

**Ministry of Energy & Mines** Energy & Minerals Division Geological Survey Branch

Assessment Report 38395

# **ASSESSMENT REPORT** TITLE PAGE AND SUMMARY





OWNER(S) 1) North Bay Resources inc. 2) \_\_\_\_

MAILING ADDRESS

POBOX.62, Skippack, Pennsylvania 19474 USA 

OPERATOR(S) [who paid for the work]

Same 1)

MAILING ADDRESS

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):



2)

(OVER)

TYPE OF WORK IN THÌS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			r
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
(number of samples analysed for)			
Soil			ļ
Silt			
Rock	7 (seven)	Golden Gate	
Other			
DRILLING			
(total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			11000
Sampling/assaying		Golden Gate	\$442.38
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)	1:5,000	20 ha Golden	\$3,625.5
PREPARATORY/PHYSICAL		Gate	
Line/grid (kilometres)		<u> </u>	ļ
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			<u></u>
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other Report			91,270,50
		TOTAL COST	\$5,338.3

# **ASSESSMENT REPORT**

**Prospecting & Geochemical Survey** 

## on the

# **ZEBALLOS GOLD PROJECT**

Alberni Mining Division, British Columbia, Canada

Latitude: 50° 0' 0.9" N; Longitude: 126° 47' 42.5" W

UTM Zone 09 (NAD83)

Northing 5541250, Easting 658000

BCGS 092E096, 092E097, 092L006, 092L007

NTS 092E15W, 092L02W

For

NORTH BAY RESOURCES INC. PO Box 162 Skippack Pennsylvania 19474 USA

By

Dan V. Oancea, PGeo

July 22, 2019

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ALS Chemex Analytical Certificates & Chemical Procedures

## 1. Summary

The Zeballos Gold Project is in the Alberni Mining Division of British Columbia, Canada. The mineral claims cover an area of 519.22 ha (1,283 acres) and are situated about 2 km north of the Village of Zeballos on the western coast of the Vancouver Island.

The property can be accessed from Mainland by using the BC Ferries services and then by travelling north on Highway 19 about 140 km past the city of Campbell River to the Zeballos road intersection. From there a well-maintained 42 km gravel road can be followed to the Village of Zeballos.

The Zeballos Gold mineral property consists of two mineral claims 100% owned by North Bay Resources Inc of Skippack, Pennsylvania, USA. It is mostly situated on the eastern bank of the Zeballos River and straddles some of its eastern tributaries the Golden Gate Creek and the Hidden Valley Creek. The property lies within the Vancouver Island's mountain range and stretches from sea level to over 1,200 m in elevation.

Rocks underlying the property are represented by the Lower Jurassic Bonanza Group calc-alkaline volcanic rocks conformably underlain by Lower Triassic to Upper Triassic Vancouver Group - Parson Bay Formation composed of limestone, slate, siltstone and argillite. Early Jurassic to Middle Jurassic Island Plutonic Suite represented by gabbro/granodiorite had intruded all older rocks. Quartz diorite intrusive rocks of the Eocene to Oligocene Mt. Washington Plutonic suite are spatially related with most of the area's gold-quartz veins.

The Zeballos Mining District has produced 9,154 kg. of gold plus byproduct silver, copper, lead and zinc from 0.627 million tonnes of ore mined from 17 past-producing mines between 1929 and 1975.

The Zeballos Gold Project encompasses three small past producing gold mines and two mineral prospects of the intrusion related gold type and of the skarn and replacement type.

Mineral production from these past producers totaled 5,692 grams of gold, 4,172 grams of silver, and 100 kilograms of copper. Most of the mineralization is of the vein type hosted by narrow shear zones that are continuous over significant strike lengths and down-dip extensions.

1970s and 1980s exploration programs identified a gold-copper-mercury geochemical and a coincident geophysical anomaly at the headwaters of Hidden Valley Creek and Golden Gate Creek. Prospecting efforts also resulted in the identification of mineralized floats carrying significant gold mineralization on the Hidden Valley Creek. Unexplored mineralized structures were also reported on the Upper Golden Gate Creek.

Since 2011, North Bay Resources has engaged in assessment work that resulted in field validation of several of the past producers located on its mineral claims. The Company also effectuated focused geochemical surveys which confirmed the presence of precious metals in the western part of the Project area.

During the month of June 2019, the writer undertook a short prospecting and rock sampling survey. The survey tried to identify new mineralized zones within the western part of the Project area.

Sampling of the Bonanza Group rocks returned slightly anomalous copper values but no significant gold values. The survey failed to locate the Gold Field Mine and stopped short of reaching the Golden Gate Mine. Literature search proved that the Gold Field Mine is not located within the Project area. A new prospecting adit that opens a few quartz-calcite veins was discovered within the Tagore Mine area.

## 2. Conclusions

Several areas of the Zeballos Gold Project are prospective to contain gold, silver, copper, lead and zinc mineralization:

- The Lower Hidden Valley Creek area is prospective for copper and gold mineralization in a possible skarn setting.

- The Upper Hidden Valley Creek area is prospective for hosting the inferred extension of a northeast-southwest structural corridor that hosts the Spud Valley/Gold Field and the Mt. Zeballos gold veins.

- The Upper Golden Gate Creek is prospective for hosting gold quartz veins on strike with the Golden Gate Mine.

- Undiscovered gold-copper mineralization could be present in the geochemically and geophysical anomalous "B" Zone located at the Golden Gate Creek and Hidden Valley Creek headwaters.

- The zinc (+/- lead-silver) Tagore skarn zone which is also hosting gold veining mineralization.

## 3. Recommendations

The prospective areas of the mineral property must be mapped and sampled.

A geophysical (EM) drone survey is recommended to be undertaken over the most prospective parts of the property.

Contingent on positive surveys results a LIDAR survey should also be flown over the whole property.

## 4. Introduction

## 4.1 Location, Access and Physiography

The Zeballos Gold mineral property is located on the western coast of the Vancouver Island in British Columbia, Canada. It is part of the Alberni Mining Division and is covered by NTS Map sheet 092E and 092L.

The property can be accessed from Mainland by using the BC Ferries services and then by travelling north on Highway 19 about 140 km past the city of Campbell River to the Zeballos road intersection. From there a well-maintained all season 42 km gravel road can be followed to the Village of Zeballos.

Access to the project's past producing mines is best described in North Bay Resources' 2011 technical report (AR32298). The Answer and Tagore Mines can be accessed from the main Zeballos road. The Golden Gate Mine can be accessed by hiking through the lush temperate rainforest. The Beano can be accessed by means of water taxi followed by travelling on decommissioned logging roads and through forest.



The Zeballos Gold Project is about 2 km north of the 150-200 people Village of Zeballos. The Village sits at the head of Zeballos Inlet, gateway to Nootka Sound, world-famous for salmon fishing and kayaking opportunities. The inlet gained its name in 1792 when Captain Alejandro Malaspina named it after one of his lieutenants, Ciriaco Cevallos.

The mineral project covers ground that stretches from sea level to 1,221 m in elevation (Mt. Beano). Physiography is rugged with hillsides being steep and bluffy. At higher elevations creeks are flowing through steep canyons and present numerous waterfalls.

The Zeballos Project encompasses the Hidden Valley Creek and the Golden Gate Creek as eastern tributaries of the Zeballos River which flows into the Pacific Ocean at the Zeballos Village. The project area also encompasses the headwaters of the Spud Creek and Bingo Creek.

## 4.2 Mineral Claims

The Zeballos Gold Project consists of two mineral claims that cover 519.22 hectares (1,283 acres). The claims are 100% owned by North Bay Resources Inc. and are centered at 50° 0' 0.9" N and 126° 47' 42.5" W. The mineral property is covered by the BCGS 092L006, 092L007, 092E096 and 092E097 maps.

Tenure Number	Claim Name	Owner	NTS Map Number	Good to Date*	Status	Area (ha)
1044367	Golden Gate	204090	092L006, 092E096	Nov 5, 2019	GOOD	373.84
1044368	Golden Gate 2	204090	092L006, 092E096	Nov 6, 2019	GOOD	145.38
TOTAL						519.22

TABLE 1: MINERAL TITLES AT THE ZEBALLOS GOLD PROJECT

Subject to acceptance of the present Assessment Report.



The Zeballos Gold mineral claims partially overlap the following Crown Grant mineral lots: DL482, Answer No.1 MC (R); DL483, Answer No.2 MC (R); DL500, Answer No.6 MC (R); DL1757, J MC; DL1759 Flobald MC; DL1760, St. George MC; DL1762, Big Apple MC; DL1770, XY MC (R); DL1771, XX MC (R); DL1772, XZ MC (R); DL1779, Blue Ox No.1 MC; DL1801, Prosperity No.1, MC; DL1802, Prosperity No.4 MC.

According to BC government's on-line search and retrieval tool GATOR the Crown Grants marked with (R) are expired / reverted.

#### 4.3 Climate, Local Resources, Infrastructure

The climate is wet and mild. Most of the five meters of average annual precipitation occur from October through May. Snowfall is never more than a few inches at the beach but is heavier at higher elevations.

Logging is the prominent industrial activity in the area and parts of the project area have also been recently logged. Fishing, fish processing and tourism are also mainstays of the local economy.

Infrastructure is good with well-maintained logging roads connecting the project area with Highway 19.

Accommodation, food and gas could be provided and sourced from the Village of Zeballos.

## 4.4 History and Development

According to John S. Stevenson (1950) small amounts of placer gold were found on the Zeballos River as early as 1907 but the staking of the first gold-quartz vein (Zeballos Gold Project's Tagore mine) happened only in 1924. In 1926 the King Midas was staked and by 1929 forty claims had been staked in the valley. Tagore made the camp's first ore shipment during the same year. Most of the gold mines closed during the WWII and the last mine to operate was the Privateer which closed gates in 1948. The Ford iron ore mine (092L 028) operated in the 1962 to 1969 period; it mined a magnetite skarn.

The most complete documentation of the geology and mineral deposits of the Zeballos Mining Camp is in BCDM Bulletin 27 (Stevenson, J.S., 1950). The most recent study of the gold mineralization and geology of the Zeballos area is in Paper 2005-1 (Marshall, D., et.al, 2004).

It should be noted that a 1974 soil sampling program and a subsequent 1984 VLF-EM survey of a 600 ft by 1,200 ft area (the "B" zone) located at the Golden Gate Creek and Hidden Valley Creek headwaters resulted in the identification of a goldcopper geochemical anomaly and of a coincident VLF-EM geophysical conductor.

Mineralized rock floats carrying economic gold mineralization had also been discovered in the Lower Hidden Valley Creek (AR5079).

The same section of the aforementioned creek was prospected in 2013 by Houle, J. and his moss sampling returned highly anomalous gold sample results (AR34249).

## 5. Geology and Mineralization

## **5.1 Regional Setting**

The study area is part of the Insular belt of the Canadian Cordillera which is comprised of several accreted volcanic terranes.

The Zeballos gold camp represents an area underlain by a Lower Jurassic Bonanza Group Island arc sequence of basaltic to rhyolitic volcanic rocks. Conformably underlying the Bonanza rocks are limestone and limy clastics of the Quatsino and Parson Bay formations, and the tholeiitic basalts of the Karmutsen Formation, all belonging to the Upper Triassic Vancouver Group.

Dioritic to granodioritic Jurassic plutons of the Zeballos intrusion phase of the Island Plutonic Suite have intruded all older rocks. The Bonanza Group rocks are considered to be the volcanic equivalent of the Island Plutonic Suite. The Eocene Zeballos stock, a quartz diorite phase of the Catface Intrusions, is spatially related to the area's gold-quartz veins. Bedded rocks are predominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis.

### 5.2 Mineralization and Deposits

The Zeballos mining camp's mineralization is related to the emplacement of the Tertiary Mount Washington intrusive rocks. The Camp's mineralization is of the intrusion related gold mineralization type.



Plate 1: Zeballos Gold Project Geology Map

2019 Assessment Report on the Zeballos Gold Project

## Legend:

uTrV: Lower Triassic to Upper Triassic Vancouver Group - Parson Bay Formation
IJBca: Lower Jurassic Bonanza Group (calc-alkaline volcanic rocks)
EMJIgd: Early Jurassic to Middle Jurassic Island Plutonic Group (granodiorite)
EOIM: Eocene to Oligocene Mt. Washington Plutonic Suite (diorites)

Recorded production for the Camp totals 9,465 kilograms gold and 4,119 kilograms silver, from 652,000 tonnes of ore mined. Most of the production came from the Spud Valley and Privateer deposits.

Stevenson (1950): "The mineral deposits of the area include gold-bearing quartz veins and high temperature replacement deposits, which contain copper and iron, and one gold-bearing replacement deposit. The gold-quartz veins are economically the most important. Magnesian limestone in the area is potentially of economic importance."

Minfile (092L 005) notes that: "In the Zeballos gold camp, generally narrow (10 to 30 centimetres) quartz-calcite veins, trending north or east (Fieldwork 1983, page 230) cut all rock types. Vein mineralogy includes pyrite, sphalerite, galena, chalcopyrite and locally arsenopyrite."

Stevenson (1950) considers that " fractures and consequently veins formed under tension are the most favorable for ore, those veins or parts of veins that strike close to north 62 degrees east and are vertical are the most likely to contain the best oreshoots."

According to Stevenson (1950) host rock alteration as it relates to veins is dependent upon the type of rocks. Granite and quartz diorite are altered to a silvery white rock with feldspar plagioclase completely sericitized and biotite and hornblende destroyed and replaced by chlorite. The lime-silicate rocks are only slightly altered along the vein walls. The feldspar tuff, green volcanic tuff and lava have been altered for distances up to 6 inches from the vein shear to a light buff dense rock (sericite + carbonate) that contains cubes of pyrite. Assays of the wallrock along the gold rich veins show that no gold of economic importance seeped into the wallrock of the veins. The sequence of mineralization is considered to be pyrrhotite, arsenopyrite, pyrite, sphalerite, chalcopyrite, galena and gold. In the quartz-sulphide ore the amount of gold is not only proportional to the sulphide content but is also dependent on the presence of sphalerite and galena. Quartz veins that contain either pyrite or arsenopyrite only do not as a rule contain much gold.

#### **5.3 Property Geology and Mineralization**

The Bonanza Group is an island arc sequence consisting of basaltic to rhyolitic volcanic rocks. Conformably underlying the Bonanza Group rocks are limestones and limy clastics of the Quatsino and Parson Bay formations, and Karmutsen Formation tholeiitic basalts, all belonging to the Upper Triassic Vancouver Group. Dioritic to granodioritic plutons of the Zeballos intrusion phase of the Early-Middle Jurassic Island Plutonic Suite have intruded all older rocks. The Eocene Zeballos stock, a quartz diorite phase of the Tertiary Catface Intrusions, is spatially related to the area's gold-quartz veins. Bedded rocks are predominantly northwest striking, southwest dipping, and anticlinally folded about a northwest axis.

The Zeballos Gold Project encompasses three past producing gold mines i.e. Tagore (092L 006), Golden Gate (092L 005), Beano (092E 002), and a mineral prospect - Answer 2 (092E 023). Mineral production from these past producers totaled 5,692 grams of gold, 4,172 grams of silver, and 100 kilograms of copper.

All these deposits (except the Beano skarn) are of the gold vein deposit type and are hosted by small shear zones within the Bonanza Group volcanic rocks and/or the Parsons Bay limestones.

Vein mineralization consist of quartz, calcite, pyrrhotite, chalcopyrite, galena, pyrite and free gold.

A detailed geological description of the Tagore and Golden Gate Mines was provided by John S. Stevenson (1950) and reported in previous assessment reports.

The skarn mineralization at Beano is hosted by an actinolite altered limestone; its mineralization consists of three different styles: 1) zones of quartz-calcite-pyrrhotite stringers 2) disseminated pyrrhotite 3) lenses of massive pyrrhotite measuring to 0.3

by 1.2 metres, as en-echelon replacement of limestone along fractures. A detailed description of the geology and mineralization for each of these mines could also be found in North Bay Resources' 2011 technical report (AR32298).

The auriferous band of limestone outcropping at Beano might continue undercover (through the creeks' headwaters geochemically anomalous "B" area) towards the Prosperity copper showing (092L 007) located on Hidden Valley Creek where another package of 600 ft of limestone and lime-silicate rocks outcrops and is sandwiched in between dark green andesitic volcanics.

On the Lower Hidden Valley Creek mineralized actinolitic floats containing pyrrhotite and chalcopyrite were noted near an old trail. They assayed up to 1.2 g/t gold and 0.16% copper (AR5079).

The same section of the aforementioned creek was prospected in 2013 by Houle, J. and his moss sampling survey returned anomalous samples grading up to 1.31 ppm (g/t) gold. Houle's moss sampling of the Golden Gate Creek also returned anomalous gold values up to 1.3 ppm gold, 0.6 ppm silver and 213 ppm zinc. (AR34249).

## 6. Prospecting & Geochemical Survey

A two-day prospecting survey was undertaken during the month of June 2019. The scope of the survey was to assess the southwestern Project area, which hosts known high grade gold mineralization and at the same time is being prospective for undiscovered mineralization of the same type.

Logging roads provide an easy access to the lower part of the east of the Zeballos River mountainous slopes.

Traverses were effectuated north and south of the Hidden Valley Creek.

In 2018 wildfires burnt a part of the forest at this location, which is in the vicinity of the Village, but the fire affected only the southwestern part of the Golden Gate mineral claim effectively stopping at the Golden Gate Creek. The affected slope is still not considered geotechnically safe and at the time of the visit an evacuation order was still in effect.

Wildfires provide an excellent opportunity for the geologist to access outcrops that are usually hidden by the lush temperate rainforest therefore a traverse was also effectuated in that area.

Another traverse intercepted the Hidden Valley Creek at the location where Houle, J. (2013) collected highly anomalous moss samples.

Field observations in the southwestern Project area that was traversed and surveyed and which encompasses both the Lower Hidden Valley Creek and the Lower Golden Gate Creek indicate that it is underlain by Bonanza Group rocks, usually grey to greenish fine-grained volcanics, hard and silicified, and most of the time mineralized with pyrrhotite, pyrite and sometimes chalcopyrite as disseminations and stringers. Some of the fissures that cut through the rock are filled with calcite/quartz.

Grab samples have been collected from the most representative outcrops, but no significant gold assays have been obtained to date. Slightly anomalous copper values (over 300 ppm) were returned from several locations.

An attempt to locate the Golden Gate Mine was made, but the traverse was not successful as it ended in a heavily vegetated steep canyon. An old cable used by the historic mining operation was encountered at this location. Directly down in the valley was the spot where Houle, J. (2013) collected moss and reported another anomalous gold sample (1.3 ppm), and some historic mining artefacts. Back in the office by plotting its location on the map and referencing it to the Mine's location, as resulted from historic documents, it seems that the adit was only 40 m in elevation above the traverse on a vegetated steep slope.

A traverse was also undertaken on the west bank of the Zeballos River in the general area of the Tagore Mine. A historic adit was found 20 - 25 m above the road (Stn 712). The short prospecting adit (5 m) follows a few stacked parallel veins / vein fissures that feature argillization and limonitization of the wallrock. The hydrothermal veins trend 220°, are vuggy and lined with crystals of calcite/siderite. No mineralization was apparent but limonite. The rocks hanging above were fissured/blocky, oxidized and easy to collapse therefore only limited sampling was undertaken as the location was not deemed safe. Samples were collected from oxidized vein material, the argillized zone and from the host rock.



Gold: All Samples Below Detection Limit

01-Jan-10

The host rock is a fine-grained volcanic greenish-white rock mineralized with pyrite, pyrrhotite as disseminations and on fissures No significant gold assays have been returned from this location. The highest zinc value (755 ppm) was returned from a grab sample collected from the wallrock to one of the veins.

Because the Mineral Titles Online map features the Gold Field / Spud Valley Mine as being located on the Golden Gate 2 mineral claim another traverse was effectuated along the forest road that leads to the Upper Spud Valley Creek. The road is maintained by a construction and forestry company.

Numerous historic mines and artefacts could be found along the forest road, including dilapidated core shacks featuring granodioritic cores obtained from drilling the Eocene Zeballos stock that host gold mineralization at some of the local mines.

The upper part of the Golden Gate 2 claims is heavily vegetated featuring second growth forest. No indications or signs of a historic mining operation were found within that area.

## 7. Discussion & Conclusions

The Zeballos Gold Project is located in a favorable geological setting represented by the presence of the productive Mt. Washington/Zeballos stock intrusion and/or in its proximity.

An analysis of the Camp's mines and mineralization done by government geologists (AR12772, p.13) indicate that the greatest potential for economic mineralization seems to be within 1,000 m of the large intrusive bodies i.e. the Mt. Washington / Zeballos stock intrusion which not only hosts most of the Camp's gold mines, but also provided the gold-base metals mineralization and fluids that permeated the adjacent Bonanza group rocks, as well as the Parson Bay limestone/lime-silicates rocks. The eastern part of the Zeballos Gold Project (especially the Golden Gate 2 claim) overlaps the western side of the Mt. Washington/Zeballos stock intrusion while most of the Project area is located within the aforementioned 'fertile' zone i.e. being within 1,000 m of the intrusion, which makes the project prospective for hosting undiscovered economic mineralization.

It should be noted that most of the veins are located in a part of the Camp where an 'apophyse' of the Eocene intrusion protrudes into the surrounding Bonanza Group rocks. It is the writer's opinion that this is the result of a ground preparation event (faulting, shearing) that is synchronous or postdates the emplacement of the Eocene stock.

By following on Stevenson's observation that Zeballos mining camp veins are continuous over significant strike lengths and by taking into consideration Marshall, D.'s 2005 geological map one can infer that the structural corridor that hosts the important Spud Valley / Gold Field Mine and the Mt. Zeballos Mine continues southwest on the Company's claims and joins the Hidden Valley Creek somewhere in the general Prosperity Adit area.

Stevenson (1950) also notes that the shear zone that hosts the Golden Gate (Portal) Mine vein can be recognized some 250 m upstream on the east side of the Golden Gate Creek. At this location it is hosting an oxidized quartz vein. This observation indicates that the Upper Golden Gate Creek is also prospective for hosting gold mineralization.

The historic gold-copper in-soil geochemically anomalous "B" zone (AR5079) has not been surveyed but nevertheless represents an important exploration target for it is in the right geological setting. A follow-up 1984 geophysical survey (AR12772) identified a buried conductor which could represent a mineralized zone located either within an auriferous band of limestone extending west from the Beano mine, or the mineralized contact between different lithologies.

According to AR12772 the "B" zone is "covered with alluvial and slide material from an intermittent stream, and partly by swamp. Geologically the depression represents the contact of a gabbro or dioritic stock extending from the Golden Portal property about elevation 750 feet southeastward toward Friend Creek. Light to dark green volcanics crop out on the steep slope above the depression, and limestone and lime-silicate rocks are thought to trend from the Beano showing toward similar units well-exposed in Hidden Valley Creek, across the upper part of the "B" grid."

The authors of the report continue by saying that the "moderately to strong conductor" identified in the area has an "apparent trend of 110 degrees, sub parallel with the trend of tuffaceous bands and limestone lenses in the area, and probably with the gabbro-volcanic contact. Rusty pyritized tuffaceous rocks, hard and siliceous (probably hornfelsed from proximity to the gabbro stock) were seen on two of the grid lines; these could be the source of gold, copper, and mercury values in soil."

Historic surveys also considered that the creek that flows south into the topographically low "B" zone must also be prospected and sampled as it might be possibly responsible for the creation of the geochemical anomaly. (AR5079)

Another prospective zone within the Zeballos Gold Project area is represented by the Hidden Valley Creek area below the Prosperity adit as described in AR5079. The report states that "mineralized actinolite float was seen near the trail. This float, containing pyrrhotite and chalcopyrite, and resembling the altered material at the Beano showing, appears to be coming from steep cliffs adjacent to the trail. Limestone float is present in the same area." The mineralized rock floats assayed up to 1,600 ppm (0.16%) copper and 1.2 g/t (1,200 ppb) gold.

It is the writer's opinion that Houle J. (2013) collected anomalous moss samples from a location immediately below the aforementioned mineralized section of the creek. The Houle location was also visited by the writer and his rock sampling exercise returned 301 ppm copper from mineralized volcanic rocks (Stn 710). It should be noted that these rocks are not the same as the rocks/mineralized floats described in AR5079 and which were most likely collected/originated from a nearby upstream location.

Houle J. (2013) also shared the opinion that "The highly elevated value of 1.31 ppm gold in the sample combined with the low gold values obtained from all three tributaries upstream from the sample site suggest the presence of an undiscovered source of gold in the immediate area upstream from E5123146, but much lower than the Prosperity occurrence."

Other types of mineralization might also be hosted by the Bonanza Group rocks and the writer's brief rock sampling exercise tried to identify some of these anomalous areas.

Assay results of the Bonanza Group rocks were reported in AR5079 and AR35166. They were generally in the 50-150 ppm copper range. The exception would be the aforementioned Hidden Valley Creek samples, and other rock samples collected by the writer from the Lower Hidden Valley Creek and the Lower Golden Gate Creek area - they assayed over 300 ppm copper (Stn 699 & 701).

The number of rock samples was not high enough to allow for a statistical estimation of a background value for copper but considering the aforementioned facts the writer considers that it is possible that the Lower Hidden Valley Creek and the Lower Golden Gate Creek flow through a slightly anomalous copper zone hosted by Bonanza Group volcanics which are mineralized with pyrrhotite, pyrite +/- chalcopyrite. Its significance needs to be further investigated.

The last but not the least important target at the Zeballos Project is represented by the Tagore Mine area (AR37024).

An interesting fact that was mentioned by Gunning (1932) but has not been followed up by subsequent explorers is represented by the existence of 'contact mineralization' that hosts the auriferous vein at Tagore. The mineralogical description of the volcanic rocks and limestone subjected to contact metamorphism as well as their mineralization are typical for the zinc-lead-silver type of skarn deposits.

According to historical reports this type of zinc-rich mineralization continues for hundreds of feet south-east of the vein and was pit sampled in 1925. Because neither high gold values nor other auriferous quartz veins have been found within the skarn zone no further exploration was done in the area.

As previously mentioned by other authors the Tagore auriferous quartz veins are younger than the skarn mineralization as they cut and are sometimes hosted by the contact metamorphism zone rocks. It is the writer's opinion that they might be genetically and spatially related as the lower temperature hydrothermal phase that generated the gold veins is ulterior and represents a possible temporal continuation of the high temperature event that generated the skarn mineralization (the emplacement of a diorite intrusive, which in some of the outcrops studied by the writer carries sulphide mineralization).

There is also a historic mentioning of gold stringers hosted within or in the vicinity of a diorite intrusion that was explored by means of an adit and unspecified mineralization was also found in underground.

The discovery of a historic adit which opened a few stacked quartz-calcite veins at Tagore is important as these fissure-veins are similar to other gold bearing veins within the Camp.

Stevenson (1950) mentions that the vein matter is represented by "quartz sulphide filling in well-defined fault fissures, rarely more than a foot wide that maintain a fairly uniform strike and dip for considerable distances.

In places the quartz sulphide vein matter might be lacking and only sheared rock present. The walls of most of the quartz sulphide veins are marked by films of gouge; frozen walls are uncommon. Comb structures are common ...

Some of the gold-quartz veins occur in sheeted zones up to 4-feet wide. These zones consist of joints spaced 2 to 8 inches apart and contain either gouge films or quartz sulphide stringers an eighth of an inch to an inch wide. Along the strike a sheeted zone may change into a narrow shear containing a lenticular quartz-sulphide vein..."

It is likely that these new stacked fissure-veins discovered at Tagore continue for a fair distance and could transition into auriferous 'lenticular quartz-sulphide vein'.

The writer hiked the cliffs above the adit but dense vegetation and thick moss prevented him from following the veins along the strike.

Because the field search for the historic Gold Field / Spud Valley Mine failed to produce any results, and Houle, J. (AR36167) also reported that his moss sampling of an area located at the Spud Valley headwaters failed to return any anomalous results, the writer engaged in literature search with the purpose of finding its exact location.

Property Files documents (see References) as well as Marshall, D. geological map indicate without any doubt that the historic mine is not located on the Golden Gate 2 mineral claim but outside the Company's claims.

## 8. Recommended Work

Further exploration work is warranted on the Zeballos Gold mineral property.

The Lower Hidden Valley Creek area should be prospected, mapped and sampled in an effort to identify the source of the precious metals mineralized float material encountered by historic surveys.

The Upper Hidden Valley Creek above the Prosperity adit should also be prospected, mapped and sampled to identify a possible extension of the aforementioned structural corridor which is host to known gold mineralization.

It is recommended to undertake a detailed geological and confirmatory soil sampling survey of the "B Zone". Contingent on the results of a subsequent geophysical survey the coincident geochemical and geophysical anomalies would be trenched and sampled. Exploratory drilling could be employed to test any anomalous ground if mechanized trenching would be difficult to accomplish. A local creek that flows into the geochemically anomalous zone should also be mapped and sampled as the anomaly might be generated by mineralized material transported by the creek into the topographically lower B Zone.

The Tagore Mine area should be mapped and sampled with the objective of identifying and delineating the low-grade zinc-lead-silver skarn zone and vein-type gold mineralization.

A geophysical (EM) drone survey is recommended to be undertaken over the most prospective parts of the property.

Contingent on positive surveys results a LIDAR survey should also be flown over the whole property in order to be able to identify topographical features of interest that are masked by the lush temperate forest that covers the ground.

## 9. Cost Statement

## Salaries:

Dan Oancea, PGeo (June 17-20, 2019):
- 4.0 Days (incl. mob/demob) @ \$577.50/day\$2,310.00
<b>Truck Rental</b> \$492.18
Gas\$154.99
<b>BC Ferries:</b> \$172.10
Accommodation\$181.24
Food:
- 4.0 Days @ \$78.75/day\$315.00
Analytical (ALS Chemex):
- 7 Samples\$442.38
Report Cost:
Dan Oancea PGeo\$1,270.50

TOTAL

\$5,338.39

## 10. References

- 1. An Update on the Mineral Deposit Potential of the Nootka Sound Region by Marshall, D et al, in Round Up 2005 poster;
- 2. Assessment Reports (AR): 5079, 12772, 32298, 32298, 34249, 35166, 36167, 37024;
- 3. Geology and Mineral Deposits of the Zeballos Mining Camp, British Columbia, 1950 by John S. Stevenson in Bulletin No. 27, British Columbia Department of Mines;
- 4. Gold Mineralization and Geology in the Zeballos Area, Nootka Sound, by Marshall D. et al, in BCGS Geological Fieldwork 2004, Paper 2005-1;
- 5. Minfile 092E 002, 092E 023, 092L 005, 092L 006, 092L 007, 092L 013, 092L 211;
- 6. Property File (PF): 012200, 012201, 012759, 012780

## **11. Statement of Qualifications**

I, Dan V. Oancea, of 507-1148 Heffley Crescent, Coquitlam do hereby certify that:

1. I am a member in good standing with the Association of Engineers and Geoscientists of the Province of Columbia, Canada. I hold a Professional Geoscientist designation. I am also a Fellow of the Geological Association of Canada (GAC), of the Association for Mineral Exploration British Columbia, and of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM).

2. I have graduated a 5-year Engineering Program (Thesis) equivalent to a Master Degree and obtained a Geological Engineering Diploma in Geology and Geophysics (1987) from the Babes Bolyai University of Cluj-Napoca, Romania.

3. I have practiced my profession for 21 years. As a professional geologist in the mining industry, I have extensive geological, geochemical, and exploration experience, management skills, and a solid background in research techniques, and training of technical personnel. I have been involved in underground and surface exploration projects in Canada and Europe.

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

5. I have authored this report which is based upon review and compilation of data relating to the Zeballos Gold Project and upon personal knowledge of the property gained from on-site survey work carried out in the 2014 - 2019 period.

6. I do not own an interest in the Zeballos Gold mineral property.

Vancouver, BC

July 22, 2019

Respectfully submitted

Dan V. Oancea PGeo

Station	Grab	Elevation	UTM E	UTM N	Description
	Sample No.				
697	Rock Sample Z-19-697	105 m	654978	5541775	Dark color silicified fine-grained volcanic rock mineralized with py, po on fissures with calcite/quartz
699	Rock Sample Z-19-699	103 m	654863	5541455	Silicified fine-grained grey volcanic rock mineralized with py, po, +/-cpy as disseminated and streaks
701	Rock Sample Z-19-701	106 m	654827	5541382	Silicified fine-grained grey volcanic rock mineralized with py, po, +/-cpy as disseminated and streaks
710	Rock Sample Z-19-710	88 m	654835	5541611	Greenish fine-grained volcanic rock mineralized with py/po, +/-cpy as disseminated and streaks
712	Rock Sample Z-19-712	52 m	654229	5541355	Limonitized argillization zone adjacent to hydrothermal fissure veins. Tagore Mine area prospecting adit.
712	Rock Sample Z-19-713	52 m	654229	5541355	Oxidized vuggy veins lined with calcite/siderite crystals. Iron hydroxides apparent.
712	Rock Sample Z-19-714	52 m	654229	5541355	Fine grained volcanic greenish-white rock mineralized with py, po as disseminations and on fissures. Host rock for the veins.

# Table 2 – Zeballos Gold Project Important Locations

\*UTM Zone 09 NAD 83

\* py = pyrite

\* po = pyrrhotite

\* cpy = chalcopyrite



Plate 2: Historic Prospecting Adit (Stn 712)

APPENDIX

# ALS CHEMEX INVOICES, ANALYTICAL CERTIFICATES

&

**CHEMICAL PROCEDURES** 

2019 Assessment Report on the Zeballos Gold Project



ALS Canada Ltd.

2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 www.alsglobal.com/geochemistry

#### To: NORTH BAY RESOURCES PO BOX 162 SKIPPACK PA 19474 USA

## **INVOICE NUMBER 4792240**

В	BILLING INFORMATION			ANALY	SED FOR DESCRIPTION	UNIT PRICE	TOTAL
Certificate: Sample Type: Account: Date: Project: P.O. No.: Quote: Terms:	VA19156377 Rock NOBARE 10-JUL-2019 Zeballos Gold Due on Receipt	C2	1 7 4 7 2 1.58	BAT-01 LOG-22 PUL-31 Au-ICP22 ME-MS61 DISP-01 SPL-21 SPL-21	Administration Fee Sample login - Rcd w/o BarCode Pulverize split to 85% <75 um Au 50g FA ICP-AES finish 48 element four acid ICP-MS Disposal of all sample fractions Split sample - riffle splitter Weight Charge (kg) - Split sample - riffle splitter	37.60 1.35 4.90 22.40 34.35 0.70 2.15 0.45	37.60 9.45 34.30 89.60 240.45 4.90 4.30 0.71
Comments:					SUBTOTAL (CAI	) \$	421.31

To: NORTH BAY RESOURCES

ATTN: P. LEOPOLD PO BOX 162 SKIPPACK PA 19474 USA R100938885 GST \$ 21.07

TOTAL PAYABLE (CAD) \$ 442.38

Payment may be made by: Cheque or Bank Transfer

Beneficiary Name:ALS Canada Ltd.Bank:Royal Bank of CanadaSWIFT:ROYCCAT2Address:Vancouver, BC, CANAccount:003-00010-1001098Please send payment info to accounting.canusa@alsglobal.com

Please Remit Payments To

## ALS Canada Ltd.

2103 Dollarton Hwy North Vancouver BC V7H 0A7 Canada Page 1 of 1



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Page: 1 Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 10-JUL-2019 Account: NOBARE

## CERTIFICATE VA19156377

Project: Zeballos Gold

This report is for 7 Rock samples submitted to our lab in Vancouver, BC, Canada on 27-JUN-2019.

The following have access to data associated with this certificate:

P. LEOPOLD

DAN OANCEA

SAMPLE PREPARATION						
ALS CODE	DESCRIPTION					
WEI-21	Received Sample Weight					
LOG-22	Sample login - Rcd w/o BarCode					
DISP-01	Disposal of all sample fractions					
SPL-21	Split sample - riffle splitter					
PUL-31	Pulverize split to 85% <75 um					

	ANALYTICAL PROCEDURES	
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP22 ME-MS61	Au 50g FA ICP-AES finish 48 element four acid ICP-MS	ICP-AES

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.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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



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Project: Zeballos Gold

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP22 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
Z-19-697 Z-19-699 Z-19-701 Z-19-710 Z-19-712		0.28 0.30 0.18 0.92 0.66	0.001 <0.001 <0.001	0.14 0.19 0.18 0.23 0.04	9.78 7.25 8.24 7.99 8.18	17.4 0.7 2.9 3.5 31.0	230 150 480 70 10	0.72 0.77 1.02 0.94 0.48	0.10 0.34 0.34 0.37 0.03	3.39 2.94 3.97 7.93 23.1	0.35 0.07 0.06 0.12 0.37	13.80 28.3 28.1 24.3 15.85	22.1 10.2 19.0 32.4 5.8	51 3 6 21 72	1.68 0.12 1.03 0.22 <0.05	62.5 305 314 301 17.3
Z-19-713 Z-19-714		0.26 0.08	<0.001	0.19 0.10	7.42 8.37	34.8 37.1	10 220	0.44 0.50	0.18 0.06	20.8 19.15	0.63 3.46	9.00 11.65	22.2 22.0	144 107	0.11 0.31	98.4 35.2



To: NORTH BAY RESOURCES PO BOX 162 SKIPPACK PA 19474 USA Page: 2 - B Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 10-JUL-2019 Account: NOBARE

Project: Zeballos Gold

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
Z-19-697		5.76	14.55	0.08	0.4	0.040	1.14	5.8	10.9	0.94	502	3.76	2.42	1.6	18.0	280
Z-19-699		4.64	17.90	0.10	0.6	0.097	0.30	11.0	5.5	0.56	711	2.60	4.44	4.5	0.6	3120
Z-19-701		7.51	22.4	0.11	0.7	0.095	1.09	11.1	7.8	1.31	1060	1.81	4.22	4.3	3.5	2340
Z-19-710		10.20	24.1	0.11	2.7	0.115	0.16	10.5	3.8	2.51	1790	1.50	2.68	3.7	8.9	1880
Z-19-712		5.02	11.40	0.09	1.0	0.044	0.01	6.7	3.7	2.88	1200	1.04	0.03	1.7	3.9	270
Z-19-713 Z-19-714		9.52 6.91	13.95 12.40	0.08	1.2 1.3	0.061	0.02	4.0 5.3	7.6 10.8	2.51 2.71	1420 3430	0.70 0.40	0.03	3.1 3.6	18.4 24.3	440 430



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Project: Zeballos Gold

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	TI	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
Z-19-697		11.0	35.5	0.005	3.15	1.17	17.0	2	0.6	522	0.11	0.21	0.64	0.239	0.29	0.5
Z-19-699		2.2	5.6	<0.002	1.14	0.56	28.6	1	1.8	249	0.30	0.09	1.08	0.914	0.03	0.4
Z-19-701		1.8	26.9	0.002	1.66	0.88	29.3	2	1.4	346	0.29	0.09	1.27	0.795	0.19	0.5
Z-19-710		3.5	2.2	0.002	1.64	2.06	42.7	3	1.6	310	0.23	0.05	0.65	1.360	0.02	0.9
Z-19-712		36.1	0.4	<0.002	0.04	0.58	23.9	1	0.5	376	0.10	<0.05	0.74	0.379	<0.02	1.8
Z-19-713 Z-19-714		1.7 5.3	1.2 7.4	<0.002 <0.002	1.15 0.90	1.72	29.8 29.1	2	0.7 0.5	341 466	0.15 0.17	<0.05 0.05	0.48 0.79	0.973 0.606	0.04 0.03	1.2 1.9



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Project: Zeballos Gold

Sample Description	Method Analyte Units LOD	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	
Z-19-697 Z-19-699 Z-19-701 Z-19-710 Z-19-712		121 19 72 472 122	0.1 2.0 1.0 0.3 0.2	13.4 48.9 42.1 45.5 16.3	75 41 55 129 102	13.5 13.4 14.9 104.0 40.0	
Z-19-713 Z-19-714		389 242	0.4 0.6	11.0 13.6	157 755	48.1 48.9	



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Project: Zeballos Gold

		CERTIFICATE COMMENTS		
		ANALYTICAL CO	MMENTS	
Applies to Method:	REE's may not be totally soluble in the ME-MS61	is method.		
		LABORATORY AD	DDRESSES	
	Processed at ALS Vancouver located a	at 2103 Dollarton Hwy, North Vancou	ver, BC, Canada.	
Applies to Method:	Au-ICP22	DISP-01	LOG-22	ME-MS61
	PUL-31	SPL-21	WEI-21	



# **FIRE ASSAY PROCEDURE**

# Au-ICP21 and Au-ICP22

# FIRE ASSAY FUSION ICP-AES FINISH

#### **SAMPLE DECOMPOSITION**

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

#### **ANALYTICAL METHOD**

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

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

METHOD CODE	ELEMENT	SYMBOL	UNITS	SAMPLE WEIGHT (G)	LOWER LIMIT	UPPER LIMIT	DEFAULT OVERLIMIT METHOD
Au-ICP21	Gold	Au	ppm	30	0.001	10	Au-AA25
Au-ICP22	Gold	Au	ppm	50	0.001	10	Au-AA26



# **GEOCHEMICAL PROCEDURE**

# **ME- MS61**

# **ULTRA- TRACE LEVEL METHOD USING ICP- MS AND ICP- AES**

#### **SAMPLE DECOMPOSITION**

**HF-HNO<sub>3</sub> -HClO<sub>4</sub> acid digestion, HCl leach** (GEO-4A01)

#### **ANALYTICAL METHOD**

#### Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and analyzed by inductively coupled plasma- atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples meeting this criterion are then analyzed by inductively coupled plasma-mass spectrometry. Results are corrected for spectral interelement interferences.

**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
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	50
Arsenic	As	ppm	0.2	10,000
Barium	Ва	ppm	10	10,000
Beryllium	Ве	ppm	0.05	1,000
Bismuth	Ві	ppm	0.01	10,000
Calcium	Са	%	0.01	50
Cadmium	Cd	ppm	0.02	1,000
Cerium	Ce	ppm	0.01	500
Cobalt	Со	ppm	0.1	10,000
Chromium	Cr	ppm	1	10,000
Cesium	Cs	ppm	0.05	500
Copper	Си	ppm	0.2	10,000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10,000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.1	500



# **ME- MS61**

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Indium	In	ppm	0.005	500
Potassium	К	%	0.01	10
Lanthanum	La	ppm	0.5	10,000
Lithium	Li	ppm	0.2	10,000
Magnesium	Mg	٥/٥	0.01	50
Manganese	Mn	ppm	5	100,000
Molybdenum	Мо	ppm	0.05	10,000
Sodium	Na	٥/٥	0.01	10
Niobium	Nb	ppm	0.1	500
Nickel	Ni	ppm	0.2	10,000
Phosphorous	Р	ppm	10	10,000
Lead	Pb	ppm	0.5	10,000
Rubidium	Rb	ppm	0.1	10,000
Rhenium	Re	ppm	0.002	50
Sulphur	S	٥/٥	0.01	10
Antimony	Sb	ppm	0.05	10,000
Scandium	Sc	ppm	0.1	10,000
Selenium	Se	ppm	1	1,000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10,000
Tantalum	Та	ppm	0.05	100
Tellurium	Те	ppm	0.05	500
Thorium	Th	ppm	0.2	10,000
Titanium	Ті	0/0	0.005	10
Thallium	TI	ppm	0.02	10,000
Uranium	U	ppm	0.1	10,000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.1	10,000
Yttrium	Y	ppm	0.1	500
Zinc	Zn	ppm	2	10,000
Zirconium	Zr	ppm	0.5	500

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