



Ministry of Energy & Mines Energy & Minerals Division

Geological Survey Branch

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

Geochemical Survey of the ZEBALLOS GOLD PROJECT \$4,434.41
AUTHOR(S) Dan V. Danceq signature(s) Dan
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)YEAR OF WORKYEAR OF WORKYEAR OF WORK
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 5525051
PROPERTY NAMEZEBALLOS GOLD
CLAIM NAME(S) (on which work was done) 689765, 706564
COMMODITIES SOUGHT Gold, Copper
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 092E002; 092E023; 092L005-007; 092L013; 092L211 MINING DIVISIONAlberniNTS_092L, 092E
LATITUDE O O LONGITUDE NTS OE (at centre of work)
OWNER(S)
1) North Bay Resources inc 2)
Mailing address PO Box 162, Skippack Pennsylvania 19474 USA
OPERATOR(S) [who paid for the work]
1) Same 2)
MAILING ADDRESS
Same
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude): Lower Jurassic Bonanta Group cale-alkaline rocks i Triassic Parson Bay
limestone ; Jurassic Island Plutonic Suite granodicrite; Eocene to Oligocene Mt. Washington Plutonic Suite diarite; Gold-Quartz veins; Skarn
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS 5079, 12772, 32298
(OVER)

THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			(incl. support)
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Airborne			
GEOCHEMICAL (number of samples analysed for) Soil			
Silt			
Rock	1		\$ 109.48
Other Stream Sedine			\$147.59
total metres; number of holes, size) Core Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
ROSPECTING (scale, area)	co j 4ha		\$ 4,177.34
REPARATORY/PHYSICAL	,		
Line/grid (kilometres)		,	
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			

BC Geological Survey Assessment Report 35166

ASSESSMENT REPORT

Geochemical Survey

of the

ZEBALLOS GOLD PROJECT

Alberni Mining Division, British Columbia, Canada

Latitude: 50° 0' 5.9" N; Longitude: 126° 49' 24.0" W

UTM Zone 09 (NAD83)

Northing 5541161, Easting 655364

NTS 092E096, 092E097, 092L006, 092L007

For

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

By

Dan V. Oancea, PGeo

December 29, 2014

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Appendix 1

- ALS Chemex Analytical Certificates & Chemical Procedures

1. Summary

The Zeballos Gold Project is located in the Alberni Mining Division of British Columbia, Canada. The mineral claims cover an area of 519.23 ha and are situated about 2 km north of the village of Zeballos on the western coast of the Vancouver Island.

The property could 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 on a well-maintained 40 km gravel road could be followed to the village of Zeballos.

The Zeballos Gold mineral property consists of four mineral claims 100% owned by North Bay Resources Inc of Skippack, Pennsylvania, USA. It is situated on the eastern bank of the Zeballos River and straddles some of its eastern tributaries - the Golden Gate and Hidden 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 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 areas gold-quartz veins. Zeballos mining camp's mineral deposits are of the intrusion related gold type and of the skarn and replacement type.

The Zeballos Gold Project encompasses five past producing gold mines and a mineral prospect. Mineral production from these past producers totaled 54,307 ounces gold, 18,609 ounces silver, 20,493 pounds copper, and 17,612 pounds of lead. Most of the production came from the adjacent Gold Field and Roper mines, where a historical estimation of the unmined resource stands at 220,429 tonnes grading 10.7 grams per tonne gold in quartz-vein deposits.

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 floats carrying copper mineralization on the Hidden Valley Creek.

In 2011, North Bay Resources Inc. engaged in a first pass prospecting program which consisted of a field check of the main old mining works; the associated assessment report produced a compilation of the geology and mining history of the mineral property.

The writer of the present report was engaged to assess the prospectivity of the claims. A short 2014 survey traversed the lower part of the property and assessed the higher ground accessibility. Elevated copper and gold values were identified in stream sediment samples collected from the lower Hidden Valley Creek.

2. Conclusions

Three main areas of the Zeballos Gold Project are prospective to contain gold, silver and copper mineralization:

- The Gold Field and Roper mines areas, which contain historical mineral resources possibly open on strike and at depth;

- Undiscovered gold-copper mineralization could be present in the geochemically anomalous "B" Zone, which is also featuring a geophysical conductor, and which is located at the headwaters of the Golden Gate Creek and Hidden Valley Creek;

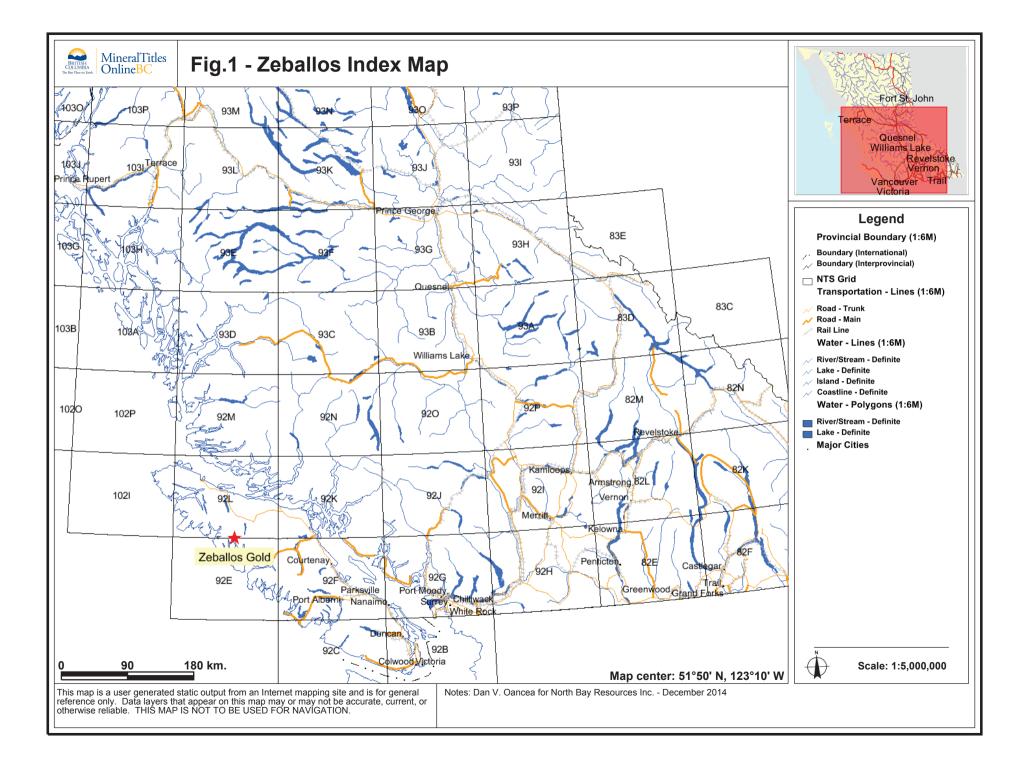
- The upper Hidden Valley Creek area is also prospective for copper and gold mineralization.

3. Recommendations

The Gold Field and Roper mines areas have to be field checked and geologically mapped. Field results would be correlated with historic literature finds and a geochemical and geophysical survey should be planned to try to identify extensions (or new veins) to the known gold-quartz veins.

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 also be employed to test anomalous ground if mechanized trenching would be difficult to accomplish.

The Hidden Valley Creek area has to be prospected, mapped and sampled in an effort to identify the source of the mineralized float material described by previous authors.



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 could 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 on a well-maintained all season 40 km gravel road could be followed to the village of Zeballos.

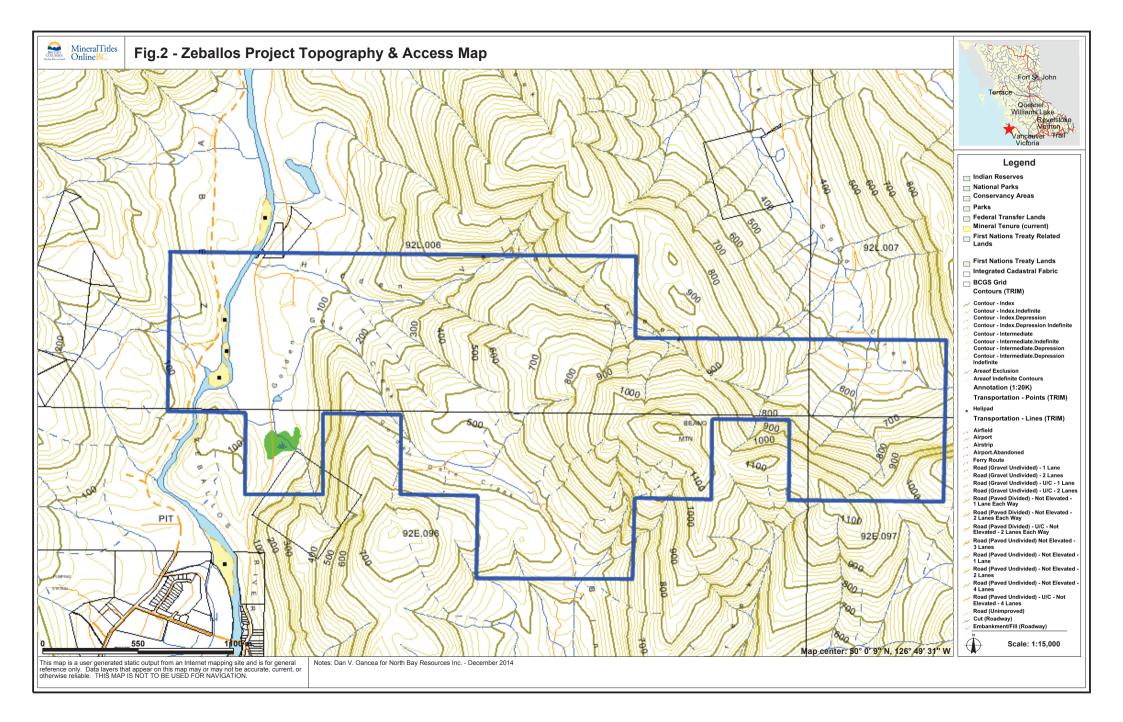
Access to the project's past producing mines is best described in North Bay Resources' 2011 technical report. The Answer and Tagore mines could be accessed from the main Zeballos road. The Golden Gate mine can be accessed by hiking through the lush temperate rainforest. The Beano and Gold Field mines can be accessed by travelling on logging roads.

The Zeballos Gold Project is about 2 km north of the 150-200 inhabitants 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 was named by Captain Alejandro Malaspina in 1792 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 property consists of four mineral claims that cover 519.23 hectares (1,283.04 acres). The claims are 100% owned by North Bay Resources Inc. and are centered at 50° 0' 5.9" N and 126° 49' 24.0" W. The mineral property is covered by the NTS 092L006, 092L007, 092E096 and 092E097 maps.



Tenure Number	Claim Name	Owner	NTS Map Number	Good to Date*	Status	Area (ha)
689765	Golden Gate	204090	092L006, 092E096	2016/June/15	GOOD	353.07
704809	Golden Gate 4	204090	092L006, 092E096	2016/June/16	GOOD	41.54
706564	Golden Gate 5	204090	092E096	2016/June/16	GOOD	20.77
819042	Golden Gate 6	204090	092L006, 092L007, 092E096, 092E097	2016/June/16	GOOD	103.85
TOTAL						519.23

TABLE 1: MINERAL TITLES AT THE ZEBALLOS GOLD PROJECT

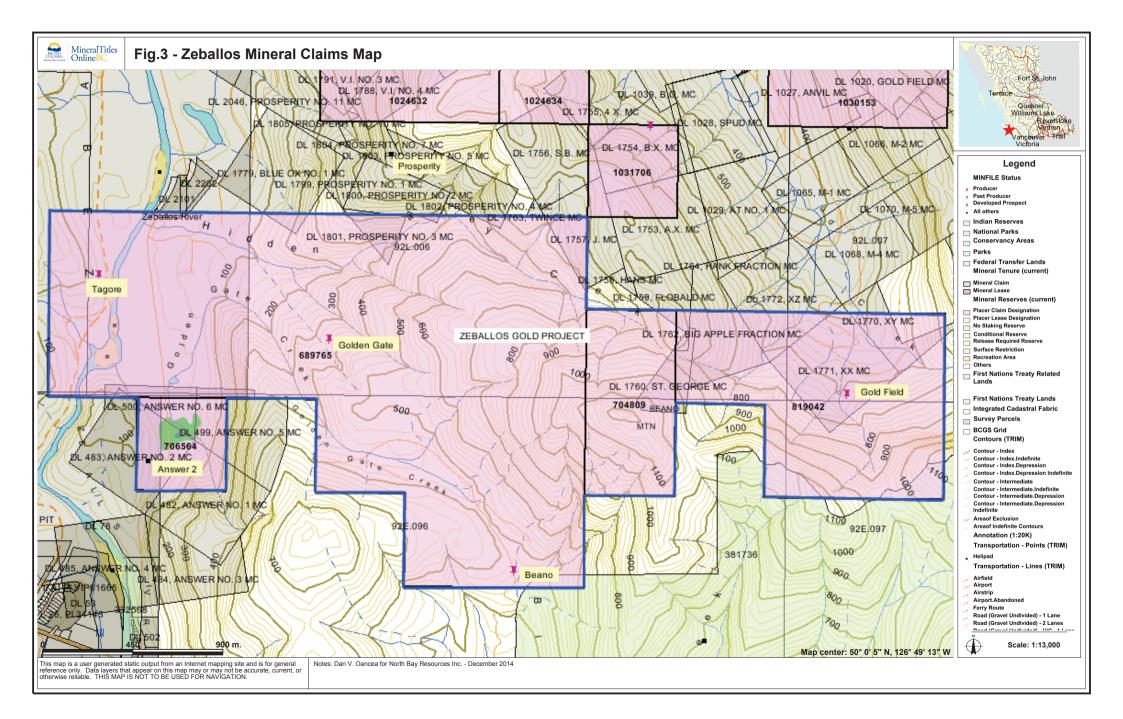
*Subject to acceptance of the present Assessment Report.

The Zeballos Gold mineral claims partially overlap the following Crown Grant mineral lots: Answer No.5, Answer No. 1, Blue Ox No.1, Prosperity No.3, J, St. George, Flobald, Big Apple Fraction, XZ, XX and XY. Title to these claims had not been researched by the writer of the present report so no assumption could be made as to which are still in good standing.

4.3 Climate, Local Resources, Infrastructure

The climate is wet and mild. Most of the 5 meters of average annual precipitation occurs 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 had 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.

Small pockets of coarse placer gold had been found at the mouth of the Spud Creek and in 1933 rich gold-quartz floats were also identified. The floats were followed upstream and in 1935 the Zeballos Gold Project's Gold Field veins were identified.

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.

A detailed history of mining, development and exploration as it relates to the Zeballos Gold Project could be found in North Bay Resources' 2011 report (AR32298). It should be noted that a 1974 soil sampling 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.



Plate 1: Old mining equipment on display in the Village of Zeballos

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 a number of 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 Eocene Zeballos stock, a quartz diorite phase of the Catface Intrusions, is spatially related to the areas 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 considered to be of the intrusion related gold mineralization type.

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 rule contain much gold.

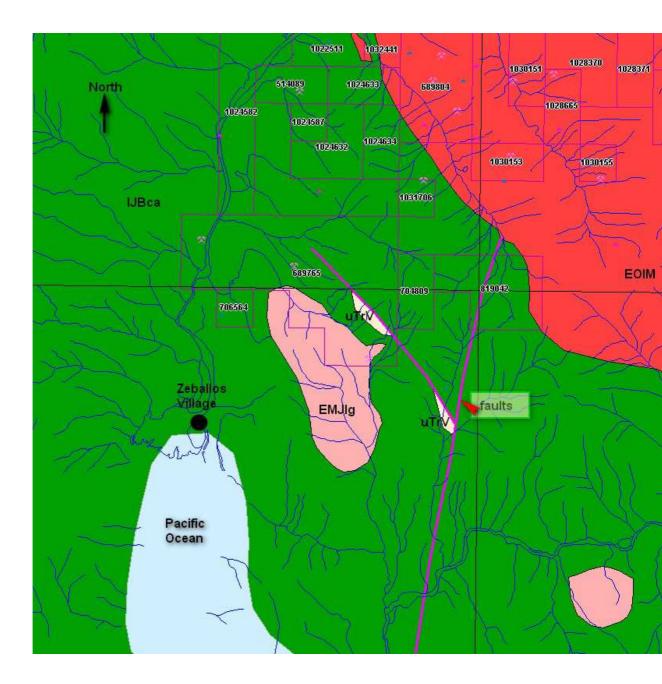


Plate 2: Zeballos Gold Project Geology Map

Legend:

uTrV: Lower Triassic to Upper Triassic Vancouver Group - Parson Bay Formation IJBca: Lower Jurassic Bonanza Group EMJIgd: Early Jurassic to Middle Jurassic Island Plutonic Group EOIM: Eocene to Oligocene Mt. Washington Plutonic Suite

5.3 Property Geology and Mineralization

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 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 areas gold-quartz veins.

The Zeballos Gold Project encompasses five past producing gold mines i.e. Tagore (092L 006), Golden Gate (092L 005), Gold Field (092L 211), Roper (092L 013), Beano (092E 002), and a mineral prospect - Answer 2 (092E 023). Mineral production from these past producers totaled 54,307 ounces gold, 18,609 ounces silver, 20,493 pounds copper, and 17,612 pounds of lead. Most of the production came from the adjacent Gold Field and Roper mines, where a historical estimation of the unmined resource stands at 220,429 tonnes grading 10.7 grams per tonne gold in quartz-vein deposits. All these deposits (except the Beano skarn) are of the gold vein deposit type and are hosted by the Bonanza group volcanic rocks within small shear zones and/or the Parsons Bay limestones. Vein mineralization consist of quartz, calcite, pyrrhotite, chalcopyrite, galena, pyrite and free gold. 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 be found in North Bay Resources' 2011 technical report (AR32298).

The auriferous band of limestone outcropping at Beano is expected to 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 same Hidden Valley Creek mineralized actinolitic float containing pyrrhotite and chalcopyrite was noted near an old trail (AR5079)

6. Prospecting Survey

A two day prospecting survey was undertaken during the month of September 2014. The scope of the survey was to assess the access to the rugged project area, to understand the geological setting and collect rock and stream sediment samples. The first day was used to travel from Mainland to the Vancouver Island and the project area without being able to do any field work because of getting dark early in the day. The second day was used to get to the project area and execute a few field traverses.



Plate 3: Bonanza Group volcanic rocks with clasts of Parson Bay limestone on Hidden Valley Creek

It was soon found that negotiating the coastal rainforest in a rugged terrain especially on a wet day presents challenges and future surveys have to be planned having in mind the difficult access. The survey party hiked through the rainforest and tried to reach higher elevations and the area located at the headwaters of some of the local creeks but fell short of reaching it due to difficult terrain and dense cover. The extensive ground cover (moss, fallen trees, ferns, brush) and the lack of outcrops made necessary the collection of rock and stream sediment samples from one of the local creeks i.e. the Hidden Valley Creek.



Plate 4: Dioritic boulder on the lower Hidden Valley Creek

The creek's boulders are representative of the rocks cut by the creek and its tributaries. Dark green hard Bonanza volcanic rocks were the most abundant rocks while recrystalized Parson Bay limestone and/or lime-silicate and interspersed volcanic rocks

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(or clasts) were far less abundant. A few diorite/granodiorite boulders have been encountered in the lower creek as well. Some of the green volcanic boulders were mineralized with disseminated pyrite and two of these samples were assayed but they did not return interesting values.

Four stream sediment samples were also collected from the Lower Hidden Valley Creek and they assayed up to 57.5 ppm copper, 50 ppb gold, 143 ppm zinc, and 150 ppb mercury.

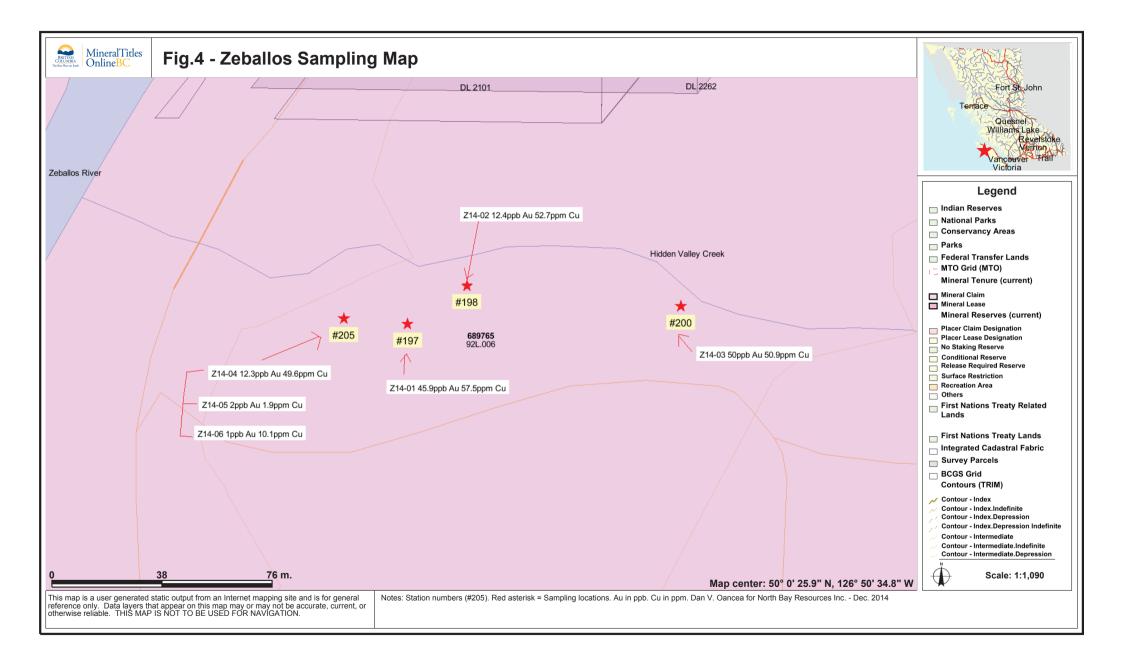
7. Discussion and Conclusions

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



Plate 5: Hidden Valley Creek stream sediment sampling location

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 large intrusive bodies i.e. the Mt. Washington intrusion which not



only that hosts most of the camps gold mines, but also provided the gold-base metals mineralization and fluids that permeated the adjacent Bonanza group rocks and the Parson Bay limestone/lime-silicates rocks. The eastern part of the Zeballos gold project overlaps the western side of the Mt. Washington intrusion while the majority 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 economic mineralization.

A special note has to be made on the Gold Field and Roper gold mines (not yet surveyed by North Bay Resources) located within the Zeballos Gold Project area. The mines are developed in the Mt. Washington quartz diorite close to the contact with Bonanza Group volcanic rocks. They have yielded 54,105 oz gold, 18,494 oz silver, 20,272 oz copper and 17,482 oz lead. Minfile 092L 211 mentions that: "Proven/probable/possible reserves in 4 veins (combined with the Roper deposit, 092L 013) are 220,429 tonnes grading 10.7 grams per tonne gold. In view of an unsuccessful 1989 mill test, the reserve figure of 49,890 tonnes in old workings grading 4.6 grams per tonne gold reported in 1942 near the end of the mine life, may be more credible (McAdam Resources Inc. Annual Report 1988)." The existence of these historical reserves could indicate that there is good exploration potential for finding new gold veins and extensions in the mines' area, which combined with the aforementioned historical reserves could make the reopening of the mines an interesting proposition.

The gold-copper in-soil geochemically anomalous "B" zone (AR5079) was not surveyed during the September 2014 field trip but nevertheless represents an important exploration target for it is located in the right geological setting and 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."

Due to limited sampling which resulted in a lack of background info on elements identified in stream sediments in the project area the assays of the 2014 Hidden Valley Creek sediment samples could be placed in the right context only by comparing them with the results of soil sampling from the "B" zone located at the headwaters of the aforementioned creek and of the Golden Gate Creek. This can be done as generally speaking there is a good correlation between soil and stream sediment samples; and one would not expect neither copper nor mercury to be more concentrated in sediment samples in comparison with soil samples. As for gold the 2014 stream sediment samples do not represent material collected from the bedrock/alluvial matter interface so there is no possibility of them being enriched at least with the coarser gold fraction therefore in the writer's opinion the gold content of the stream sediment samples could also be compared with the background and anomalous values of the "B" zone which is being drained by the Hidden Valley Creek.

The "B" zone's soil background values were considered to be 1-29 ppm for copper; 5-35 ppb for gold; and, 40-240 ppb for mercury. The "B" zone's soil anomalous values were considered to be in the 30-58 ppm range for copper; 40-1690 ppb for gold; and, 250-600 ppb for mercury.

The lower Hidden Valley Creek stream sediment samples assayed in the 49.6-57.5 ppm range for copper; 12-50 ppb for gold (two of the samples were at 45.9 ppb and 50 ppb) ; and, 130-150 ppb for mercury. One of the samples also returned a 143 ppm zinc assay. If compared to the anomalous soil values from the "B" zone then copper, gold (and zinc) values would be anomalous. The lower mercury values in stream sediment samples could highlight the fact that part of the mercury was fixed/captured by the creek's vegetation/organic matter.

The writer of the present report's interpretation is that due to the lack of representative background data (not enough stream sediment sampling) the aforementioned stream sediment assays cannot be considered anomalous but they can be considered elevated enough to point to the presence of mineralization in the Hidden Valley Creek's upper reaches. And this is exactly what was noted in previous reports - the existence of mineralized zones on the Hidden Valley Creek and of the anomalous "B" zone.

Two dark green basaltic rock floats mineralized with disseminated pyrite were sampled but assays returned uninteresting values i.e. in accord with previous sampling results of the Bonanza Group volcanic rocks. It should be noted that there is no mentioning of any dioritic rocks outcropping in the upper reaches of the Hidden Valley Creek so the significance of the dioritic boulders found in the lower part of the creek (if not deposited there by glaciers) is that they indicate the possibility of gold mineralization being present within or in the vicinity of the dioritic intrusion (possibly part of the productive Mt. Washington intrusion).

The third prospective zone within the Zeballos Gold project area is represented by the Hidden Valley Creek area below the Prosperity adit as described in AR05079 (the adit is not located within North Bay Resources' project area). 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."

8. Recommended Work

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

The Gold Field and Roper mines areas have to be field checked and geologically mapped. Field results would be correlated with historic literature finds and a geochemical and geophysical survey should be planned to try to identify extensions to the known gold-quartz veins. New veins are also possible to be identified by using modern exploration means. Contingent on positive results a short drilling program has to be considered to test for down dip and strike extensions of the known veins and for new veins.

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 also be employed to test anomalous ground if mechanized trenching would be difficult to accomplish.

The Hidden Valley Creek area has to be prospected, mapped and sampled in an effort to identify the source of the mineralized float material described by previous authors.

9. Cost Statement

Salaries:

Dan Oancea, PGeo:
- 3.0 Days Fieldwork (including mob/demob) @ \$500/day\$1,500.00
Gabriela Oancea, Geologist:
- 3.0 Days Fieldwork @ \$180/day\$540.00
Gas:\$160.29
Truck Rental:
- 3.0 Days @ \$86.6/day\$262.25
BC Ferries:\$177.60
Accommodation:
- 2.0 Nights @\$118.60/night\$237.20
Food:
- 6.0 Days @ \$50/day\$300.00
Analytical (ALS Chemex):
- 6 Samples\$257.07
Report Cost:
Dan Oancea PGeo
- 2.0 Days @ \$500/day\$1,000.0
TOTAL \$4,434.41

10. References

- 1. Assessment Reports: 5079, 12772, 32298;
- 2. 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;
- 3. Minfile 092E 002, 092E 023, 092L 005, 092L 006, 092L 007, 092L 013, 092L 211;

11. Statement of Qualifications

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

- 1. I am a registered Professional Geoscientist in the Province of British Columbia, Canada and a Fellow of the Geological Association of Canada.
- 2. I have a B.Sc. degree in Geological Engineering and Geophysics from Babes-Bolyai University of Cluj-Napoca, Romania, which I graduated in 1987.
- 3. I have practised my profession for over 15 years.
- 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 mineral property and upon personal knowledge of the property gained from on-site survey work carried out in the September 29-October 1, 2014 period.
- 6. I do not own interest in the Zeballos Gold mineral property.

Vancouver,

December 29, 2014

Respectfully submitted Dan V. Oancea PGeo

Station	Sample No.	Elevation	UTM E	UTM N	Description
197	Stream sediment sample Z- 14-01	42 masl	654530	5541664	Hidden Valley Creek bed
198	Stream sediment sample Z-14-02	51 masl	654550	5541678	Hidden Valley Creek bed
200	Stream sediment sample Z-14-03	61 masl	654624	5541674	Hidden Valley Creek bed
205	Stream sediment sample Z-14-04; and, rock samples Z-14-05 and 06	42 masl	654508	5541665	Hidden Valley Creek bed Dark green basaltic rock floats (Bonanza Group) mineralized with disseminated pyrite

*UTM Zone 09 NAD 83

APPENDIX 1

ALS CHEMEX INVOICES, ANALYTICAL CERTIFICATES & CHEMICAL PROCEDURES



ALS Canada Ltd. 2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

Page 1 of 1

INVOICE NUMBER 3253065

	BILLING INFORMATION	QUANTITY	ANALYS	ED FOR DESCRIPTION		UNIT	TOTAL
Certificate: Sample Type: Account: Date: Project: P.O. No.: Quote:	VA14183399 Sediment NOBARE 6- DEC- 2014 Zeballos	4 4 2.96	PREP- 41 ST43- PKG PREP- 41	Dry, Sieve (180 um) Soil Au- ST43 + ME- MS41 (25 g) Weight Charge (kg) - Dry, Sieve		1.45 31.95 2.35	5.80 127.80 6.96
Terms: Comments:	Due on Receipt C3						
		┛ └────			SUBTOTAL (CAD)	S	140.56
To:	NORTH BAY RESOURCES ATTN: PERRY LEOPOLD 2120 BETHEL ROAD LANSDALE PA USA				R100938885 GST	\$	7.03 147.59
	Please Remit Payments To : ALS Canada Ltd. 2103 Dollarton Hwy	E E S A A	Seneficiary Name: Bank: WIFT: Address: Account:	ALS Canada Ltd. ALS Canada Ltd. Royal Bank of Canada ROYCCAT2 Vancouver, BC, CAN 003-00010-1001098 ent info to accounting.canusa@also		00	PY
	North Vancouver BC V7H 0A7 Canada				F	'A	ID



2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

Page: 1 Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 6-DEC-2014 This copy reported on 8-DEC-2014 Account: NOBARE

CERTIFICATE VA14183399

Project: Zeballos

This report is for 4 Sediment samples submitted to our lab in Vancouver, BC, Canada on 25-NOV-2014.

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			
SCR-41	Screen to -180um and save both			

	ANALYTICAL PROCEDU	RES
ALS CODE	DESCRIPTION	INSTRUMENT
Au-ST43	Super Trace Au - 25g AR	ICP-MS
ME-MS41	51 anal. aqua regia ICPMS	

TO: NORTH BAY RESOURCES ATTN: DAN OANCEA 2120 BETHEL ROAD LANSDALE PA USA

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.



Colin Ramshaw, Vancouver Laboratory Manager

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



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To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

Page: 2 - A Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 6-DEC-2014 Account: NOBARE

Project: Zeballos

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ST43 Au ppm 0.0001	ME-MS41 Ag ppm 0.01	ME-MS41 AI % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.2	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1
Sample Description Z-14-01 Z-14-02 Z-14-03 Z-14-04	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm



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Page: 2 - B Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 6-DEC-2014 Account: NOBARE

Project: Zeballos

Sample Description	Method Analyte Units LOR	ME-MS41 Cs ppm 0.05	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01
Sample Description Z-14-01 Z-14-02 Z-14-03 Z-14-04	Units LOR	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%



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Project: Zeballos

Sample Description	Method Analyte Units LOR	ME-MS41 Nb ppm 0.05	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2
Sample Description Z-14-01 Z-14-02 Z-14-03 Z-14-04	Units LOR					ppm 0.1 11.9 13.5 11.4 10.0				ppm 0.1 7.4 7.1 6.3 6.1						



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Page: 2 - D Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 6-DEC-2014 Account: NOBARE

Project: Zeballos

Sample Description	Method Analyte Units LOR	ME-MS41 Ti % 0.005	ME-MS41 TI ppm 0.02	ME-MS41 U ppm 0.05	ME-MS41 V ppm 1	ME-MS41 W ppm 0.05	ME-MS41 Y ppm 0.05	ME-MS41 Zn ppm 2	ME-MS41 Zr ppm 0.5	
Z-14-01 Z-14-02 Z-14-03 Z-14-04		0.159 0.159 0.135 0.134	0.12 0.12 0.11 0.11	0.50 0.44 0.48 0.45	96 97 81 87	0.22 0.23 0.22 0.23	10.65 9.55 8.78 8.97	143 95 92 91	<0.5 0.7 0.5 <0.5	



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Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 6-DEC-2014 Account: NOBARE

Project: Zeballos

	CERTIFICATE COMMENTS
Applies to Method:	ANALYTICAL COMMENTS Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g). ME-MS41
	LABORATORY ADDRESSES
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. Au-ST43 LOG-22 ME-MS41 SCR-41 WEI-21



ALS Canada Ltd. 2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

2103 Dollarton Hwy North Vancouver BC V7H 0A7 Canada

To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

INVOICE NUMBER 3253068

E	BILLING INFORMATION		QUANTITY		SED FOR DESCRIPTION		UNIT	TOTAL
Certificate: Sample Type: Account: Date: Proiect: P.O. No.: Quote: Terms: Comments:	VA14183460 Rock NOBARE 3- DEC- 2014 Zeballos Due on Receipt	C3	2 0.24 2 2	PREP- 31 PREP- 31 Au- TL44 ME- MS61	Crush, Split, Pulverize Weight Charge (kg) - Crush, Split Trace Level Au - 50 g AR 48 element four acid ICP- MS	, Pulverize	7.45 0.70 16.70 27.90	14.9 0.1 33.4 55.8
To: N	ORTH BAY RESOURCES					SUBTOTAL (CAD) R100938885 GST		104.27
A 2 L	TTN: PERRY LEOPOLD 120 BETHEL ROAD ANSDALE PA SA					TOTAL PAYABLE (CAD)	\$	109.48
PI	ease Remit Payments To : LS Canada Ltd.			Payment may be n Beneficiary Name: Bank: SWIFT: Address: Account:	nade by: Cheque or Bank Transfer ALS Canada Ltd. Royal Bank of Canada ROYCCAT2 Vancouver, BC, CAN 003-00010-1001098			V



2103 Dollarton Hwy North Vancouver BC V7H 0A7 Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

Page: 1 Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 3-DEC-2014 Account: NOBARE

CERTIFICATE VA14183460

Project: Zeballos

This report is for 2 Rock samples submitted to our lab in Vancouver, BC, Canada on 25-NOV-2014.

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-31	Fine crushing - 70% <2mm						
PUL-31	Pulverize split to 85% <75 um						

	ANALYTICAL PROCEDU	RES
ALS CODE	DESCRIPTION	
ME-MS61	48 element four acid ICP-MS	
Au-TL44	Trace Level Au - 50 g AR	ICP-MS

TO: NORTH BAY RESOURCES ATTN: DAN OANCEA 2120 BETHEL ROAD LANSDALE PA USA

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.



Colin Ramshaw, Vancouver Laboratory Manager

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



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To: NORTH BAY RESOURCES 2120 BETHEL ROAD LANSDALE PA USA

Page: 2 - A Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 3-DEC-2014 Account: NOBARE

Project: Zeballos

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-TL44 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
Sample Description	LOR	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm



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Page: 2 - B Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 3-DEC-2014 Account: NOBARE

Project: Zeballos

Sample Description	Method Analyte Units LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
Sample Description Z-14-05 Z-14-06	Units															



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Project: Zeballos

Sample Description	Method Analyte Units LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 TI ppm 0.02	ME-MS61 U ppm 0.1
Z-14-05 Z-14-06	LOR	0.5			0.01 0.81 0.20									0.005 0.374 0.171		



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Project: Zeballos

1							
Sample Description	Method Analyte Units LOR	ME-MS61 V ppm	ME-MS61 W ppm	ME-MS61 Y ppm	ME-MS61 Zn ppm	ME-MS61 Zr ppm 0.5	
	LUK	1	0.1	0.1	2		
Z-14-05 Z-14-06		58 66	0.3 0.1	42.2 6.0	44 32	19.8 14.0	



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Page: Appendix 1 Total # Appendix Pages: 1 Finalized Date: 3-DEC-2014 Account: NOBARE

Project: Zeballos

	CERTIFICATE COMMENTS
Applies to Method:	ANALYTICAL COMMENTS REE's may not be totally soluble in this method. ME-MS61
Applies to Method:	LABORATORY ADDRESSESProcessed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.Au-TL44CRU-31PUL-31WEI-21



GEOCHEMICAL PROCEDURE

Au-TL43, Au-TL44

DETERMINATION OF TRACE LEVEL GOLD BY SOLVENT EXTRACTION – GRAPHITE FURNACE AAS OR ICPMS FINISH

SAMPLE DECOMPOSITION

Aqua regia gold digestion (GEO-AuAR01/02)

ANALYTICAL METHOD

Inductively coupled mass spectrometry (ICPMS) or Atomic absorption spectrometry (AAS)

A finely pulverised sample (25 - 50 g) is digested in a mixture of 3 parts hydrochloric acid and 1 part nitric acid (aqua regia). This acid mixture generates nascent chlorine and nitrosyl chloride, which will dissolve free gold and gold compounds such as calaverite, AuTe₃.

The dissolved gold is complexed and extracted with Kerosene/DBS and determined by graphite furnace AAS. Alternatively gold is determined by ICPMS directly from the digestion liquor. This method allows for the simple and economical addition of extra elements by running the digestion liquor through the ICPAES or ICPMS.

NOTE: Samples high in sulphide or carbon content may lead to low gold recoveries unless they are roasted prior to digestion.

METHOD CODE	ELEMENT	SYMBOL	UNITS	SAMPLE MASS (G)	LOWER LIMIT	UPPER LIMIT	DEFAULT OVERLIMIT METHOD
Au-TL43	Gold	Au	ppm	25	0.001	1	Au-0G43
Au-TL44	Gold	Au	ppm	50	0.001	1	Au-OG44



GEOCHEMICAL PROCEDURE

ME- MS41

ULTRA- TRACE LEVEL METHODS USING ICP- MS AND ICP- AES

SAMPLE DECOMPOSITION

Aqua Regia Digestion (GEO-AR01)

ANALYTICAL METHOD

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

A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, ment spectral interferences.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Silver	Ag	ppm	0.01	100
Aluminum	Al	%	0.01	25
Arsenic	As	ppm	0.1	10 000
Gold	Au	ppm	0.2	25
Boron	В	ppm	10	10 000
Barium	Ва	ppm	10	10 000
Beryllium	Ве	ppm	0.05	1 000
Bismuth	Bi	ppm	0.01	10 000
Calcium	Са	%	0.01	25
Cadmium	Cd	ppm	0.01	1 000
Cerium	Се	ppm	0.02	500
Cobalt	Со	ppm	0.1	10 000
Chromium	Сг	ppm	1	10 000
Cesium	Cs	ppm	0.05	500
Соррег	Cu	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	0.02	500



ME- MS41

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Мегсигу	Нд	ppm	0.01	10 000
Indium	In	ppm	0.005	500
Potassium	К	%	0.01	10
Lanthanum	La	ppm	0.2	10 000
Lithium	Li	ppm	0.1	10 000
Magnesium	Mg	%	0.01	25
Manganese	Mn	ppm	5	50 000
Molybdenum	Мо	ppm	0.05	10 000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.05	500
Nickel	Ni	ppm	0.2	10 000
Phosphorus	Р	ppm	10	10 000
Lead	Pb	ppm	0.2	10 000
Rubidium	Rb	ppm	0.1	10 000
Rhenium	Re	ppm	0.001	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10 000
Scandium	Sc	ppm	0.1	10 000
Selenium	Se	ppm	0.2	1 000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10 000
Tantalum	Та	ppm	0.01	500
Tellurium	Те	ppm	0.01	500
Thorium	Th	ppm	0.2	10000
Titanium	Ti	%	0.005	10
Thallium	TI	ppm	0.02	10 000
Uranium	U	ppm	0.05	10 000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.05	10 000
Yttrium	Υ	ppm	0.05	500
Zinc	Zn	ppm	2	10 000
Zirconium	Zr	ppm	0.5	500

NOTE: In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte.



GEOCHEMICAL PROCEDURE

ME- MS61

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

SAMPLE DECOMPOSITION

HF-HNO₃ -HClO₄ 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	0/0	0.01	50
Arsenic	As	ppm	0.2	10,000
Barium	Ва	ppm	10	10,000
Beryllium	Ве	ppm	0.05	1,000
Bismuth	Bi	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	Cu	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	%	0.01	50
Manganese	Mn	ppm	5	100,000
Molybdenum	Мо	ppm	0.05	10,000
Sodium	Na	0/0	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	0/0	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	Ti	٥/٥	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

The **Au-ST43** analytical method is gold by aqua regia extraction with ICP_NS finish. The methods range is 0.0001-0.1 ppm gold which is considered a super trace level of detection. It is used in the determination of gold in soils and stream sediment samples.