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# **Bozena Lake Property Drillhole Sampling Winter 2023**



## Tuuri Township Area

NTS Grid Sheet # 042D15

Prepared For: Wayne Richards

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March 2<sup>st</sup>, 2023

## Summary

Bayside Geoscience completed a re-sampling program on historic drill core from the Bozena Lake property for claim owner Wayne Richards. The objective of this project was to re-examine the historic core from 2007-2008 drill program at the Steel River Property and sample them for gold analysis. Existing samples were reviewed and noted that gold analysis was not done as it was previously sent only for multi-element analysis. The core was re-marked, and new areas of interest were noted before the samples were cut at Bayside's Core processing facility in Thunder Bay, ON. Forty-two samples were collected, ranging between 1 to 1.5 m in length. The samples were sent to Activation Laboratories LTD. (Actlabs) in Thunder Bay, ON for gold analysis. The results received from Actlabs returned with no significant gold values.

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## Introduction

Between February 2<sup>nd</sup> and February 4<sup>th</sup>, 2023, Claim Owner Wayne Richards initiated a resampling program on Bozena lake property, located between the towns of Marathon and Terrace Bay, Ontario, Canada. Wayne Richards contracted Bayside Geoscience Inc. of Thunder Bay, Ontario to complete the program. Re-sampling was conducted on historic drill hole number BZW0805 from the Bozena Lake Property which was previously part of the Phoenix Matachewan Mines Inc. (PMM) drill program on Steel River property from March 2007 to November 2008. All UTM coordinates throughout this report are given in NAD 83 zone 16U.

### Location and Access

The Steel River Property that includes the Bozena Lake and Prairie West claim groups is located along the Trans-Canada Highway #17 (TCH) approximately 50 kilometers west of the town of Marathon within the township of Tuuri (Figure 1). The southern part of Prairie West claim group is located approximately two kilometers from TCH and can be accessed by the Prairie River logging road. The northern Bozena Lake group is approximately five to seven kilometers from the TCH. The easterly claims of Bozena Lake can be accessed by a quad trail that was extended over to the south-east corner of Bozena Lake in 2007. The northerly claims remain inaccessible by ground. Figures 2 and 3 show the trails along the drill the hole locations. The property can also be accessible by canoe.

#### Bozena Lake Property Location 450000 500000 400000 Longlac Legend Town/City Geraldton Roads Jellicoe Little Longlac Railway tracks 5500000 -Lakes Lake Nipigon Rivers and streams Mining Division Long Lake Bozena Lake Property 5450000 5450000 Nipigon Red Rock Rossport Schreiber Bozena Lake Property Terrace Bay Marathonoo 5400000 Lake Superior Pass Lake Amethyst Harbour Map created by Ragi Ramesh February 9, 2023 Coordinate System: NAD\_1983\_UTM\_Zone\_16N 20 km 10 0 1:1,000,000 350000 400000 450000 500000 550000

Figure 1:Bozena Lake Property Location



Figure 2: Drill hole locations – Grid 1W (Giroux, L.A., 2009).



Figure 3:Drill hole locations – Grid 3 Area (Giroux, L.A., 2009).

# Property Ownership and Claims

Bozena Lake is located within the Thunder Bay Mining Division in the township of Tuuri and is covered by NTS sheet 042D/15. It consists of seven single cell mining claims and five boundary cell mining claims covering 170 hectares. The claim assemblage of the property is shown in Figure 4 and Table 1 shows the list of claims.

Table 1: List of Claims and Work Distribution

Claim Cell ID	Cell Type	Tenure Status	Issue Date	Anniversary Date	Claim Due Date	HOLDER
295496	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
145668	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
210962	Boundary Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
248369	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
145667	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
210963	Boundary Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
335805	Boundary Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
314940	Boundary Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
174747	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
107540	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
128173	Single Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards
295497	Boundary Cell Mining Claim	Active	2018-04-10	2023-03-23	2023-03-23	(100) Wayne Larry Richards



Figure 4: Claim Map

# **Exploration History**

Several phases of exploration activities were done in and around the Bozena and Prairie West claim groups between the years of 1903 and 2019. Table 2 lists the previous exploration activities that were done in and around the Bozena Lake property.

#### Table 2: List of Exploration activities

Year	Company	Type of Work	Property
1903-1905	W.J. Wilson and W.H.Collins	Reconnaissance mapping	In the area
1953-1954	J.W.R. Walker	Mapping	In the area
1955	Marlhill Mines Limited	Diamond drill	Marlhill and Prairie West
1964	Cominco	Diamond drill	West of the Prairie River
1968	Conwest Exploration	Diamond drill	Goldbar Lake
1971	Kennco Ltd	Airborne EM survey	Between Santoy Lake and
			the Prairie River
1977	Hudson Bay Oil and Gas	Diamond drill	Little Steel Lake
1981-1982	Canadian Nickel	Downhole mapping, fluxgate	McKellar Creek to
	Company	magnetometer and horizontal loop EM	~2km west of the
		surveys	Prairie River
1983	Del Norte Chrome Corp.and	Ground magnetometerand VLF-EM	West of the Prairie River
	Marathon Minerals Inc	surveys	
1983	Teck Explorations	Ground magnetometerand CEM horizontal	Prospect Lake and
	Limited	shootback surveys	McClaren Lake
1983	Golden Range	Aerodat heli-borne magnetometer, VLF-EM,	Prospect Lake and Spider
	Resources Inc	and a 3-frequency time-domain EM survey	Lake
1983	Wasabi	Aerodat heli-borne magnetometer, VLF-EM,	Southern half of Santoy
	Resources Inc.	and a 3-frequency time-domain EM survey	Lake
1983-1984	Cumberland	Aerodat magnetometer and EM surveys	From the Steel River east
	Resources		to near the Prairie River
1988	Noranda	Regional magnetometer and Input-EM surveys	Prairie River area
1988	M.W. Carter	Mapping	Schreiber-Terrace Bay
			area

1990	Geological Survey of	Airborne geophysical survey	Hemlo-Marathon area
	Canada		
1991	George Daniels	OPAP funded prospecting, mapping, and	West of the Prairie River
		sampling	
1996	Ontario GeologicalSurvey	High density lake sediment and water	Schreiber-Terrace Bay
		geochemistry survey	area
1997	Totem Sciences Inc.	Line cutting, induced polarization and Max-	Northern side of Spider
		Min EM surveys	Lake
1998-2000	Major GeneralResources	Mapping, Lithogeochemical sampling,	West side
		prospecting, and ground magnetometer	of the Prairie River
		surveys	
2002	RJK Explorations Ltd. and	Diamond drill	Between Santoy Lake and
	GLR Resources Inc.		the Prairie River
2002	Ontario Geological Survey	Airborne survey	Steel River
2004	Phoenix Matachewan	Lithogeochemical sampling	Steel River area
2005	Phoenix Matachewan	Ground magnetic, VLF surveys, Diamond drill	Prairie West, Bozena Lake
2006	Phoenix Matachewan	Helicopter-borne timedomain electromagnetic	Steel River Property
	contracted Geotech	geophysical survey	
	Limited and Condor		
	Consulting Inc of		
	Lakewood, Colorado		
2011-2012	Wayne Richards	Assaying and analyses, prospecting, and	Bozena Lake Property
		rock sampling	
2016-2017	Wayne Richards	Assaying and analyses, prospecting, and	Bozena Lake Property
		manual labor	
2019	Wayne Richards	Assaying and analyses, prospecting, and	Bozena Lake Property
		rock sampling	

## **Regional Geology**

Most of the geological information and Figure 5 originates from the Report on the 2007-2008 Drill Programon the Bozena Lake and Prairie West Claim Groups (Giroux, L.A., 2009). "Phoenix Matachewan's Steel River Project is located on the north shore of Lake Superior mid-way between Marathon and Terrace Bay. The property is centered on a large area of Archean aged metavolcanics within the Abitibi-Wawa subprovince. A major felsic volcanic centre forms the core of an antiform, and is overlain by a thin, laterally extensive unit of chert, shale, sulphide ironformation and related sedimentary rocks. The Steel River volcanic assemblage is contiguouswith the Manitouwadge (75 km ENE) and the Big Duck Lakes (45 km W) greenstone belts; bothof which contained significant base metal deposits - > 6 million tonnes of ore and >65 million tonnes of ore respectively."

"The felsic volcanic sequence in the Steel River area is an antiformal sequence of rhyolite flows, coarse epiclastic breccia, minor pyroclastic strata and some subvolcanic domes and dykes. The prominent antiformal axis is coincident with strong cleavage development, with most primary features rotated parallel to the axis. These are interlayered with mafic flows and capped by a near continuous exhalite unit. The capping exhalite units are overlain by a predominantly mafic sequence. Our preliminary geochemical compilation indicates that the felsic strata are "high.

temperature" rhyolite (FII-FIIIb, Hart et al, 2001), and that the mafic strata are profoundly europium (Eu) depleted. The latter are mainly andesite, whereas the overlying mafic flows are basaltic. The felsic strata and remarkably sodium (Na) depleted, and just below the exhalite unit, they are manganese (Mn) and base-metal enriched. In summary, the petrochemical data indicate that the strata are part of a major high-temperature hydrothermal system."

"Overall, the lowest part of the stratigraphic section corresponds to the antiformal axis. The antiform appears to plunge to the east, and thus the western part of the system, in the area of Santoy Lake, may represent the overall base of the section. That region is typified by epidotized mafic rocks and is adjacent to a felsic intrusive complex that we speculate may contain portions of a subvolcanic sill system."

"The past-producing VMS deposits in both the Manitouwadge (to the east) and Winston Lake (to

the west) areas are both associated with felsic sequences (proximal at Winston, siliciclastic at Manitouwadge). The presence of possibly laterally equivalent strata at Steel River, including well developed volcanic breccia, coupled with excellent geochemical indicators of high temperature hydrothermal discharge indicate high VMS potential in the Steel River."

### Property Geology

West Claim Groups (Giroux, L.A., 2009). Figure 6 shows the property geology. "The focus of Phoenix Matachewan's exploration has been the folded cherty exhalative sediment horizon which caps a mixed felsic to mafic metavolcanic sequence. The 'northern limb' of the exhalite horizon strikeseast-west through the most northerly claims of the Bozena Lake claim group - from Prospect Lake (to the west) to the east of Bozena Lake. The 'southern limb' of the horizon runs east-westthough the more southerly claims of the Bozena Lake group and through the centre of the PrairieWest claim."

"Regional metamorphic grade is upper greenschist to lower amphibolite, and generally increases towards the contacts with major alkaline (to the east) or granitic intrusions."

"The rusty cherty exhalative unit is of regional extent (Walker, 1967) and typically found along steep hillsides because of the sediments or basalts, which overlie the unit, being considerably more susceptible to physical erosion processes. The chert is generally highly iron stained on outcrop surfaces and the exterior of boulders, but very whitish and clean when broken. The unit contains sparse to a few percent sulphides, with more abundant sulphides commonly representedby strongly oxidized material commonly found only in talus debris."

"Tuff-breccias and/or debris flow units are present often immediately underlying the chert horizon. Intermediate to felsic fragments, ranging from lapilli to bomb-size in dimensions, rest within a deep green often garnet-rich matrix which was initially considered to represent sediment derived from basalts, but is in most cases a strongly altered intermediate to felsic ash."

"The felsic volcanic rocks are predominantly rhyolitic ash and crystal tuffs, usually whitish to salmon orange coloured on weathered surfaces, and medium grey where broken. Clastic sedimentary rocks which overlie the volcanic and chert units are comprised of greywacke of fairly uniform composition, with minor interlayered pelites. Metre-wide to 10m wide diabase dykes are common, generally with subvertical dips and displaying a wide range of strike orientations."

"Faulting is also common across the property. Numerous township scale topographic lineaments are evident on topographic maps of the area, most commonly defined by lakes and creek valleys trending northwesterly or northerly, with a subordinate set of similar north-easterly trending features. Steep fault-scarp-like cliffs exhibiting 10m to 30m of local relief are commonly encountered when traversing the property."



Figure 5: Regional Geology (Giroux, L.A., 2009)



Figure 6: Property Geology

## 2023 Drill Core Sampling Program

### Methodology

The objective of this drill core sampling program was to resample historic drill hole BZW0805 which was drilled during the 2007 to 2008 drill program at the Steel River Property by Phoenix Matachewan Mines Inc (PMM) for gold analysis. The core was logged in 2009 and the samples were submitted for multi-element analysis but not gold. Drill hole number BZW0805, with a depth of 107m, was shipped to Bayside Geoscience's core processing facility at 1179 Carrick St., Thunder Bay, ON., and was re-sampled and cut over a 2-day period from February 2<sup>nd</sup>, 2023, to February 4<sup>th</sup>, 2023. The location of the drillhole is shown in Figure 7 and collar details is shown in Table 3. Bayside personnel Ragi Ramesh examined the core and compared the geology to the historic logs received from Phoenix Matachewan Mines Inc (PMM) in Appendix A. The core was remarked, and core photos were retaken as shown in Appendix B.

### Sampling and Analytical Methods

After reviewing the existing samples, the new samples were cut at Bayside's core processing facility. Existing half cuts were quarter cut leaving one quarter of the core in the box while full core was cut into halves. A total of forty-two samples were collected and submitted to AcLabs for gold (Au) analysis in Thunder Bay, Ontario. Samples were collected between 16.4 meters to 79 meters and ranged in length from between 1 to 1.5 meters. The analysis method conducted by Actlabs is Fire Assay-Atomic Absorption Spectroscopy (FA-AA) which is a total decomposition technique to quantitatively determine the amount of gold and uses the absorption of light to measure the concentration of gas-phase atoms.

Assay preparation was accomplished by crushing samples to a 2mm particle size, mechanically splitting the samples to 250g, and then pulverizing to 95% passing 105µm. Certificate of Analysis is included in Appendix C.



Figure 7:Drill hole BZW0805 Location

Drill Hole	UTM Coordinates		Datum and Zone	Azimuth	Dip	Depth (m)
Number	Easting	Northing				
BZW0805	515021	5410889	NAD_1983_Zone_16N	180	-45	107.4

### Results

Table 4 shows the gold (Au) results from sampling completed on the historic core. The Au values are recorded in Parts per billion (ppb). The highest value is 21ppb (0.021g/ton) recorded between 76.6 to 77.6 meters with sample number of 856791. This is in the sedimentary unit of strongly quartz veined graphitic shale with the quartz being barren. No significant Au values were returned from the sampling program.

### Table 4: Au results with corresponding sample

Hole	From(m)	To(m)	Sample Number	Analysis Method	Detection Limit	Au_ppb
BZW-08-05	16.4	17.9	856751	FA-AA	5	< 5
BZW-08-05	17.9	19.4	856752	FA-AA	5	< 5
BZW-08-05	19.4	20.4	856753	FA-AA	5	12
BZW-08-05	20.4	21.3	856754	FA-AA	5	14
BZW-08-05	21.3	22.3	856755	FA-AA	5	6
BZW-08-05	22.3	23.3	856756	FA-AA	5	< 5
BZW-08-05	23.3	24.3	856757	FA-AA	5	< 5
BZW-08-05	24.3	25.3	856758	FA-AA	5	< 5
BZW-08-05	25.3	26.3	856759	FA-AA	5	< 5
BZW-08-05	26.3	27.3	856760	FA-AA	5	< 5
BZW-08-05	27.3	28.3	856761	FA-AA	5	< 5
BZW-08-05	28.3	29.3	856762	FA-AA	5	< 5
BZW-08-05	29.3	30.3	856763	FA-AA	5	< 5
BZW-08-05	30.3	31.3	856764	FA-AA	5	< 5
BZW-08-05	31.3	32.3	856765	FA-AA	5	< 5
BZW-08-05	32.3	33.3	856766	FA-AA	5	< 5
BZW-08-05	33.3	34.3	856767	FA-AA	5	< 5
BZW-08-05	34.3	35.3	856768	FA-AA	5	< 5
BZW-08-05	37.3	38.2	856769	FA-AA	5	6
BZW-08-05	38.2	39.1	856770	FA-AA	5	< 5
BZW-08-05	39.1	40	856771	FA-AA	5	< 5
BZW-08-05	46.5	48	856772	FA-AA	5	< 5
BZW-08-05	48	49	856773	FA-AA	5	5
BZW-08-05	51	51.5	856774	FA-AA	5	8
BZW-08-05	51.5	52.5	856775	FA-AA	5	8
BZW-08-05	52.5	53.2	856776	FA-AA	5	9
BZW-08-05	61.8	62.8	856777	FA-AA	5	12
BZW-08-05	62.8	63.8	856778	FA-AA	5	10
BZW-08-05	63.8	64.8	856779	FA-AA	5	< 5
BZW-08-05	64.8	65.7	856780	FA-AA	5	5
BZW-08-05	65.7	66.7	856781	FA-AA	5	< 5
BZW-08-05	66.7	67.7	856782	FA-AA	5	5
BZW-08-05	67.7	69.2	856783	FA-AA	5	10
BZW-08-05	69.2	70.7	856784	FA-AA	5	7
BZW-08-05	70.7	71.6	856785	FA-AA	5	12
BZW-08-05	71.6	72.6	856786	FA-AA	5	< 5
BZW-08-05	72.6	73.6	856787	FA-AA	5	< 5
BZW-08-05	73.6	74.6	856788	FA-AA	5	15
BZW-08-05	74.6	75.6	856789	FA-AA	5	15
BZW-08-05	75.6	76.6	856790	FA-AA	5	15
BZW-08-05	76.6	77.6	856791	FA-AA	5	21
BZW-08-05	77.6	79	856792	FA-AA	5	9

# Conclusions and Recommendations

Resampling of drillhole BZW-08-05 did not return any significant or anomalous enrichment in gold. Sampling focussed on areas of quartz veining and sulfide mineralization, comprised dominantly of sphalerite and lessor pyrite. Many of the gold occurrences in the Terrace Bay – Schreiber Greenstone belt are associated with base metal mineralization so sampling of this core was warranted.

Despite the lack of precious metals, this hole intersected significant Zn and Cu mineralization (up to 25.8% Zn and 0.3% Cu) that has not seen follow up work since the completion of the drilling campaign. Further work is recommended to follow up on the potential for base metal mineralization at Bozena Lake.

A time domain electromagnetic geophysical survey, flown by Geotech in 2006, produced a number of strong conductive anomalies across the property that should be reinvestigated. A program of modelling conductors, ground truthing and potentially diamond drilling could follow.

# Expenditures

ltem	Cost	Units	Total
Assays	\$32.65	43	\$1,403.95
Core Cutting	\$10	43.5	\$435.00
Sampling/Logging	\$600	2	\$1,200.00
Report Writing	1000	1	\$1,000.00
Тс	\$4,038.95		

Table 5: Costs associated with the Bozena Lake sampling program

Table 6: Credit Allocation of the Bozena Lake sampling Program

Claim ID	Total
145667	\$4,038.95

## Signatures

I, Steven D. Flank, of the City of Thunder Bay, in the Province of Ontario, do hereby certify that:

- 1. I am the President and Principal Geoscientist of Bayside Geoscience Inc., a geological consulting company based in Thunder Bay, Ontario.
- I am a member in good standing with the Association of Professional Geoscientists of Ontario (#2695), residing at 124 Sherwood Drive, Thunder Bay, Ontario, P7B 6L1.
- 3. I attained an H.BSc. in Geology from Lakehead University in Thunder Bay, Ontario (2011) and an M.Sc. in Mineral Exploration from Laurentian University in Sudbury, Ontario (2017).
- I have worked as an exploration geologist for 12 years focusing on project generation and early-stage gold projects including shear zone hosted lode gold and intrusion related disseminated gold deposits and intrusion related Ni-Cu-PGE deposits.
- 5. I personally supervised the 2023 Bozena Lake Property resampling program as described in this report.

Dated March 2, 2023 Thunder Bay, Ontario, Canada

Steven D. Flank, M.Sc., P.Geo.

### References

- Giroux, L.A., 2009, Report on the 2007-2008 Drill Program on the Bozena Lake and Prairie West Claim Groups
- Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007. Volcanogenic massive sulfide deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 141-161.
- Hart et al., 2001. Trace element geochemistry and petrogenesis of felsic metavolcanic rocks associated with volcanogenic Cu-Zn-Pb massive sulfide deposits, in Anonymous, ed., Geological Society of America, 2001 Annual meeting.
- Walker, J.W.R., 1967. Geology of the Jackfish- Middleton Area, Ontario Department of Mines, p. 41

Appendix A: Core Logging Description and Cross Section

### STEEL RIVER PROPERTY

Hole ID: BZW0805	Az: 180 Dip: -45 Total Length: 107.0
x: 515021 y: 5410889 z: 318	Hole_Type: Diamond Loggedby: JM Franklin   Survey_Type: Not Surveyed Log Date: 06/11/2008   Sampledby: JM Franklin
	Drill_Operator: Richards Exploration Reloggedby:
Location: Bozena West	Hole_Diameter: BTW ReLog Date:
Project: <b>Steel River</b> Claim: TB 1233240 MapSheet: 42D15	Units:MetresStartDate:29-Sep-08EndDate:06-Oct-08Left Casing:Casing Depth: 3Storage:Jackfish Lake Cottages, Terrace Bay, ON
Purpose/Comments	



#### SURVEY

Depth: Azimuth: Dip: Mag: Temp (C):

From (m)	To (m)	UNIT code	ALT code	Min code	Geological Description	Geochen	nical R	esults	S						
0.00	0.30	OVB			Overburden										
					Bedrock at surface (30 cm of overburden).										
0.30	52.44	GWKE			Greywacke	Sample	From	То	Interval	Туре	Cu ppm	Pb ppm	Zn ppm		
					To 15.1m; medium to fine grained wacke, light grey, narrow fracture filled guatz veins ±	351493	16.45	17.62	1.17	CORE	80	65	1690		
					pyrite, trace disseminated pyrite.	351494	17.62	18.40	0.78	CORE	78	116	366		
					p),	351495	18.40	19.45	1.05	CORE	74	60	3300		
					From 21.15 to 22.1m: 70% Wacke with 30% guartz veins, 5% disseminated and vein-	351496	19.45	20.25	0.80	CORE	3230	359	191000		
					like sphalerite in narrow fractures. Sphalerite = dark brown, high iron.	351497	20.25	21.15	0.90	CORE	1735	36	233000		
						351498	21.15	22.15	1.00	CORE	1035	25	50000		
					From 22.1 to 29.5m: Greywacke with high, irregularily distributed guartz veins (10%)	351499	22.15	23.15	1.00	CORE	36	15	3520		
					over all average of 1-2% sphalerite in veins.	351500	23.15	24.15	1.00	CORE	56	54	7130		
						818096	24.15	25.15	1.00	CORE	37	277	11400		
					29.5 to 33.2m: Wacke; 1% pyrite in veinlets with only trace? Sphalerite.	818097	25.15	26.15	1.00	CORE	69	118	7000		
						818098	26.15	27.15	1.00	CORE	103	335	12200		
					37.35 to 40.08m: 1% sphalerite in veinlets in Wacke, bedding @ 045 degrees.	818099	27.15	28.15	1.00	CORE	59	123	663		
						818100	28.15	29.50	1.35	CORE	81	70	25800		
							40.08 to 48.35m: Bedded Wacke.	351433	33.20	34.20	1.00	CORE	29	19	4570
						351434	34.20	35.50	1.30	CORE	33	48	11400		
					48.35 to 51.05m: Greywacke, minor pyrite.	351435	37.35	38.35	1.00	CORE	42	182	5060		
					17.10 17.20 SPH Sphalerite staining in Wacke, approx estimate of up to 5%.	351436	38.35	39.00	0.65	CORE	53	212	6170		
						351437	39.00	40.00	1.00	CORE	65	197	8130		
						351438	51.00	51.50	0.50	CORE	70	18	15500		
					19.45 21.15 SPH Quartz Vein: High Grade Zn. Brecciated quartz vein with 40% sphalerite, dark brown and coarse grained.										

(m) (m)	code code code	Geological Description	Geochemical Results
		24.80 25.40 SPH 10% Sphalerite.	
		33.20 37.35 SPH 5% sphalerite in quartz veins and veinlets, veins 10% to C.A.	
		48.10 48.35 Graphitic shale with 10% pyrite.	
		51.05 51.33 SPH Mineralized 10% pyrite, 2-5% sphalerite plus fluorite in veins and silicified zones.	
52.44 53.63	SED	Sediments	
		Graphitic shale and wacke.	
		53.1 - 53.63m: Silicified wacke.	
53.63 60.20	SYE	Syenite	
		Syenite dyke with chilled margins (50cm wide).	
60.20 61.50	GWKE	Greywacke	Sample From To Interval Type Cu ppm Pb ppm Zn ppm
		Silicified wacke with 20% graphite shale containing 25% pyrite.	351439 60.90 62.00 1.10 CORE 131 18 121
61.50 63.30	SED	Sediments	Sample From To Interval Type Cu ppm Pb ppm Zn ppm
		Graphitic shale with 5% bedded pyrite, 50-60 degrees re bedding.	351440 62.00 63.00 1.00 CORE 104 14 77
63.30 67.80	GWKE	Greywacke	Sample From To Interval Type Cu ppm Pb ppm Zn ppm
		63.3 to 64.75m: Silicified wacke.	351441 67.00 68.00 1.00 CORE 90 13 35
		64.75 to 67.8m: Less silicified wacke with 10% disseminated pyrite.	
67.80 79.06	SED	Sediments	Sample From To Interval Type Cu ppm Pb ppm Zn ppm
		Strongly quartz veined graphic shale, 20% pyrite, locally silicified wacke, no sphalerite, quartz veins from 20% to massive, quartz is barren.	351442     68.00     69.00     1.00     CORE     47     15     65       351443     69.00     70.00     1.00     CORE     48     16     95       351444     70.00     71.00     1.00     CORE     25     16     53
79.06 85.10	GWKE	Greywacke	
		79.06 to 82.8m: Silicified wacke, no sulphides.	
		82.8 to 85.1m: Wacke with graphitic shale interbeds, 5% disseminated sulphides, 25% pyrite in graphitic shale.	
85.10 107.00	SYE	Syenite	
		Alkali dyke (syenite), chill margin to 86m, feldspar prophyritic, 2% feldspar phenocrysts, massive even texture, pinkish grey in color.	

From (m)	To (m)	UNIT code	ALT Min code code	Geological Description	Geochemical Results
107.0	107.00	EOH		End of Hole	

General Comments:





# Appendix B: Core Photos



Figure 8: BZW0805 Dry(above) and Wet(below) Drill Core Box 1 to 4.



Figure 9:BZW0805 Dry(above) and Wet(below) Drill Core Box 5 to 8

121 -49

Figure 10: BZW0805 Dry(above) and Wet(below) Drill Core Box 9 to 12



Figure 11: BZW0805 Dry(above) and Wet(below) Drill Core Box 13-16

Carlos I 12 S 0.

Figure 12:BZW0805 Dry(above) and Wet(below) Drill Core Box 17-20

97 88 129 0) (94 )95 lag. 102

Figure 13: BZW0805 Dry(above) and Wet(below) Drill Core Box 21-24

Appendix C: Activation Laboratories Ltd. Certificate of Analysis

Quality Analysis ...



Innovative Technologies

Report No.:	A23-02415
Report Date:	27-Feb-23
Date Submitted:	21-Feb-23
Your Reference:	

Wayne Richards

# **CERTIFICATE OF ANALYSIS**

43 Core samples were submitted for analysis.

The following analytical package(s) were requested:	Testing Date:	
1A2-Tbay	QOP AA-Au (Au - Fire Assay AA)	2023-02-26 07:49:49

#### REPORT A23-02415

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3



LabID: 673

ACTIVATION LABORATORIES LTD. 1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6 TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com CERTIFIED BY:

Mat Vind

Mark Vandergeest Quality Control Coordinator

[	Analyte Symbol	Au
Ī	Unit Symbol	ppb
Ī	Lower Limit	5
[	Method Code	FA-AA
Ī	W856751	< 5
Ī	W856752	< 5
Ī	W856753	12
Ī	W856754	14
Ī	W856755	e
Ī	W856756	< 5
Ī	W856757	< 5
İ	W856758	< 5
t	W856759	< 5
t	W856760	< 5
t	W856761	< 5
t	W856762	< 5
t	W856763	< 5
t	W856764	< 5
t	W856765	< 5
t	W856766	< 5
t	W856767	< 5
t	W856768	< 5
t	W856769	6
t	W856770	< 5
t	W856771	< 5
t	W856772	< 5
t	W856773	5
t	W856774	8
t	W856775	8
t	W856776	ç
t	W856777	12
t	W856778	10
İ	W856779	< 5
t	W856780	5
İ	W856781	< 5
t	W856782	5
t	W856783	10
İ	W856784	7
İ	W856785	12
İ	W856786	< 5
İ	W856787	< 5
t	W856788	15
t	W856789	15
ł	W856790	15
t	W856791	21
t	W856792	Ę.
t	W856793	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Oreas E1336 (Fire Assay) Meas	526
Oreas E1336 (Fire Assay) Cert	510.000
Oreas E1336 (Fire Assay) Meas	530
Oreas E1336 (Fire Assay) Cert	510.000
W856759 Orig	< 5
W856759 Dup	< 5
W856769 Orig	5
W856769 Dup	7
W856773 Orig	5
W856773 Dup	5
W856788 Orig	14
W856788 Dup	16
W856792 Orig	9
W856792 Split PREP DUP	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5

Quality Analysis ...



Innovative Technologies

Report No.:	A23-02415
Report Date:	27-Feb-23
Date Submitted:	21-Feb-23
Your Reference:	

Wayne Richards

# **CERTIFICATE OF ANALYSIS**

43 Core samples were submitted for analysis.

The following analytical package(s) were requested:	Testing Date:	
1A2-Tbay	QOP AA-Au (Au - Fire Assay AA)	2023-02-26 07:49:49

#### REPORT A23-02415

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If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3



LabID: 673

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Mat Vind

Mark Vandergeest Quality Control Coordinator

[	Analyte Symbol	Au
Ī	Unit Symbol	ppb
Ī	Lower Limit	5
[	Method Code	FA-AA
Ī	W856751	< 5
Ī	W856752	< 5
Ī	W856753	12
Ī	W856754	14
Ī	W856755	e
Ī	W856756	< 5
Ī	W856757	< 5
İ	W856758	< 5
İ	W856759	< 5
t	W856760	< 5
t	W856761	< 5
t	W856762	< 5
t	W856763	< 5
t	W856764	< 5
t	W856765	< 5
t	W856766	< 5
t	W856767	< 5
t	W856768	< 5
t	W856769	6
t	W856770	< 5
t	W856771	< 5
t	W856772	< 5
t	W856773	5
t	W856774	8
t	W856775	8
t	W856776	ç
t	W856777	12
t	W856778	10
İ	W856779	< 5
t	W856780	5
İ	W856781	< 5
t	W856782	5
t	W856783	10
İ	W856784	7
İ	W856785	12
İ	W856786	< 5
İ	W856787	< 5
t	W856788	15
t	W856789	15
ł	W856790	15
t	W856791	21
t	W856792	Ģ
t	W856793	7

Analyte Symbol	Au
Unit Symbol	ppb
Lower Limit	5
Method Code	FA-AA
Oreas E1336 (Fire Assay) Meas	526
Oreas E1336 (Fire Assay) Cert	510.000
Oreas E1336 (Fire Assay) Meas	530
Oreas E1336 (Fire Assay) Cert	510.000
W856759 Orig	< 5
W856759 Dup	< 5
W856769 Orig	5
W856769 Dup	7
W856773 Orig	5
W856773 Dup	5
W856788 Orig	14
W856788 Dup	16
W856792 Orig	9
W856792 Split PREP DUP	8
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5