GEOCHEMICAL ASSESSMENT REPORT on the PUTNAM PROPERTY TENURES 1073735, 1073736, 1076136, 1076140, 1076155, 1076195, 1076221, 1076222 50°23.020 N LATITUDE/118°56.148W LONGITUDE NTS 82L/7W 82L.035 UTM 11µ 5583022N 362377E NEAR LUMBY, NE of VERNON, BC VERNON MINING DIVISION BRITISH COLUMBIA Event #5936877

By

J. T. Shearer, M.Sc., P.Geo. (BC & Ontario) FSEG Unit 5 – 2330 Tyner Street, Port Coquitlam, BC V3C 2Z1 Phone: 604-970-6402 E-mail: jo@HomegoldResourcesLtd.com

May 18, 2022

Field Work Completed between May 15, 2022 and May 18, 2022

Table of Contents

Pag	e
SUMMARYiii	
INTRODUCTION	
LOCATION and ACCESS4	
CLAIM STATUS	
HISTORY9	
REGIONAL GEOLOGY18	
LOCAL GEOLOGY	
EXPLORATION WORK 2020	
CONCLUSIONS and RECOMMENDATIONS	
REFERENCES	
APPENDICES	
Appendix I Statement of Qualifications	
Appendix II Statement of Costs	
Appendix II Sample Descriptions35	
Appendix III XRF Results	

LIST of ILLUSTRATIONS

		Page
FIGURE 1	Location Map	2
FIGURE 2	Detail Location Map	3
FIGURE 3	Table 1 Claims 1-100,000	5
FIGURE 3a	Table 2 Claims	6
FIGURE 4	Detail Claim Map	7
FIGURE 5	Trinity Project 1984	13
FIGURE 6	IMap Plot of Locations and Results	15
FIGURE 7	IMap Sample Locations and Results Put13 and Put14	16
FIGURE 8a	Putnam Prospecting Traverse	17
FIGURE 8b	Putnam Prospecting Traverse	17
FIGURE 9	Regional Geology Map from Assessment Report 13,311	21
FIGURE 10	Property Geology	26
FIGURE 11	Sample Locations and Results 2022	29

LIST of TABLES

		Page
TABLE 1	List of Claims	7
TABLE 2	Drill Log 1984 by S. L. Blusson	11
TABLE 3	Assay Values, Drillhole 1984 by S. L. Blusson	12

SUMMARY

1) The area covers placer gold in Putnam Creek along with highly anomalous gold values in graphitic and pyritic phyllite/schist near the Trinity Valley Road up to 3.4g/tonne Au (Blusson, 1985).

2) The area is accessed by well-maintained logging roads and paved roads 15km north of Lumby and a short distance northeast of Vernon, BC.

3) One drill hole was completed on the west end of the property with highly anomalous gold values in the core up to 2.4g/tonne Au. The layered pyrite mineralization could be very extensive along strike.

4) On the west side of the claims, there are 3 Minfile occurrences, including Gold Mountain which samples returned values of 27g/tonne Au from underground workings.

5) Initial rock and soil sampling returned highly anomalous values in copper and zinc. Selected samples assayed for gold and silver with low values.

6) Reconnaissance ground magnetometer readings show anomalous values around 1984 drill hole. (Work not claimed for assessment credit.)

7) A number of previous rock samples (Put # 2, 3 5 and 6) are highly anomalous in copper (see figure 8). Soil samples are also anomalous in copper. Selected samples were assayed for gold and silver which returned low values.

8) Rock sample Pt #5 ran 1274 ppm Cu, Put #6 560 ppm Cu, Put #3 243 ppm Cu, Put #13 at 450 ppm Cu and 593 ppm Zn and Put #2 at 477 ppm Cu. Likewise, several soil samples also were anomalous in copper (refer to figure 8), such as T1 – 197 ppm Cu, T3 at 186 ppm Cu, T11 at 433 ppm Cu and T5 at 517 ppm Cu.

9) The majority of the rock samples in 2022 are medium grey, highly schistose schist and gneiss, which are commonly highly pyritic and rusty weathering.

Silica values are plotted on Figure 11 and range from 4.2% Si (sample PM-7) up to 38.14% Si (quartz vein) but averages 14.78% Si in the typical schist (PM-3 to 6, PM-8 to 14).

Calcium also is highly variable, ranging from a high of 16.17% Ca to a low of 0.1% Ca. The average of schist approximately 2.21% Ca. Ca rsults are plotted on Figure 11.

Aluminum in the schists averages 5.19% Al, results are plotted on Figure 11.

Sulfur varies from 9.76% S (PM-7) to less than 1% S.

PM-7 has disseminated pyrite pinheads throughout.

Several rusty samples average 4.5% S. Iron content up to 8.97% Fe mirrors S values.

Metallic elements (Cu, Zn, As and Mo) are uniformly low in contrast to the anomalous soil samples collected previously.

10) Detail follow-up work planned for 2023 consists of geological mapping, prospecting, rock and soil geochemistry and ground geophysics.

Respectfully submitted, Thearen J. T. Shearer, M.Sc., P.Geo. (BC & Ontario) FSEG

INTRODUCTION

The Putnam Property is located 15km north of Lumby, BC and includes 8 claims totalling 2,833.48 ha. The area covers placer gold and stream sediment anomalies generated by previous regional reconnaissance geochemical program. A follow-up geochemical evaluation of the property was carried out on the property and is the subject of this report.

One diamond drill hole completed by Dr. Stew L. Blusson in June 1984 showed highly anomalous gold values in pyritic black shales up to 2.15g gold over 4 feet in core. The pyritic black shale unit appears to be extensive.

Attention was drawn to the east of the property area by rusty weathering exposures of graphitic and pyritic phyllites/schists on the west side of Trinity Valley Road. Several selected grab samples of the more gossanous material returned gold values up to 0.1oz./ton (3.4g/tonne) gold (Blusson, 1985).

On the west end of the claims are 3 Minfile occurrences including Gold Mountain (82LSW061) described as a 1.5m thick quartz vein which underground sampling returned gold values of 27g/tonne (MMAR 1902 page 188).



Figure 1 Location Map



Figure 2 Detail Location Map

LOCATION and ACCESS

The Putnam property is located astride Putnam Creek in the Vernon area of southern British Columbia. The village of Lumby is 14.5km (9 miles) south of the property and the city of Vernon is 26km (16 miles) southwest.

The National Topographic System reference is 82L/7W and the coordinates of the centre of the claim are 50°23.020 north and 118°56.148 west. The Universal Transverse Mercator grid references are from 5582000 to 5584500 north and from 359800 to 361850 east.

Good access to the centre of the property is provided by travelling northeast from Lumby on Mable Lake Road for 4km (2.5 miles), north on Trinity Valley logging road for 13km (8 miles) and thence northwest on Putnam Creek logging road for 2.25km (1.4 miles). The nearest major centre is Vernon, 22km (14 miles) west of Lumby on Highway 6.

The property is located on the west slope of Trinity Valley. The claim is cut by Putnam Creek which flows in a narrow, steep-sided valley from Silver Star Mountain to the broad, terraced Trinity Valley. Elevations on the property vary from 890 metres (2900 feet) above sea level to 1070 metres (3500 feet) a.s.l.

A major hydro powerline transects the west side of the property.



Figure 3 Table 1 Claims 1-100,000; Some of these claims have lapsed – see page 8



Figure 3a Table 2 Claims 2022; Current claims – see page 8



Figure 4 Detail Claim Map; Detail of claims of which some have lapsed

CLAIM STATUS

The Putnam Project is comprised of 9 mineral claims totalling 2,957.12 ha as shown in Table 1. The property is in the Vernon Mining Division (figure 3 and 3a).

Tenure #	Claim Name	Size (ha)	Location Date	Current Good to Date	Owner						
1073735	Putnam 1	329.68	January 6, 2020	June 11, 2022	J. T. Shearer						
1095634	Putnam 2	164.80	May 15, 2022	May 18, 2025	J. T. Shearer						
1076136	Putnam 3	288.37	May 10, 2020	May 18, 2022	J. T. Shearer						
1076140	Putnam 4	470.91	May 10, 2020	May 18, 2022	J. T. Shearer						
1076155	Putnam 5	428.10	May 11, 2020	May 18, 2022	J. T. Shearer						
1076195	Putnam 6	245.33	May 13, 2020	May 18, 2022	J. T. Shearer						
1076221	Putnam 7	247.14	May 14, 2020	May 18, 2022	J. T. Shearer						
1076222	Putnam 8	494.31	May 14, 2020	May 18, 2022	J. T. Shearer						
1077052	Putnam SE	123.64	July 2, 2020	July 10, 2022							

Table 1
Claims in Good Standing as of May 18, 2022 and Filing of SoW

Total 2,792.28 ha

Table 2

			Current Claims		
1076195	Putnam 6	164.80	May 13, 2022	October 25, 2023	J. T. Shearer
1095634	Putnam 2	164.80	May 15, 2022	May 18, 2025	J. T. Shearer
1095710	Putnam 1	329.68	May 19, 2022	May 19, 2023	J. T. Shearer
1095714	Putnam 7	237.83	May 20, 2022	May 20, 2023	J. T. Shearer
1096975	Putnam 3	164.81	August 6, 2022	August 6, 2023	J. T. Shearer
	Total	1,061.92 ha			

Table 1 shows the claims in good standing as of the SoW 5936877 on May 18, 2022. Unfortunately, claims other than Putnam 2 and 6 were not put on the SoW (a simple mistake). The other claims provide that Putnam 2 and 6 were contiguous. The other claims subsequently lapsed. Please see figures 3 and 3a.

Cash may be paid in lieu for up to one year if no work is performed. Following revisions to the Mineral Tenures Act on July 1, 2012, claims bear the burden of \$5 per hectare for the initial two years, \$10 per hectare for year three and four, \$15 per hectare for year five and six and \$20 per hectare each year thereafter. Work can be filed for up to 10 years in advance.

The claims stretch 10km east-west along Putnam Creek from Trinity Valley Road in the east to the Gold Mountain Showing in the west.

HISTORY

Heavy Mineral Surveys

Four heavy mineral samples were collected from stream sediments in Putnam Creek and its tributaries in 1984 (Kyba, 1985).

Between seven and eight kilograms of -20 mesh sand were collected in plastic bags from about 100 kilograms of gravel at each sample site. The bulk samples were transported to the C.F. Mineral Research Laboratory in Kelowna, B.C., where they were washed, wet-sieved, jigged and submitted to tetrabromoethane and dilute methylene iodide separations, followed by nine electromagnetic separations. The resultant -60 mesh heavy non-magnetic fractions were crushed, weighed, vialled and submitted to Nuclear Activation Services in Hamilton, Ontario for nuclear activation geochemical analysis for gold, arsenic, antimony, barium and tungsten. After completion of irradiation cooling, the concentrates were then forwarded to Barringer Magenta Laboratories in Calgary, Alberta for geochemical analysis by the atomic absorption technique for silver, copper, molybdenum, lead and zinc.

These results were statistically treated to average the sample size and produce a weighted total.

All four samples contained highly anomalous amounts of gold. Sample number 224 from a tributary of Putnam Creek contained 2300 parts per billion gold. All other elements were considered to be of background value.

Soil Geochemistry

A total of 137 soil samples were collected at 50 metre intervals along 13km of logging road and flagged lines. Samples were collected from the B or C horizons at depths ranging from 75 to 350mmm. Average depth was 200mm. Material collected varied from grey clay to brown silt and sand. The area is one of gentle to moderate slopes.

Samples were collected in numbered Kraft paper bags and shipped to Kamloops Research and Assay Laboratory, Kamloops, BC for geochemical analysis. All samples were analysed for gold, copper and lead. Seven samples were analysed for silver. Thirty gram samples of the -80 mesh fraction were analysed for gold by the fire assay/atomic absorption method using aqua regia solution. Copper, silver and lead analyses of the -80 mesh fraction were by the hot acid extraction/atomic absorption method.

In 137 samples one sample contained 90 ppb gold, all other samples were less than 5 ppb gold.

Silver values were less than 0.6 ppm silver.

Histograms for copper and lead defined the following values:

Copper0 - 80 ppmbackground80 - 96 ppmpositive96 ppmanomalous

Lead 0 - 14 ppm background 15 ppm anomalous

One sample was anomalous in gold (90 ppb). It is located in an area of heavy forest and a few scattered outcrops of black phyllite.

A weak copper anomaly is associated with the Main Fault Zone and with the low angle fault contact area between the augite andesite and black phyllite. Scattered weak lead anomalies occur in the area of quartz veins that contained small amounts of galena, in the area of the single gold anomaly and in the Main Fault Zone.

Rock Geochemistry

A total of 26 rock samples were collected from the project area. All were analysed for gold and silver and 10 were analysed for arsenic and antimony. Geochemical analyses were performed by Kamloops Research and Assay Laboratory, Kamloops, B.C.

The highest gold value was 30 ppb and was contained in a sample of altered and pyritized augite andesite. All other rock samples were less than 5ppb. Silver values were less than 3ppm. Arsenic and antimony were very low in all samples.

						ALTER	IATION					1.
OOTAGE	DESCALATION	FROM	10	-								CALC
12-	Casing Soil and Disten Delisck.											
11	. Ok av - Okul abullite wind 1-2' units of 2t av med or Juflaceaus	7'	22.	120	white	suluta	Vanht	110 to	1 12 "	thick a		
	phylite with - shik shyllite laminutions - du phylite has	1.6	63	iacut de	and the	New	4 %	There	WAY	Glature	47	
	- Server 26 At up tult becoments to 2 mm.			dump	Atiens .	It quite	**	CINI /	20.02	404	14-	
32-	a mainly de ge med ar tathactus phylite.		1	4 100	25124	7- 22'		I	T	T		
-31			T	T	T		ſ		I		T	
1-37				13							T	
- 58		1	20	1-3 0						-	Ī	
200-	Buck phyllife some mid or class (114)	1 201	64	3 1							1	1
- 87	14. 54 - Chellite tastaceaus much med as that clasts	64-1	25 20	1 bus	erte H	1 444	Casele	60 100	The Me	12 21		110
36 -	- auxed by we do sy adapte in lensy 12 bayers a lammations	1-23-1	120	fort	1.10 10	1111	1171 0	10	14			1
311-	mainly Die by with midlife, shull the finely laminastee	- 28	139	-	-	*	-	-	-		-	1
- 120	mored 21 an daile platifie tuffereeus 21 gy mid 50 clasts.	T	T								1	
- 129	paruly ell by presented and Sheared pupiller Soft.	1	001	4	1 11		in tale	2	61/2	1	Ĩ	1010
461 -	Ship (24 tash (45) (1 1 100 pr) 100 pr 100 pr 21 102 CK	1 100	001	11/2	Le vin	of un	ine law	the trans	h Sal C		ľ	1
		130 ±	Artais	14 6	11 11	124 54	erel 1.	TY PYT	te vein	s		
14.3	Dark applifie mud stone withe her makened breezes por hain ation										-	1
152	must Tome mer us will live inster and us a hull the	143-52	There	luted	2 Venn	2-1	1 A.					
11:3	sheet shall be soorly luminuled to messive instatemetered secure	152-163	125	Ilan	1°6. (a.	Yeile ve	211					Ì
172	austly much at it orcenity so shiftid schift accasion up to 2"											
1	sours and laminutions of Alack phullite over lars	169	hud	of caled	× 121	11.00						
	strong schistority - mained nattic tatt ? Alartic											
102	well cert quite active sticks schistesity.							1				
				-								
			1									
		Int Terrary and				100 100 100 100 100 100 100 100 100 100		_				
				I								
			Î		-							
			T	I								

Table 2 Drill Logs 1984 by S. L. Blusson

5500	REMARKS		Service And															1																						
.S. 6/4																																			-				1	
gged By.	Ī	Zn.	Ť	İ	İ		Ì	1		-	1	İ		1	Ì	Ì	1	1		1	Ī		1		1												No.			
بر 	SES	Cu.		1	1				1	1	Ì	Ì	1	1	1	1	İ	Ì	1	ĺ		1	Í	Ì		Ì	-	1	1	Ì	-	Ì								
	AVERA	A9.	1	1	1		1	-		1		1	1		1	1	1		1	1	1	•	1	1	1	1	1	İ	Ì	Î	Ì	1	1	1						
8		Au.	1		1		1		+		1				1	1	1		1	1			1	1			Ì	Ī	1	1	1			1						No. of Concession, Name
Angle	1	DTH				1			-		+	-	1							-	1	1				1	1		1		1	1	1							
		3	1	-	$\frac{1}{1}$					-	1					1				1				1	1	1				1	1									
2:	4			1		$\frac{1}{1}$	-		-	+	+	-	-		1			-		1	+			1			1		1		$\frac{1}{1}$	1		-						
e ation					-		-	-	1		-						_			•			+	2		1			-				-							
	TH X ASS			-	-				-									-					$\frac{1}{1}$		+	+		-		1	-		-	-	_					
1.00	MIC							-	-		-	-						-				1				-	-	-	-		-		· 							
Brian					+		-	-	-	+	-	-	-	_		-		1		_	-		1					1	+	+									_	
	-	_						-		-	-	-		1		_		-		1											1									
Clain			+				-		+	1	-		1.1		1	-			-							1		$\frac{1}{1}$	+	-	1	1		-						
1			1.0	-	+			-						-		-		-		-	+	1	+		+	1	1	1	1	1	1	1	1							Ì
9. A.	Ae	TTO	1	1		1		-	1							-				1		1		1	Ì	1	-		1	1		1	1	1			Γ	1		
, c , r	PP6.	t	50	120	1900	50	850	90	1300	160	2490	1800	20	96	50	50	20	50	20	50	20	So	80	50	50	2	50	50	50	50	50	20	20		480					
Eesu H	MIDTH	Ħ	8	2			-	1		2	2	2	2	2	3	2	2	3	2	50	2	2	2	2	2	~	2	2	3	2	2	2	60							
chemical	NUMBER		1 11	2	E	4	2	6	- 7	8	0	01	11	-12	13	14 -	15	16	12	18	61	30	12	22	23	24	25	36	37	28	29	30	31		- una					
	FODTAGE	#	- 7-9	9-11	11-12	12-13	13-14	14-15	15-16	10-18	18-20	20-22	22-24	24-24	26-28	20-30	30-32	32 - 34	34-36	36-38	38-40	40-42	42-94	44-96	46-48	48-50	50-52	53-54	54-56	56-58	58-60	60-62	62-64		Standard . Au 0.5 a					1

Table 3 Assay Values Drill Logs 1984 by S. L. Blusson



Figure 5 Trinity Project 1984

Exploration Work 2020

Work in 2020 focussed on rock and soil sampling.

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30, 2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater.

A number of rock samples (Put # 2, 3 5 and 6) are highly anomalous in copper (see figure 8). Soil samples are also anomalous in copper. Selected samples were assayed for gold and silver which returned low values.

Rock sample Pt #5 ran 1274 ppm Cu, Put #6 560 ppm Cu, Put #3 243 ppm Cu, Put #13 at 450 ppm Cu and 593 ppm Zn and Put #2 at 477 ppm Cu. Likewise, several soil samples also were anomalous in copper (refer to figure 8), such as T1 – 197 ppm Cu, T3 at 186 ppm Cu, T11 at 433 ppm Cu and T5 at 517 ppm Cu.

Additional soil and rock sampling is warranted for a program in 2021.



Figure 6 IMap Plot of Locations and Results 2020



Figure 7 IMap Sample Locations and Results Put13 and Put14



Figure 8a Putnam Prospecting Traverse



Figure 8b Putnam Prospecting Traverse

REGIONAL GEOLOGY

The rocks in the area around Lumby were mapped by Jones (1959) as undefined units of the Monashee Group which was assigned to the Shuswap Terrane. Their age; Archean or younger, and correlation with other lithostratigraphic units was unknown. It was thought that they were bounded by two northwesterly trending faults, one of which separated them from Triassic-age Slocan Group rocks to the east.

The Shuswap Metamorphic Complex is exposed just west of the Lumby area.

It was considered by Jones and his contemporaries to be a western extension of the Canadian Shield that was in fault contact with adjacent younger rocks. Okulitch (1979) found that along some of the margins of the complex, Mesozoic-age units could be traced into the complex and correlated. Consequently, Okulitch (1979) determined that the Shuswap Metamorphic Complex had a Precambrianage core that was added to during subsequent orogenic and metamorphic events.

Okulitch (1979) found that the Lumby area was underlain by shale, massive siltstone, conglomerate and tuff. He could not find any evidence of a boundary fault between the Sicamous Formation of the Monashee Group and adjacent Slocan Group rocks and thus assigned everything to the Late Triassic-age Slocan Group.

The Slocan Group rocks near Lumby have been influenced profoundly by their proximity to the Shuswap Metamorphic Complex which has destroyed many sedimentary structures and lithological relationships through conversion of sedimentary and volcanic rocks to phyllites, schists and gneisses.

The Slocan Group rocks form some of the upper part of the Kootenay Arc, which extends in southwestern British Columbia from the U.S. border to northeast of Revelstoke (Douglas et al; 1970).

Kootenay Arc sediments and volcanics were deposited at the western margin of proto-North America in the Cordilleran Geosyncline. Kootenay Arc deposition from Late Proterozoic until Middle Palaeozoic time was in a large eugeosyncline that segregated into smaller sub-basins during the Late Palaeozoic Era. Mesozoic deposition was mostly miogeosynclinal.

The older eugeosynclinal assemblage is exposed mostly in the eastern part of the Kootenay Arc; the younger miogeosynclinal assemblage is exposed mostly in the western part of the Kootenay Arc. The Lumby area is underlain by the Slocan Group which forms part of that miogeosynclinal assemblage.

Read and Wheeler (1976) mapped the Slocan Group over a broad area just northeast of the Lumby area. Their description of the Slocan Group was as follows:

The Slocan Group lies between the Kuskanax and Nelson Batholiths and extends into Vernon map-area (Jones, 1959), between Thor-Odin and Pinnacles Domes. The group consists of a thick unit of politic rocks overlain by approximately 4,000 feet of volcanic rocks. At the base of the group, lenses of conglomerate and sedimentary breccia ..., composed of Kaslo detritus, disconformably overlie the Kaslo Group. Near the base, limestone ..., up to 100 feet thick, forms layers intercalated with grey argillite, phyllite and fine-grained quartzite ... Near the top of (this) map unit ..., rocks become tuffaceous and pass into meta-andesite and meta-dacite tuffs and flows ..., and augite meta-basalt and meta-andesite flows and tuffs ... Between Columbia River and Slocan Lake, these volcanic rocks core the depressions of the doubly-plunging synclines ...

West of Slocan Lake, an increase of metamorphic grade towards Valhalla Dome, which lies south of the map-area, has converted metasedimentary rocks of the Slocan Group to mica schist ... and marble ...

Read, P.B. and Wheeler, J.O.; 1976: Descriptive Notes to G.S.C., O.F. 432.

Slocan Group rocks are intruded by a suite of calc-alkalic batholiths and stocks that are part of the Nelson Batholith (Read and Wheeler, 1976). Nelson Batholith intrusions are concordant intrusions elongate parallel to the westerly trend of the country rock. They are dated by Read and Wheeler (1976) as Jurassic to Cretaceous, generally about 164 million years old.

Read and Wheeler (1976) recognized four phases of regional deformation in Kootenay Arc rocks east of the Lumby area.

The first phase of deformation produced rootless isoclinal folds with well-developed, axial plane foliation during the Middle Palaeozoic. This phase of deformation was completed before the Slocan Group was deposited and consequently, has no relevance to the geology of the Saddle Mountain or Deafies Creek properties.

The second and third phases of deformation occurred during the Middle Jurassic Period after deposition of the Slocan Group and early during emplacement of Nelson Batholith intrusions. Read and Wheeler (1976) estimated that these phases of deformation and associated regional metamorphism occurred between 178 and 164 million years ago.

Second and third-phase folds are open to tight folds with a crenulation axial plane cleavage.

Read and Wheeler (1976) recognized a late phase of deformation that produced microscopic kink folds of various orientations in phyllites.

Jurassic-age regional metamorphism in Slocan Group rocks varies from chlorite to biotite sub-facies of the greenschist facies of metamorphism. Locally, Slocan Group rocks are metamorphosed to granulite facies due to contact metamorphism during the emplacement of intrusions related to the Nelson Batholith and anatexis during extension of the Shuswap Metamorphic Complex.

Okulitch (1979) described the structures observed in Slocan assemblage rocks near Lumby as follows: Structures in the Sicamous Formation are well-developed at all scales but are variable in their style and mutual relationships throughout the project-area. Bedding and sub-parallel foliation are ubiquitous: the latter is particularly evident although fine laminar compositional layering is also present... Attenuated isoclinal folds are common and these early structures are similar in many respects to those in adjacent older units... Megascopic early folds in the Sicamous Formation on the flanks of the Chase and Silver Star Anticlines are the same as those described in the Silver Creek and Tsalkom Formations.

Late and latest structures present in the Sicamous Formation are for the most part also the same as in adjacent units. Possibly significant exceptions are latest brittle folds west of Adams Lake that plunge gently east, which are of anomalous orientation, and polyphase folds in Coldstream and Creighton Valleys. These features may be related to major faulting... Okulitch; A.V.: 1979;

Descriptive Notes to G.S.C.; 0.F.637, Map B

Plutonic rocks ranging in age from Ordovician to Cretaceous have been mapped in the area around Lumby and Vernon (Jones, 1959; Okulitch, 1979). Small intrusive plugs of Jurassic-age diorite and Cretaceous-age granite were mapped near some of the peaks near the Deafies Creek and Saddle Mountain properties (Okulitch, 1979). The intrusions have been related to the major orogenic events that have affected the region.

These orogenic events were described by Okulitch (1979) as follows:

The Columbian Orogeny, occurring during the Early Jurassic to Mid-Cretaceous time, was the major event affecting rocks in the project-area. Most of the polyphase ... folding, regional metamorphism and faulting took place at this time. Extensive plutonism accompanied and followed deformation...

Within the project-area, radiometric data . . . suggest that closure of the K-Ar isotopic system during waning regional metamorphism and deformation took place at least 130 to 155 MA ago (Early Cretaceous to Middle Jurassic). Early Jurassic rocks were affected by most deformational phases of the orogeny; Early Cretaceous plutons ... are post-tectonic.

Uplifting and erosion followed the Columbian Orogeny. Final cooling of high-grade metamorphic rocks may not have taken place until about 50 MA ago ... or a discrete thermal event, perhaps associated with Eocene plutonic and volcanic rocks affected the Rb-Sr and K-Ar isotopic systems ... Movement along northerly trending faults and latest warping preceded or accompanied extrusion of (Eocene or Oligocene-age volcanics). Numerous feeder dykes followed fracture and fault planes. Such tensional features may be induced by post-orogenic erosion, uplift and cooling of the crust...

Post-Eocene uplift and faulting took place predominantly in the Shuswap Metamorphic Complex and resulted in erosion of (the Tertiary-age volcanics) and further exposure of the metamorphic terrain.

Okulitch; A.V.; 1979: Descriptive Notes to G.S.C., 0.F.637, Map B

Large cliff-forming outcrops of Tertiary-age flood basalts and andesites are exposed on the eastern part of the area about 8 km east of Lumby (Ostler, 1993A). There, they unconformably overlie Slocan Group metasediments.

The Lumby area underwent significant glaciation during the Pleistocene Stage, producing broad valleys. Late Pleistocene and Recent glacio-fluvial sediments filled White Valley to its present topographic level and a thick mantle of glacial till was deposited on lower hill slopes. A thick apron of glacio-fluvial sediments covers the Trinity Valley burying Slocan Group rocks located there (Ostler, 1993A).



Figure 9 Regional Geology from GSC Open File 637

FIGURE 9a LEGEND to FIGURE 9 (UPPER PART)

PHANEROZO	IC
CENOZOI	C ARY OR QUATERNARY
PLI	DCENE OR PLEISTOCENE
TQs	CONGLOMERATE (NEAR VERNON): BASALTIC ARENITE, BRECCIA, RUBBLE, CONGLOMERATE (ALONG NORTH THOMPSON AND CLEARWATER Rivers).
TERTI	ARY
MIO	CENE AND/OR PLIGCENE (MAY INCLUDE PLEISTOCENE)
mīv	PLATEAU LAVA; DLIVINE BASALT, ANDESIDE, RELATED ASH AND BRECCIA; BASALTIC ARENITE; MINOR BASAL SEDIMENTS; (May include vounger valley basalts).
Eoc	ENE AND (?) OLIGOCENE
K.	AMEGOPS GROUP (PRINCETON GROUP IN SOUTHWEST CORNER: SKULL HILL FORMATION ALONG NORTH THOMPSON RIVER).
Eikv	AND OPE GROUP (CHU CHUA FORMATION ALONG NORTH THOMPSON RIVER: TRANQUILLE BEDS NEAR WESTERNMOST SOUTH THOMPSON NYERE: INCLUDES UNIT Too on Mar A).
eTKs	SANDSTONE, CONGLOMERATE, SHALE: MINOR COAL, TUFF ARKOSE.
	UNCONFORMITY
PAL	LEOCENE OR EOCENE
pTy	SYENITE, GRANITE: MINOR MONZONITE, SHONKINITE.
MESOZO	C.
CRETA	ICEOUS
Kg	GRANITE, GRANDDIORITE; LESSER GUARTZ MONZONITE AND QUARTZ DIORITE.
1	BALDY BATHOLITH AND SATELLITIC STOCKS.
Kam	QUARTZ MONZONITE. GRANODIORITE: MINDR PEGMATITE.
E	DI Y (BETACEAUC
5	ALMON ARM. DEEP CREEK, NISCONLITH AND SCOTCH CREEK PLUYONS.
EKgd	GRANODIORITE. GRANITE, QUARTZ MONZONITE: MINOR DIORITE, GARBRO, QUARTZ, DIORITE,
	IAFT BATHOLITH
EKqm	QUARTZ HONZONITE, GRANODIORITE: HINOR PEGNATITE AND DIORITE.
JURAS	STIC OR CRETACEOUS
1111	SYENITE AND FELSITE DYKES.
1 ceres	
JURAS	isic
Jgn	UNSIVE AND FOLIATED. STATES THE FORMATTE, AFCITE, LEUCOLATIC GRAATE AND JUANTE MORENTE BORDERING AND WITHIN SHUWAAP HETANGPHIC COMPERX AND DWANGAN FLUTONIC AND HEAMORPHIC COMPLEX: SILVER STAR INTRUSIONS: (May include orthogneiss of Palaedzoic and Proterozoic ages).
LAT	E JURASSIC
	ALHALLA PLUTONIC ROCKS
1 Jgd	GRANDDIORITE, GRANITE; MINOR GABBRO, DIORITE, QUARTZ DIORITE.
LAS	NE BLOGE PLUTON
EJg	FOLIATED. LINEATED GRANITE (MAY INCLUDE PALAEOZOIC PLUTONIC ROCKS).
	IEISON PINTONIC ROCKS TUNNA RATUM ITH AND BATELLING STOCKS
EJgd	DUARTZ DIORITE, GRANODIORITE: MINOR DIORITE, GRANITE, AMPHIBOLITE, GABBRO AND ULTRAMAFIC ROCKS.
Eldi	DIDDITE - NINDA DUNCTA DIDDITE NUM FARMA
Elu	SVENITE AND MORZONITE.
(,	INTRUSIVE CONTACT
Talas	LIC AND JURASSIC
UPP	ER TRIASSIC AND LOWER JURASSIC
The tare	AUDER UNDER VEUSTBET INCLUDES SEDEM UNDER NEM SUUTREAST EUGE OF AMERAS
- JNV	PHYLLITE: MINOR ARGILLITE. LIMESTONE. SERICITIC SCHIST.
line	TPLASSIC
K	ARMIAN AND NORIAN
1	ICOLA GROUP
URNS	BLACK SHALE, ARGILLITE. CONGLOMERATE, LIMESTONE, SILTSTONE; MINOR TUFF AND PHYLLITE.
URNC	LINESTONE

1

FIGURE 9a

LEGEND to FIGURE 9

Si	LOCAN GROUP (MIDDLE PART)
-	SPRICITIC, GRAPHITIC AND ARGILLACEDUS LIMESTONE: CALCAREOUS PHYLLITE, ARGILLITE,
uksp	SHALE, ARGILLITE, MASSIVE SILTSTONE, PHYLLITE, TUFF AND CALCAREOUS PELITE: MINOR CONGLOWERATE, LIMESTONE,
ulkscg	CONSLONERATE,
DAL AFOT	ALC AND #507010
0	RANAGAN PLUTONIC AND METAMORPHIC COMPLEX (MAY INCLUDE METAMORPHIC EQUIVALENTS OF UNIT CPTA AND/OR OLDER ROCKS) MID TRIASIC GREISSIC GRANITE).
PMn	HORNBLENDE AND BIOTITE GNEISS, PARAGMEISS; MINOR SCHIST, MARBLE, QUARTZITE AND AMPHIBOLITE.
PMnm	DIORITIC ENEISS. AMPHIBOLITE.
Psc	MARBLE .
Psb	DUARTZ MICA SCHIST.
PALAEOZ	DIC an and (?) Pennsylvanian acto fedur
Pruh	MASSIVE AND FOLIATED GREENSTONE, CHUDRITIC PHYLLIFE, AMPHIBOLITE: MINOR ULTRAMAFIC ROEMS.
Prub	SERPENTINIZED ULTRAMAFIC ROCKS.
S	LIDE MOUNTAIN GROUP FENNELL FORMATION
Pr	PILLOW LAVA FLOWS. MASSIVE AND FOLIATED GREENSTONE, DREENSCHIST, ARGILLACEOUS CHERT: MINOR AMPHIBOLITE, LIMESTONE, BRECCIA,
PFt	CHERT
Prp	ARGILLITE, SILTSTONE
PFcg	CONGLOMERATE SEDDENTIN/JED IN TRANAETE DATUS
Pfub	JEARENTINIZED ULTAKAKIT ANDAS
	SALKON FORMATION
Pı	GREENSTONE, CHLORITE PHYLLITE, AMPHIBOLITE: MINGR BLACK SHALE, LIMESTONE, MARBLE,
PTUD	SERPENTINIZED ULTAMAFIC HOCKS.
PTC	PASSIVE, WHITE LIMESTONE.
Picg	ANDWIGHTTT SHEICHED WARKE PEDBLE LUNGLUMENALE,
Prsc	GREY. DIOPSIDIC MARBLE.
CARBO	DRIFERGUS AND PERMIAN (MAY INCLUDE TRIASSIC) SSTERIAR - Morrowan and Wolfcampian-Guadalupian (may include Karmian - Yortan), Mompson Assemblage (may include unit ubns).
CPTA	UNDIVIDED.
CPTAS	SILICEOUS ARGILLITE, VOLCANICLASTIC SANDSTONE, QUARTZITE, SILTSTONE; MINOR LIMESTONE, SHEARED CONGLOMERATE, BRECCIA AND GREENSTONE.
CPTAY	GREENSTONE, TUFF:
CPTAC	TASSIVE, CRYSTALLINE WHITE AND GREY LIMESTONE: MINOR CHERT PEBBLE CONGLOMERATE, ARGILLACEOUS LIMESTONE AND CHERT.
CPTAcg	WINGLOWERNE WITH LIPESTONE MATMIX.
	11LFORD GROUP
CMSS	SILTSTONE. SANDSTONE. SHALE: MINOR QUARTZ GRANULE CONGLOMERATE.
Смяр	BLACK SHALE, ARGILLITE: MINOR SANDSTONE.
Cmvd	GREENSTONE, CHLORITIC SHYLLITE.
Missi	ISSIPPIAN NGEAN - MERANDOLIN
	NILFORD GROUP
Ммс	FINE GRAINED GREY LIMESTONE: HINOR DOLOMITE AND SHALE.
Ммсд	GRANULE TO BOULDER CONGLORERATE, SOME WITH LINESTONE AND GREENSTONE CLASTS.
MISS	ISSIPPIAN (?) OR OLDER OLD DAVE INTRUSIONS LINCLODES ULTRAMAFIC ROCKS ASSOCIATED WITH UNITS EO(BY AND RUNW).
Pub	SERPENTINITE AND SERPERTITIZED ULTRAMAFIC ROCKS: MINOR PYROXENITE AND PERIDOTITE.
_	CHAPPERON GROUP
Pcv	CHLORITIC PHYLLITE. GREENSTORE, MICACEOUS SCHIST, MINOR LIMESTONE AND ULTRAMAFIC ROCKS.
DEVO	NTAN
UA .	TE DEVONIAN MOUNT FONLER BATHOLITH. SOUTH FORTHALL PLATON.
Don	FOLIATED AND LINEATED ENCORATIO GRANITE, TRANITIC PELDERAR PORCHARY, SURATE MONECULTE, STANDOUTE,
redu]	MINDR PEGMATITE AND QUARTE DIMATTE.

FIGURE 9a **LEGEND to FIGURE 9**

0	LEGEND to FIGURE 9
CATE	E ORDOVICIAN (LOWER PART)
	ITTLE SHUSHAP GREISS
lUgn	LEUCORATIC GRANTLE GREISS, UGANTZ MONZONTLE GREISS, GRANDDIONTLE IMETSS, MINUM DIONTLE BREISS,
CAMBR	JAN AND ORDOVICIAN AGLE BAY FORMATION
COEBVO	FOLIATED ACID VOLCANIC ROCAS, CHERT, SILICEOUS PHYLLITE; SHEARED AND ALTERED GUARTZ FELDSPAR PORPHVRY AND/OH DUARTZ GRANULE CONGLOMERATE; GHEISSIC ACID IGHEOUS ROCKS NEAR SHUSWAP LAKE.
COEBY	GREENSTONE, CHLORITIC PHYLLITE: MINOR AGGLOMERATE, SERICITIC PHYLLITE, DUARTZITE, LIMESTONE AND TUFF,
COrea	SERICITIC: SILICEDUS PHYLLITE, SERICITIC DUARIZITE, DUARIZ BIOTITE SCHIST, DUARIZ BIOTITE GARNET SCHIST; HINOR TUFF AND LAVERS OF UNITS COEBY, COEBC.
COm	DEALM ANGILLITE. ANGILLATEDUS MATLETTE, SMALE, MINUN LIMESTONE. Massive white crystalline limestone, dark grey foliated limestone; minor limestone with chert nodules.
EOF	CONGLIDHERATE, SOME WITH BLACK DUARTZ CLASTS; MINOR BRECCIA AND AGGLIDHERATE.
looning	TSMINAKIN LIMESTONE MEMBER
EOB,	MASSIVE WHITE CRYSTALLINE LIMESTONE; MINOR GREENSTONE AND GREENSCHIST.
S	ILVER CREEK FORMATION
EOscq	QUARTZ BIOTITE. SERICITE AND GARNET SCHIST: MINOR QUARTZO-FELDSPATHIC BIOTITE GHEISS. PEGMATITE. AMPHIBULITE MARBLE.
(Freed)	CHASE QUARTZITE MEMBER
COSCe	QUARTZITE, SILICEQUS MARBLE, CRYSTALLINE LIMESTONE: MINOR PELITIC SCHIEF,
PROTEROZO	NC AND PALAEOZOIC (MAY INCLUDE ARCHAEAN)
Sec. S	HUSHAP METAMORPHIC COMPLEX
PIPab	UNDIVIDED: GRANITOID GHEISS, PARAGHEISS, SCHIST: HINGH GUAMTZITE, HANDLE, HAND
PIPso	DUNATZITE: MINOR PELITIC SCHIST.
PIPsc	MARBLE. DIOPSIDIC MARBLE MINOR CALCIUM SILICATE GNEISS AND AMPHIBOLITE.
PIPm	AMPHIBOLITE. AMPHIBOLITIC GHEISS. MINOR MORNBLENDE BIOTITE SCHIST.
PIPsqc	SILICEOUS MARBLE, CALCAREOUS DUARTZITE, CALCIUM SILICATE GNEISS; MINOR PELITIC SCHIST
ElPgdn	GRANODIORITE, DIONITE AND TOMALITE GNEISS/AUGEN GNEISS.
	GEOLOGICAL BOUNDARIES (APPROXIMATE. ASSUMED).
Paul TP	
FAULIS	AVIONITE TONES (TEETH ON HEAVELON WALL)
	THRUST FAULTS (APPROXIMATE, ASSUMED: TEETH ON MANGING WALL).
~~~~	HIGH ANGLE FAULTS (APPROXIMATE. ASSUMED).
PLANAR STRIC	TURES
18	BEDDING (TOPS KNOWN: INCLINED. OVERTURNED).
+ //	BEDDING (TOPS UNKNOWN: HORIZONTAL, INCLINED, VERTICAL).
+	"FOLIATION. SCHISTOSITY: GHEISSIC LAVERING OR CLEAVAGE (HORIZONTAL. INCLINED. VERTICAL): EANLIEST DR O <u>nly</u> observed. Svia plakes (uniined, usetical) of meenerabic foing observed to may deenomen bendus: cabilest op
11	CNLY OBSERVED.
11	FOLIATION OR PRE-EKISTING STRUCTURES. Avial planes (inclined, vertical) of latest mesoscopic folds observed to have deformed bedding
	AND THO PHASES OF PRE-EXISTING STRUCTURES.
LINEAR STRUCT	URES
11	LINEATIONS (PLUNGING, HORIZONTAL) FORMED BY FOLD AKES (F), BEDDING/FOLIATION INTERSECTION (X)- MINERAL ALIGNMENT OR RODDING (R) AND BOUDINAGE AKES (A);(UNDETERMINED LINEATIONS NOT LABELLED); EARLIEST OF ONLY OBSERVED.
11	LINEATIONS (PLUNCING, HORIZONTAL) OBSERVED TO BE ASSOCIATED WITH LATE FOLDS OR SUPERIMPOSED UPOH PRE-Existing structures.
11	LINEATIONS (PLUNGING, HORIZONTAL) OBSERVED TO BE ASSOCIATED WITH LATEST FOLDS OR SUPERIMPOSED UPON TWO PHASES OF PRE-EXISTING STRUCTURES.
entos	
··	· EADLY AXIAL TRACE (ANTIFORM: UPRIGHT. OVERTURNED OR RECUMBENT).
X D	EARLY AXIAL TRACE (SYNFORM: UPRIGHT, OVERTURNED OR RECLUMBENT).
+	LATE AXIAL TRACE (ANTIFORM. SYNFORM),
SEDCHRONDLOGIC	SAMPLE SITE
Qa	PALAEONTOLOGIC SAMPLE
+()	RADIOMETRIC SAMPLE

# LOCAL GEOLOGY

The Putnam property is on the eastern flank of the Intermontane Belt. The regional geology compiled by Okulitch (1979) shows the area to be underlain by Triassic sediments and volcanic rocks which are intruded by Jurassic granite (Figure 5).

The property is underlain by Triassic sediments and volcanic rocks that have been subjected to low grade regional metamorphism and later faulting. The Jurassic granite of Okulitch has been identified as a gneiss on the property and is thought to be older than the sediments (Blusson, 1985).

Gneiss

Gneiss occurs on the eastern edge of the property in an area of heavy forest cover.

In outcrop it was identified as banded quartzite and strongly foliated granodiorite. The deformation present in this unit is not present in the Triassic sediments and volcanic rocks and therefore is considered to be older than them.

Argillite with interbedded Limy Argillite and Argillaceous Limestone

Argillite is exposed in several outcrops along the B.C. Hydro line right-of-way on the northern edge of the property.

The argillite is most commonly black and thin bedded.

Limy argillite and argillaceous limestone beds within the argillite unit are light grey. Beds vary from several centimetres to up to one metre in thickness.

Limited structural data suggests the unit has been gently folded along northeast plunging fold axes.

Phyllite with interbedded Siltstone and Quartzite

Phyllite with interbedded Siltstone and Quartzite occur in the southern and central areas of the property.

The phyllite is black, thin bedded and commonly carbonaceous.

The quartzite is light brown to buff, fine to very fine grained. It occurs as beds within the phyllite that vary from one metre up to eight metres thick.

Bedding and foliation attitudes of Map Units 3 and 3a trend northwesterly and are near vertical to steeply dipping to the northeast.

Augite Andesite, Greenstone

Augite Andesite, Greenstone occurs as an irregular shaped mass across the central portion of the property.



Figure 10 Property Geology from Assessment Report 13,311 (B.W. Kyba)

The augite andesite is a dark green-grey, fine to medium grained rock with 10 to 20% dark green-black augite phenocrysts. The phenocrysts range in length from several millimetres to up to one centimetre.

The greenstone is common along the margins of the augite andesite mass. It is dark green, fine to very fine grained with rare augite phenocrysts up to 3 millimetres in length.

A breccia is developed within the augite andesite unit on the eastern border of the property. It is composed of 5-15% rotated and angular fragments of augite andesite in greenstone matrix. The breccia occurs as a 30 metre wide zone that trends northeasterly and is near vertical.

In the northern half of the property contacts suggest the augite andesite is a sill or dyke-like intrusion. In the southern and eastern portions of the property the augite andesite/greenstone unit is in fault contact with the sediments (Map units 3, 3&) along a low angle thrust(?).

## Aplite (Map Unit 5)

Aplite occurs as a dyke in the northern part of the mapped area. It is white, fine to medium grained and contains up to 5% disseminated fine grained euhedral pyrite. Contacts to the surrounding sediments are cold and sharp.

Faults, Alteration and Mineralization

Several different types and attitudes of faulting are present on the Putnam property. Alteration and mineralization are associated with the major fault zones.

The Main Fault Zone (Figure 3) trends northwesterly across the northeastern corner of the property. In outcrops along the powerline right-of-way the zone is 200 metres wide. Augite andesite within the fault zone has been sheared, bleached and pyritized. The zone is exposed again 1000 metres to the northwest in the cliffs north of Putnam Creek. Here the zone is 100 metres wide and contains sheared and pyritized augite andesite.

Quartz and quartz calcite veins are associated with other faults and fault zones on the property. One vein in the southwestern corner of the property contained minor amounts of galena.

# **EXPLORATION WORK 2022**

Follow -up sampling in 2022 focussed on the main pyritic exposures adjacent to the main access road. A total of 17 chip samples were collected. The geochemical results are contained in Appendix III and on Figure 11.

Assays were conducted by using an XRF Unit factory calibrated (Cert No. 0154-0557-1) on October 30, 2013, Instrument #540557 Type Olympus DPO-2000 Delta Premium. The instrument was calibrated using Alloy Certified reference materials by ARM1 and NIS5 standards. Only certified operators were employed and that were experienced in XRF assay procedures. Read times were 120 seconds or greater.

The majority of the rock samples are medium grey, highly schistose schist and gneiss, which are commonly highly pyritic and rusty weathering.

Silica values are plotted on Figure 11 and range from 4.2% Si (sample PM-7) up to 38.14% Si (quartz vein) but averages 14.78% Si in the typical schist (PM-3 to 6, PM-8 to 14).

Calcium also is highly variable, ranging from a high of 16.17% Ca to a low of 0.1% Ca. The average of schist approximately 2.21% Ca. Ca rsults are plotted on Figure 11.

Aluminum in the schists averages 5.19% Al, results are plotted on Figure 11.

Sulfur varies from 9.76% S (PM-7) to less than 1% S.

PM-7 has disseminated pyrite pinheads throughout.

Several rusty samples average 4.5% S. Iron content up to 8.97% Fe mirrors S values.

Metallic elements (Cu, Zn, As and Mo) are uniformly low in contrast to the anomalous soil samples collected previously.



Figure 11 Sample Locations and Results 2022

# **CONCLUSIONS and RECOMMENDATIONS**

Very high gold values were contained in the heavy mineral fractions of samples collected from Putnam Creek and its tributaries. Detailed geological mapping and soil sampling was started to define a bedrock source of these anomalies.

The one drill hole completed in 1984 gave highly anomalous gold values up to 2.4g/tonne Au in core close to the surface. Prior selective sampling in 1984 gave 3.4g/tonne Au assays in pyritic phyllite/schist along the west side of the Trinity Valley Road.

A number of previous rock samples (Put # 2, 3 5 and 6) are highly anomalous in copper. Soil samples are also anomalous in copper. Selected samples were assayed for gold and silver which returned low values.

Previous rock sample Pt #5 ran 1274 ppm Cu, Put #6 560 ppm Cu, Put #3 243 ppm Cu, Put #13 at 450 ppm Cu and 593 ppm Zn and Put #2 at 477 ppm Cu. Likewise, several soil samples also were anomalous in copper (refer to figure 8), such as T1 – 197 ppm Cu, T3 at 186 ppm Cu, T11 at 433 ppm Cu and T5 at 517 ppm Cu.

Follow-up rock sampling was completed on the main mineralized exposures in 2022.

The majority of the rock samples are medium grey, highly schistose schist and gneiss, which are commonly highly pyritic and rusty weathering.

Silica values are plotted on Figure 11 and range from 4.2% Si (sample PM-7) up to 38.14% Si (quartz vein) but averages 14.78% Si in the typical schist (PM-3 to 6, PM-8 to 14).

Calcium also is highly variable, ranging from a high of 16.17% Ca to a low of 0.1% Ca. The average of schist approximately 2.21% Ca. Ca rsults are plotted on Figure 11.

Aluminum in the schists averages 5.19% Al, results are plotted on Figure 11.

Sulfur varies from 9.76% S (PM-7) to less than 1% S.

PM-7 has disseminated pyrite pinheads throughout.

Several rusty samples average 4.5% S. Iron content up to 8.97% Fe mirrors S values.

Metallic elements (Cu, Zn, As and Mo) are uniformly low in contrast to the anomalous soil samples collected previously.

Additional soil and rock sampling is warranted for a program in 2023.

Respectfully submitted, J. T. Shearer, M.Se., P.Geo. (BC & Ontario) FSEG

#### REFERENCES

#### Allen, A.R.; 1990:

Diamond Drilling Report: The Lumby Property Vernon Mining Division, B.C. DD Hole 290-2 on the OK Claim; B.C. Assessment Rept. No. 20363, 7 p. 5 fig.

#### 1989:

Diamond Drilling Report on the Lumby Property Vernon Mining Division; B.C. Assessment Rept. No. 18932, 8 p. 2 fig.

#### 1987 (Revised):

Report on the Lumby Property Vernon Mining Division, British Columbia; Rept. to Zicton Gold Ltd, 11 p. 8 fig.

#### Blusson, S. L.; 1985:

Barry & Brian Claims, Putnam Creek, BC Assessment Report 13660.

#### Bradley, M.; 1990:

Report on Chip/Channel Sampling and Geological Mapping of the 140 East and 190 East Crosscuts, 808 m Level Underground, Chaput 5 Claim: Report to The Quinto Mining Corporation.

### Douglas, R.J.W. et al.; 1970:

Geology and Economic Minerals of Canada; Dept. Energy, Mines and Res., Economic Geology Rept. No. 1, pp. 367-420.

#### Drummond, A.D. and Howard, D.A.; 1993:

Report on the Exploration Potential of the Muscovite-Graphite-Gold Deposit of the Quinto Mining Corporation; Report to The Quinto Mining Corporation.

#### Halliwell, D.R. and Allen, A.R.; 1992:

Geology, Geophysics and Geochemistry Report: The Lumby Property, Claims OK, HAZ 5; B.C. Assessment Rept. No. 22554, 17 p. 11 fig.

### 1991:

Geology and Prospecting Report, The Lumby Property, OK and Haz 5 Claims; B.C. Assessment Rept. No. 21561, 10 p. 6 fig.

#### Holland, S.S.; 1976:

Landforms of British Columbia, A Physiographic Outline; B.C. Min. Energy, Mines and Petr. Res., Bull. 48, pp. 73-74.

#### Jones, A.G.; 1959:

Vernon Map-area, British Columbia; Geol. Surv. Canada, Mem. 296.

#### Kuran, D.L.; 1986:

Report on the Lumby Project; Report to The Quinto Mining Corporation.

#### Kyba, B.W.; 1985:

Geological and Geochemical Surveys on the Putnam Property, BC Assessment Report 13311

Okulitch, A.V.; 1979a:

Thompson-Shuswap-Okanagan Map-area, British Columbia; Geol Surv. Canada, Open File 637, 5 maps.

1979b:

Geology and Mineral Occurrences of the Thompson-Shuswap-Okanagan Region, south-central British Columbia, Geological survey of Canada, Open File 637

Ostler, John; 1993A:

Geological and Geochemical Exploration on the B.S 3 and Hol 3 Claims of the Saddle Mountain Property; B.C. Assessment Rept. No. 22937, 34 p. 16 fig.

1993B: Geological and Geochemical Report on the Deafies Creek Property; B.C. Assessment Rept. No. 22954, 27 p. 12 fig.

Read, P.B. and Wheeler, J.O.; 1976:

Geology: Lardeau West-half, British Columbia; Geol. Sum. Canada, Open File 432, 1 map + notes.

#### Shearer, J.T.; 2020

Geochemical Assessment Report on the Putnam Property, dated December 8, 2020

**Appendix I** 

# **Statement of Qualifications**

May 18, 2022

# **APPENDIX I**

# **STATEMENT OF QUALIFICATIONS**

I, JOHAN T. SHEARER, of 3572 Hamilton Street, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

- 1. I am a graduate of the University of British Columbia (B.Sc., 1973) in Honours Geology, and the University of London, Imperial College (M.Sc., 1977).
- 2. I have over 35 years of experience in exploration for base and precious metals and industrial mineral commodities in the Cordillera of Western North America with such companies as McIntyre Mines Ltd., J. C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd.
- 3. I am a fellow in good standing of the Geological Association of Canada (Fellow No. F439) and I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (Member No. 19,279).
- 4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. Unit #5-2330 Tyner Street, Port Coquitlam, British Columbia.
- 5. I am the author of this report entitled "Geochemical Assessment Report on the Putnam Gold Property" dated May 18, 2022.
- 6. I have visited the property on May 15 and 16, 2022 and July 22-26 & September 11-13, 2020. I carried out geological mapping and sample collection. I am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Sandspit Gold property by examining in detail the available reports, logging drill core, plans and sections, and have discussed previous work with persons knowledgeable of the area.
- 7. I own an interest in the property described herein.

Dated at Port Coquitlam, British Columbia, this 18th day of May, 2022.

J. T. Shearer, M.Sc., F.G.A.C., P.Geo. Mines Supervisor #835903

Appendix II

**Statement of Costs** 

May 18, 2022

# **APPENDIX II**

# **STATEMENT OF COSTS – 2022**

		Total without GST
J. T. Shearer, M.Sc., P.Geo. (BC & Ontario), Senior Geologist 2 davs @ \$800/dav. May 15-16. 2022		\$ 1,600.00
Denis Delisle, Experienced Prospector		800.00
2 days @ \$400/day, May 15-16, 2022		
	Subtotal	\$ 2,400.00
Transportation		
Truck #1, 2 days @ \$120/day		240.00
Truck# 2, 2 days @ \$120/day		240.00
Side-by-side Kawasaki & Trailer, 2 days @ \$150/day		300.00
Fuel		550.00
Hotel & Meals		200.00
Supplies		50.00
XRF Assays – in Lab and in Field with Portable XRF Unit		450.00
Data Compilation		700.00
Report Preparation		1,200.00
Word Processing		400.00
	Subtotal	\$ 4,330.00
	Total	\$ 6,730.00

Event #	5936877
Date Filed	May 18, 2022
Work Filed	\$ 4,700.00
PAC Filed	\$ 918.55
Total Filed	\$ 5,618.55

**Appendix III** 

**Sample Descriptions** 

May 18, 2022

# Putnam List of Samples and Descriptions

Sample	Al%	Si%	Ca%	Fe%	S%	К%	Description
PM-1	6.65	14.24	1.6252	4.9942	2.1305	2.053	Very rusty weathering, schistose, flat gypsum flakes,
							medium grey on fresh pyritic schist
							11 U 362395 5583010
PM-2	4.4	8.79	4.1311	5.87	3.6759	2.429	Very rusty, schistose, light grey, very pyritic schist-phyllite
							11 U 362396 5583020
PM-3	6.13	16.67	0.2186	4.5241	1.3721	2.963	Very rusty, schistose, silvery weathering under rust,
							pyritic schist
							11 U 362395 5583044
PM-4	5.48	10.47	14.4	0.8251	0.0177	1.935	Gneissic, black MnO stain, pyritic gneiss
							11 U 362395 5583052
PM-5	4.64	11.74	2.7686	7.47	1.8117	1.076	Very rusty weathering, white on fresh surface, pyritic
							schist
							11 U 362394 5583059
PM-6	5.7	12.51	1.6619	4.2235	1.1514	2.06	Light brown, less rusty weathering, light grey on fresh
							surface, slightly pyritic schist
							11 U 362391 5583064
PM-7	1.4017	4.2271	16.17	3.277	9.76	0.313	Very rusty, dark purply rust, schistose, light grey on fresh
							whitish weathering too, pyritic schist
							11 U 362391 5583072
PM-8	5.44	16.82	2.423	6.0938	3.4111	0.828	Very rusty weathering, light grey on fresh surface,
							disseminated pyrite, pyritic schist
	7.64	40.74	2 4 0 0 4	5 0200	2 04 07	4.244	11 U 362386 5583070
PIVI-9	7.61	18./1	2.1801	5.9288	3.8187	1.341	Light brown, somewhat rusty weathering, medium grey
							on fresh, disseminated pyrite pinneads, pyritic phyllite
DN4 10	E C	11 51	2 1601	E 0.9	E 0627	2 006	11 U 302387 5583059 Deeply rusty to buff brown weathering light grov on fresh
PIVI-10	5.0	11.51	2.4001	5.96	5.0057	2.090	surface, ructy phyllite
							11 11 262288 5582052
DM_11	3.68	15 12	8.06	5 / 51/	7 88	0.042	Moderately rusty weathering medium uniform grey on
	5.00	13.12	0.00	5.4514	7.00	0.042	fresh surface
							11 U 362390 5583044
PM-12	5 51	14 26	1 796	6 84	4 1033	1 45	Very rusty weathering friable rusty pyritic schist
	0.01			0.01			11 U 362391 5583032
PM-13	1.7265	19.04	15.96	0.694	0.0495	0.701	Rusty, moderate to intense rusty weathering, light grey to
							white on fresh surface, guartz-carbonate, vellowish schist
							11 U 362388 5583018
PM-14	5.56	15.77	0.1004	4.4513	1.0934	3.509	Very rusty weathering, schistose, yellowish grey on fresh
							surfaces, rusty schist
							11 U 362394 5583027
PM-15	4.39	9.83	3.7901	8.97	2.347	1.185	Extremely rusty, somewhat schitose, white on fresh
							surface, pyritic phyllite
							11 U 362386 5583007
PM-16	6.33	20.24	ND	1.0493	0.1523	3.783	Very rusty, siliceous, ark grey on fresh surfaces "graphitic"
							schist
							11 U 362386 5583000
PM-19	ND	38.14	ND	0.0275	ND	ND	Only slightly rusty in places, very siliceous, bit of yellow
							staining, white on fresh surfaces, quartz vein
							11 U 362393 5582992

Appendix IV

**XRF** Results

May 18, 2022

## Putnam XRF 2022

All Values in %

Sample	Mg	Mg +/	Al	Al +/-	Si	Si +/-	Р	P +/-	S	S +/-	Cl	Cl +/	К	K +/-	Ca	Ca +/-
PM-1	0.77	0.19	6.65	0.07	14.24	0.1	0.829	0.0198	2.1305	0.0154	ND		2.053	0.0145	1.6252	0.0125
PM-2	1.19	0.29	4.4	0.08	8.79	0.09	0.8358	0.0247	3.6759	0.0341	ND		2.429	0.0228	4.1311	0.0382
PM-3	ND		6.13	0.08	16.67	0.13	0.6468	0.023	1.3721	0.0124	ND		2.963	0.0236	0.2186	0.0066
PM-4	ND		5.48	0.08	10.47	0.09	0.3597	0.0241	0.0177	0.003	ND		1.935	0.0163	14.4	0.11
PM-5	1.94	0.32	4.64	0.08	11.74	0.12	1.504	0.0339	1.8117	0.0194	ND		1.076	0.0121	2.7686	0.0284
PM-6	1.27	0.21	5.7	0.07	12.51	0.09	1.6574	0.0266	1.1514	0.0098	ND		2.06	0.0157	1.6619	0.0135
PM-7	ND		1.4017	0.0389	4.2271	0.0346	0.7779	0.02	9.76	0.07	ND		0.313	0.0038	16.17	0.11
PM-8	1.7	0.2	5.44	0.06	16.82	0.12	0.5755	0.0194	3.4111	0.0242	ND		0.828	0.0071	2.423	0.0177
PM-9	2.14	0.2	7.61	0.08	18.71	0.12	0.7544	0.0216	3.8187	0.0257	ND		1.341	0.0101	2.1801	0.0158
PM-10	0.93	0.25	5.6	0.08	11.51	0.1	0.9845	0.0245	5.0637	0.0414	ND		2.096	0.0179	2.4681	0.0213
PM-11	1.02	0.22	3.68	0.06	15.12	0.11	0.5172	0.0223	7.88	0.06	ND		0.042	0.0036	8.06	0.06
PM-12	1.89	0.24	5.51	0.07	14.26	0.11	0.7172	0.0223	4.1033	0.0325	ND		1.45	0.0124	1.796	0.0155
PM-13	ND		1.7265	0.0457	19.04	0.13	0.2383	0.0236	0.0495	0.003	ND		0.701	0.0064	15.96	0.11
PM-14	ND		5.56	0.07	15.77	0.11	0.468	0.0168	1.0934	0.0087	ND		3.509	0.0234	0.1004	0.0054
PM-15	0.77	0.23	4.39	0.07	9.83	0.09	1.1238	0.0242	2.347	0.0207	ND		1.185	0.0109	3.7901	0.0324
PM-16	ND		6.33	0.07	20.24	0.13	0.4129	0.0199	0.1523	0.0036	ND		3.783	0.0251	ND	
PM-19	ND		ND		38.14	0.21	0.1804	0.0222	ND		ND		ND		ND	

`

Ti	Ti +/-	V	V +/-	Cr	Cr +/-	Mn	Mn +/-	Fe	Fe +/-	Со	Co +	Ni	Ni +/-	Cu	Cu +/-	Zn	Zn +/-
0.8154	0.0247	0.0363	0.0082	ND		0.0576	0.0039	4.9942	0.0403	ND		ND		0.0247	0.0013	0.004	0.0005
0.8212	0.0309	0.0658	0.0109	ND		0.05	0.0048	5.87	0.06	ND		ND		0.0043	0.001	0.0029	0.0006
1.2152	0.0357	0.0486	0.0112	ND		0.0333	0.0041	4.5241	0.0439	ND		ND		0.0036	0.0009	0.002	0.0005
0.0989	0.0193	0.0388	0.0101	ND		0.4445	0.0123	0.8251	0.0157	ND		0.032	0.0019	0.0122	0.0013	0.0394	0.0014
0.5172	0.0268	0.0397	0.0098	ND		0.0475	0.0049	7.47	0.08	ND		ND		0.006	0.0012	ND	
0.9106	0.027	0.079	0.0095	ND		0.0856	0.0046	4.2235	0.0377	ND		ND		0.0022	0.0007	0.0046	0.0005
0.3911	0.0212	0.0269	0.0081	ND		0.0229	0.0033	3.277	0.031	ND		ND		0.0061	0.0008	ND	
0.5229	0.0218	0.0259	0.0077	0.0111	0.0036	0.0731	0.0045	6.0938	0.0487	ND		ND		0.0031	0.0008	0.0029	0.0005
0.5625	0.023	0.0584	0.0087	ND		0.0716	0.0045	5.9288	0.0462	ND		ND		0.0101	0.001	0.004	0.0006
1.0144	0.0313	0.0749	0.0109	ND		0.0573	0.0046	5.98	0.06	ND		ND		0.0153	0.0013	0.0034	0.0006
0.3563	0.0219	0.0295	0.0088	0.0134	0.0042	0.0807	0.0052	5.4514	0.048	ND		0.004	0.0011	0.0063	0.001	0.0051	0.0006
0.4476	0.0224	0.0393	0.0087	ND		0.086	0.0051	6.84	0.06	ND		ND		0.0194	0.0014	0.01	0.0008
ND		ND		ND		0.0964	0.0058	0.694	0.0129	ND		ND		0.0024	0.0008	ND	
0.9413	0.0268	0.0903	0.0097	ND		0.0327	0.0034	4.4513	0.0365	ND		ND		ND		0.0019	0.0004
0.7913	0.026	0.0336	0.0087	0.0203	0.004	0.0672	0.0047	8.97	0.08	ND		ND		0.0186	0.0014	0.004	0.0007
1.3306	0.0368	0.0729	0.0124	ND		0.0183	0.0034	1.0493	0.0151	ND		ND		ND		ND	
ND		ND		ND		ND		0.0275	0.0029	ND		ND		ND		ND	

As	As +/-	Se	Se +/-	Rb	Rb +/-	Sr	Sr +/-	Y	Y +/-	Zr	Zr +/-	Мо	Mo +/-	Ag /	4g +	Cd	Cd +
ND		0.0009	0.0001	0.0037	0.0002	0.0357	0.0005	0.0026	0.0002	0.0103	0.0003	ND		ND		ND	
ND		ND		0.0087	0.0003	0.0437	0.0007	0.0015	0.0002	0.0073	0.0004	ND		ND		ND	
0.0012	0.0003	0.0007	0.0002	0.0061	0.0003	0.0321	0.0005	0.0009	0.0002	0.0079	0.0003	0.0012	0.0002	ND		ND	
ND		ND		0.0053	0.0003	0.072	0.0009	0.0059	0.0003	ND		0.0011	0.0002	ND		ND	
ND		ND		0.003	0.0002	0.0239	0.0006	0.0015	0.0002	0.0059	0.0004	ND		ND		ND	
ND		ND		0.0056	0.0002	0.0236	0.0004	0.0018	0.0002	0.0072	0.0003	0.0008	0.0002	ND		ND	
ND		0.0006	0.0001	0.0011	0.0001	0.0209	0.0004	0.0014	0.0002	0.0031	0.0002	ND		ND		ND	
0.0012	0.0003	ND		0.002	0.0002	0.0322	0.0005	0.0016	0.0002	0.0045	0.0003	0.0007	0.0002	ND		ND	
ND		ND		0.0017	0.0002	0.0288	0.0005	0.0016	0.0002	0.0054	0.0003	ND		ND		ND	
ND		ND		0.0049	0.0002	0.0273	0.0005	0.0037	0.0002	0.0122	0.0004	0.0011	0.0002	ND		ND	
0.001	0.0003	ND		0.0006	0.0001	0.0261	0.0005	0.0022	0.0002	0.0035	0.0003	0.0007	0.0002	ND		ND	
0.0014	0.0003	ND		0.003	0.0002	0.0268	0.0005	0.0022	0.0002	0.0054	0.0003	0.0009	0.0002	ND		ND	
ND		ND		0.0014	0.0002	0.0264	0.0004	0.0005	0.0002	ND		ND		ND		ND	
0.0017	0.0003	0.0007	0.0001	0.0109	0.0003	0.0151	0.0003	0.0008	0.0002	0.0084	0.0003	ND		ND		ND	
ND		ND		0.0028	0.0002	0.0491	0.0007	0.0023	0.0002	0.008	0.0004	0.0014	0.0002	ND		ND	
0.0024	0.0003	0.0007	0.0001	0.0073	0.0002	0.033	0.0005	ND		0.011	0.0003	ND		ND		ND	
١D		ND	ND														

Sn	Sn +	Sb	Sb +	W	W +	Hg	Hg +	Pb	Pb +/-	Bi	Bi +,	Th	Th +/-	U	U +/	LE	LE +/-
ND		ND		ND		ND		0.001	0.0003	ND		ND		ND		65.7	0.25
ND		ND		ND		ND		0.002	0.0004	ND		0.003	0.0009	ND		67.7	0.33
ND		ND		ND		ND		0.002	0.0004	ND		0.003	0.0008	ND		66.1	0.26
ND		ND		ND		ND		ND		ND		ND		ND		65.8	0.24
ND		ND		ND		ND		ND		ND		ND		ND		66.4	0.37
ND		ND		ND		ND		ND		ND		ND		ND		68.6	0.26
ND		ND		ND		ND		0.001	0.0003	ND		ND		ND		63.6	0.21
ND		ND		ND		ND		0.001	0.0003	ND		ND		ND		62	0.27
ND		ND		ND		ND		ND		ND		ND		ND		56.8	0.28
ND		ND		ND		ND		ND		ND		0.003	0.0008	ND		64.2	0.31
ND		ND		ND		ND		0.001	0.0004	ND		0.002	0.0007	ND		57.7	0.3
ND		ND		ND		ND		ND		ND		0.003	0.0008	ND		62.8	0.31
ND		ND		ND		ND		ND		ND		ND		ND		61.5	0.23
ND		ND		ND		ND		0.001	0.0003	ND		ND		ND		67.9	0.21
ND		ND		ND		ND		0.002	0.0004	ND		0.003	0.0008	ND		66.6	0.3
ND		ND		ND		ND		ND		ND		0.002	0.0007	ND		66.6	0.21
ND		ND		ND		ND		ND		ND		ND		ND		61.7	0.21