

Location/Identification **MINFILE Number:** 082LSW042 Name(s): WHITE ELEPHANT (L. 4880) PRE-CAMBRIAN, PINE (L.4883), RALFRED NO. 2 (L.5042), EAST (L.5044), WEST (L.5045), EDWARD (L.5046) **Mining Division:** Vernon Past Producer Status: Underground Westside-Kelowna **Electoral District: Mining Method** Okanagan Shuswap Natural Resource Distr **Regions:** British Columbia **Resource District:** 082L013 **BCGS Map:** 082L04E **UTM Zone:** NTS Map: 11 (NAD 83) 50 08 53 N Latitude: 5558223 Northing: Longitude: 119 33 25 W 317325 Easting: 1041 metres **Elevation:** Within 500M **Location Accuracy:** Shaft on Lot 4880. **Comments:** Mineral Occurrence Gold, Silver, Bismuth, Tellurium, Tungsten **Commodities:** Tetradymite, Chalcopyrite, Scheelite, Gold, Pyrrhotite, Telluride Minerals Significant: Associated: Quartz, Pyrite **Mineralization Age:** Mesozoic-Cenozoic Vein, Podiform, Massive **Character:** Deposit Mesothermal **Classification:** I01: Au-quartz veins, I02: Intrusion-related Au pyrrhotite veins Type: Fractured, Faulted Regular Modifier: Shape: 30x10x0 metres 045/60N Strike/Dip: **Dimension:** Surface dimensions of vein **Comments:** Host Rock **Dominant Host Rock:** Plutonic Stratigraphic Age Group Formation Igneous/Metamorphic/Other Paleozoic-Mesozoic Harper Ranch Unnamed/Unknown Formation Middle Jurassic Unnamed/Unknown Informal _____ _____ **Dating Method Isotopic Age Material Dated** -----_____ ---------------_____ Hornblende Biotite Granodiorite Lithology: Informally named the Terrace Creek batholith. **Comments: Geological Setting Tectonic Belt:** Intermontane Thompson Plateau **Physiographic Area:** Plutonic Rocks, Quesnel Terrane: Inventory Year: 1988 DUMP Ore Zone:

	Mined:	5,146 tonnes	5,672	tons		
		Metric	Imperia	1		
		Summary Production	n			
	Geochemical Soil Sampling, VI	LF E.M., Magnetometer, Induced Polarization	n			
leference:	Property File - C.J. Sampson [1988-06-30]: Prospectus: Lucky 7 Exploration Ltd., Report on the Geology,					
comments:	Prior to closing, in 1935, underground development on the 300-foot level is reported to have averaged 12.7 grams per tonne gold over 2.1 metres					
	Gold	12.7 grams per tonne				
	Commodity	Grade				
Sample Type:	Chip					
_ •			NI 43-101:	Ν		
Category:	Assay/analysis		Report On:	N		
Ore Zone:	UNDERGROUND		Year:	1935		
Reference:	Property File – E.J. Kondra [193 Vernon Area	80-02-29]: Letters Re: Mineral Claims, Crow	n Granted Mineral Claims	,		
comments:	average of samples from a trenc	h on the upper most mine dump				
	Gold	8.6 grams per tonne				
	Silver	17.8 grams per tonne				
ampic Type.	Commodity	Crodo				
ample Type	Grab		··· TU-101.			
ategory:	2200ay/anaiy515		NI 43-101.	N		
re Zone:	TRENCH		Year:	1980 N		
	1 0					
leference:	Property File - C.J. Sampson [1] Geochemical Soil Sampling, VI	988-06-30]: Prospectus: Lucky 7 Exploration .F E.M., Magnetometer, Induced Polarization	1 Ltd., Report on the Geolo n	gy,		
omments:	a 1.0 metre chip sample (31839)) from a quartz body containing a 0.5 metre s	ulphide bleb			
	Bismuth	0.136 per cent				
	Gold	51.98 grams per tonne				
	Silver	10.9 grams per tonne				
- *	Commodity	Cuada				
Sample Type:	Chip					
cangury.	, , <u>,</u>		NI 43-101:	N		
Ore Zone:	MAIN Assav/analysis		Year: Report On:	1988 N		
	Geochemical Soil Sampling, VI	LF E.M., Magnetometer, Induced Polarization	n			
Reference:	Property File - C.J. Sampson [1]	988-06-30]: Prospectus: Lucky 7 Exploration	h Ltd., Report on the Geolo	gy,		
Comments:	grab samples from a dump pile					
	Gold	27.0 grams per tonne 35.6 grams per tonne				
	Commodity	Grade				
ample Type:	Grab					
	- ·		INI 4 3 -101:	1		
tegory:	Assay/analysis		Report On:	N		

	Milled:	4,833 tonnes	5,327	tons			
Recovery	Gold Silver	63,170 grams 9,549 grams	2,031 307	ounces			
Capsule Geology							

The White Elephant occurrence is located at an elevation of approximately 1030 metres on an east-facing slope, 25 kilometres west-southwest of Vernon and north of Shorts Creek.

Regionally the area is underlain by volcanics, mudstone, siltstone, shale and fine clastic sedimentary rocks of the Devonian to Triassic Harper Ranch and(?) Nicola groups, which are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Coryell quartz latite porphyry to syenite plugs and dikes intrude the igneous and sedimentary rocks, and volcanic rocks of the Eocene Penticton and Kamloops groups overlie them.

Locally, a quartz vein or lens in granodiorite hosts gold, silver, tungsten, bismuth and tellurium values. The highly fractured and faulted quartz vein strikes northeast and dips 60 degrees northwest. The vein, greater than 10 metres thick, is traceable on surface for at least 30 metres. A pod of massive pyrrhotite, up to 4 metres thick, occurs at the footwall contact, although the best gold values occur in lenses and stringers some distance from the vein wall. Pyrrhotite, pyrite, chalcopyrite and tetradymite (gold-bearing bismuth telluride) occur as lens-like bodies with the vein. Stringers and segregations of bismuth telluride, free gold and scheelite are also reported.

Underground workings include a 91-metre inclined shaft with four levels of development to a depth of 60 metres on oreshoots varying from 4.5 to 7.5 metres wide and 15 metres long as identified in the 300-foot level (lowest level of workings). The mineralized zone is reportedly open at depth and along strike.

Prior to closing, in 1935, underground development on the 300-foot level is reported to have averaged 12.7 grams per tonne gold over 2.1 metres (Property File - C.J. Sampson [1988-06-30]: Prospectus: Lucky 7 Exploration Ltd., Report on the Geology, Geochemical Soil Sampling, VLF E.M., Magnetometer, Induced Polarization).

In 1980, samples from a trench on the uppermost mine dump are reported to have averaged 8.6 grams per tonne gold and 17.8 grams per tonne silver (Property File – E.J. Kondra [1980-02-29]: Letters Re: Mineral Claims, Crown Granted Mineral Claims, Vernon Area).

In 1988, a 1.0 metre chip sample (31839) from a quartz body containing a 0.5 metre sulphide bleb assayed 51.98 grams per tonne gold, 10.9 grams per tonne silver and 0.136 per cent bismuth, whereas grab samples from a dump pile yielded up to 35.6 grams per tonne gold and 27.0 grams per tonne silver (Property File - C.J. Sampson [1988-06-30]: Prospectus: Lucky 7 Exploration Ltd., Report on the Geology, Geochemical Soil Sampling, VLF E.M., Magnetometer, Induced Polarization).

The White Elephant (L.4880) occurrence was discovered in 1912 by Archie Clarke. In 1921, a 2-metre shaft had been completed and, in 1922, approximately 264 tonnes of mineralized rock were shipped producing 5257 grams of silver and 13 468 grams of gold.

In 1924, Okanagan Premier Mines Ltd. extended the shaft to 30 metres (100-foot level) and drove a 60-metre crosscut. In 1928, Pre-Cambrian Mines Ltd. continued underground exploration with 60 metres of drifting from the 100-foot level shaft and an unknown amount of drifting at the 35-foot level. In 1929, mining from the pyrrhotite lens (35-foot level) produced 27 tonnes of pyrrhotite concentrate containing low gold values.

In 1930, a new inclined shaft was sunk along the footwall of the quartz body and by 1933 the shaft had been extended to the 200-foot level. In 1934, raises from the 200, 100 and 60-foot levels were driven along with drifts and crosscuts totalling 43.8 metres on the 200-foot level and 27.0 metres on the 60-foot level. In 1935, the inclined shaft was extended to the 300-foot level, and at least 32.1 metres of drifting was completed on the level. During the period 1933 through 1935, production from the quartz body totalled 4882 tonnes and produced 4292 grams of silver and 49 702 grams of gold.

During 1970 through 1980, the area was owned and examined by Vernon Mining Co. Ltd. During 1987 through 1989, W. Blyth completed programs of geological mapping and ground magnetic and electromagnetic surveys on the area. Also in 1987, Lucky 7 Exploration Ltd. completed a program of geological mapping, soil sampling and ground magnetic and electromagnetic surveys on the area.

Bibliography

EM OF 1999-3 EMPR AR *1921-192,196; *1922-144; 1923-159; *1924-140; 1927-213; 1928-220; *1929-248,441; *1930-207,208; 1931-116; *1932-143; *1933-A196; 1934-A24,29,C36(photo),*D29-30,31; 1935-A24,30,D13; 1950-115 EMPR ASS RPT 15930, 18698, 19486 EMPR BC METAL MM00443 EMPR BULL *1(1932), p. 79; 10(1943), p. 117; 20(1944) Part III, p. 24, 25 EMPR EXPL 1978-E92; 1979-100; 1980-132; 1987-C90; 1988-A21,A43,*B35-38 EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363 EMPR INF CIRC 1989-1, p. 26 EMPR INDEX 3-218 EMPR MAP 37, 5207G, 7216G EMPR OF 1989-5, 1990-30, 1991-17, p. 31, 1999-3 EMPR P 1982-1, p. 9; 1987-15, p. 43; 1989-1, p. 35 EMPR RGS 1976 EMPR PF (In 082LSW General - Claim Map, 1966; Lucky 7 Exploration Ltd., Prospectus, June 1988) GSC MAP 46-7, 1059A, 1712A GSC MEM 296, p. 151 GSC OF 637 (Map C), 736, 2167 GSC P 89-1E pp. 51-60 GSC SUM RPT *1931A, pp. 79, 86-90 EMPR PFD *4557, 902939, 902968, 903184, 903217, 903395, 750395, 811689, 881388, 881391, 889474, 889475, *680235, 680236, 680237 Date Coded: 1985/07/24 BC Geological Survey (BCGS) Ν Coded By: Field Check: 2020/03/05 N **Date Revised:** Karl A. Flower (KAF) **Revised By:** Field Check: