

Location/Identification									
MINFILE Number:	094E 313								
Name(s):	<u>METCALF</u> LAKE, KEMESS								
Status:	Showing		Mining Division: Electoral District:	Omineca Peace River North					
Regions:	British Columbia		Resource District:	Mackenzie Natural Resource District					
BCGS Map:	094E006 094E02W		UTM Zone:	09 (NAD 83)					
NTS Map: Latitude:	57 03 04 N			6325200					
Longitude:	126 48 39 W		Northing:						
Elevation:	1477 metres		Easting:	632800					
Location Accuracy:	Within 100M								
Comments:		4.7 kilometres east of the north end of Thu	tade Lake and about 2	253 kilometres north of the					
	community of Smithe	ers (Assessment Report 25812).							
Mineral Occurrence									
Commodities:	Zinc, Copper, Silver								
Minerals	Significant:	Sphalerite, Chalcopyrite, Bornite							
	Associated:	Epidote, Actinolite, Garnet							
	Alteration:	Epidote, Actinolite, Garnet, Malachite							
	Alteration Type:	Skarn, Oxidation							
	filefulion Type.	,							
Deposit	Character: Stratabound, Podiform								
Ĩ									
		Host Rock							
Dominant Host Ro	ck: Sedimentary								
Stratigraphic Age	-	Formation	U	eous/Metamorphic/Other					
Permian Lower Jurassic	Asitka		 Dla	 ck Lake Stock					
Lower Jurassie									
Isotopic Age		Dating Method	Material Dated						
			-						
			_						
Lithology: Li	mestone, Cherty Tuff, Quar	tz Monzonite, Granodiorite							
<i>6</i> ,	-	Geological Sett	ing						
Tectonic Belt:	Intermontane	Physiographic Area		Aountains					
Terrane:	Stikine, Plutonic								
		Inventory							
Ore Zone:	SAMPLE			Year: 1998					
ore zone.									

Category:	Assay/analysis Report On: N		
		NI 43-101: N	
Sample Type:	Grab		
	Commodity	Grade	
	Silver	18.6 grams per tonne	
	Copper	0.02 per cent	
	Zinc	10.3 per cent	
Comments:			
Reference:	Assessment Report 25812.		

**Capsule Geology** 

The Metcalf occurrence is located 4.7 kilometres east of the north end of Thutade Lake about 253 kilometres north of the community of Smithers.

In the Metcalf showing region, Permian Asitka Group crystalline limestones are the oldest rocks exposed. They are commonly in thrust contact with Upper Triassic Stuhini Group andesite flows and pyroclastic rocks. Stuhini volcanics have been intruded by the granodiorite to quartz monzonite Black Lake Suite of Early Jurassic age and are in turn unconformably overlain by, or faulted against, Lower Jurassic calcalkaline volcanics of the Toodoggone Formation (Hazelton Group).

A 3-metre thick, flat lying skarn body occurs at the contact above limestone and below cherty tuff, both of the Asitka Group. The skarn consists of pervasive epidote, actinolite with some garnets, and with variable sphalerite, chalcopyrite, bornite and malachite. In 1988, select grab sampling of outcrop yielded 18.6 grams per tonne silver, 10.3 per cent zinc, 0.02 per cent copper, 0.02 per cent tungsten, 0.06 per cent cadmium and 0.02 per cent bismuth (Assessment Report 25812).

The showing was originally found in 1997 by P. Metcalf of the British Columbia Geological Survey. Royal Oak Mines Inc. held the Kemess property in the late 1990s. In 1997 and 1998, they worked on Duncan Ridge, near four Crown grant claims held by Auterra Ventures Inc. (Cairn 1-4). In 1998, preliminary exploration work at Duncan Ridge was undertaken on behalf of Royal Oak Mines Inc. Prospecting was done over the sites of magnetic, radiometric and resistivity anomalies from the 1997 airborne geophysical survey, and known mineral showings: Cairn (094E 012), Lake 21 (094E 067) and Lake 22 (094E 108). The airborne survey was conducted over 327 line kilometres. In 1998, 365 soil and 43 rock samples were collected.

See Lake 22 (094E 108) for further work history details.

Bibliography										
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Date Coded:	2014/07/17	Coded By:	Garry J. Payie (GJP)	Field Check:	Ν					
Date Revised:	2021/07/20	<b>Revised By:</b>	George Owsiacki (GO)	Field Check:	Ν					