

Location/Identification **MINFILE Number:** 092P 005 **RAYFIELD COPPER** Name(s): RAYFIELD RIVER, RAYFIELD FELDSPAR, DANSEY, BD, I.D.S., PAT, VB, WIN **Mining Division:** Clinton Prospect Status: Fraser-Nicola **Electoral District:** British Columbia 100 Mile House Natural Resource District **Regions: Resource District:** 092P035 **BCGS Map:** 092P06E NTS Map: **UTM Zone:** 10 (NAD 83) 51 18 48 N Latitude: 5686404 Northing: Longitude: 121 05 20 W Easting: 633191 930 metres **Elevation:** Within 500M **Location Accuracy:** Location of diamond drill hole 6, Assessment Report 19,927. **Comments:** Mineral Occurrence Copper, Feldspar, Nepheline Syenite, Gold **Commodities:** Bornite, Chalcopyrite, Chalcocite, Copper, Malachite, Cuprite, Feldspar, Nepheline Minerals Significant: Associated: Feldspar Feldspar, Epidote, Chlorite, Hematite, Sericite Alteration: Potassic **Alteration Type:** Unknown **Mineralization Age:** Vein, Disseminated **Character:** Deposit Porphyry **Classification:** Type: L03: Alkalic porphyry Cu-Au 000/ 2500x600x0 metres **Dimension:** Strike/Dip: Host Rock Plutonic **Dominant Host Rock:** Stratigraphic Age Group Formation Igneous/Metamorphic/Other Triassic-Jurassic Unnamed/Unknown Informal Isotopic Age **Dating Method Material Dated** -----Leucocratic Syenite, Monzonite, Diorite, Amphibole Syenite, Syenitic Pegmatite, Aplite, Nepheline Syenite Lithology: **Geological Setting Tectonic Belt:** Intermontane Cariboo Plateau **Physiographic Area:** Terrane: Quesnel Inventory Year: 2016 SAMPLE Ore Zone: Report On: Ν Assay/analysis Category: NI 43-101: N

Sample Type:	Grab			
	Commodity	Grade		
	Copper	0.292 per cent		
Comments:	a grab sample (16PZR002) of malac bornite mineralization			
Reference:	Assessment Report 36513			
Ore Zone:	SAMPLE	Vear	2015	
Category:	Assay/analysis	Report On	. N	
		NI 43-101	N N	
Sample Type:	Grab			
	Commodity	Grade		
	Copper	0.263 per cent		
Comments:				
Reference:	(Assessment Report 35761			
Ore Zone:	DRILLHOLE	Year	2008	
Category:	Assay/analysis	Report On	. N	
		NI 43-101	N	
Sample Type:	Drill Core			
	Commodity	Grade		
	Copper	0.13 per cent		
Comments:	over 67 metres in hole 08-05			
Reference:	Assessment Report 30271			
Oro Zono:	DRILLHOLE	Vear	1990	
Category:	Assay/analysis	Report On	: N	
Category.		NI 43-101	N	
Sample Type:	Drill Core			
	Commodity	Grade		
	Copper	0.19 per cent		
Comments:	over 15.0 metres in hole 374-16			
Reference:	Assessment Report 30271			
Ore Zone [.]	DRILLHOLE	Vear	1990	
Category:	Assay/analysis	Report On	. N	
g		NI 43-101	N N	
Sample Type:	Drill Core			
	Commodity	Grade		
	Copper	0.17 per cent		
Comments:	over 51.0 metres in hole 374-20		ı	
Reference:	Assessment Report 30271			

Category: Assay/analysis Report On: N Sample Type: Drill Core Image: Commodity in the set of the set
Sample Type: Drill Core Commodity Grade Copper 0.18 per cent Comments: over 43.4 metres on an extension of previously started hole 374-3 Reference: Assessment Report 30271 Ore Zone: DRILLHOLE Year: 1989 Category: Assay/analysis Report One: N Sample Type: Drill Core Commodity Grade Cold 0.035 grams per tonne Copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 N Ore Zone: DRILLHOLE Year: Drill Core Year: 1970 Category: Assessment Report 19927 N Sample Type: Drill Core Year: 1970 Category: Assessment Report 19927 N N Sample Type: Drill Core N N Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH
Sample Type: Drill Core Commodity Grade Copper 0.18 per cent Comments: over 43.4 metres on an extension of previously started hole 374-3 Reference: Assessment Report 30271 Ore Zone: DRILLHOLE Year: 1989 Category: Assay/analysis Report On: N Sample Type: Drill Core N1 43-101: N Sample Type: Drill Core Commodity Grade Gold 0.035 grams per tonne Copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values reper values Reference: Assasy/analysis Report On: N Sample Type: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Year: 1970 Category: Assay/analysis Report On: N N1 43-101: N N
$\begin{tabular}{ c c c c c } \hline Commodity & Grade & & & & & & & & & & & & & & & & & & &$
Copper 0.18 per cent Comments: over 43.4 metres on an extension of previously started hole 374-3 Reference: Assessment Report 30271 Ore Zone: DRILLHOLE Year: 1989 Category: Assay/analysis Report On: N Sample Type: Drill Core Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper 0.129 per cent Ore Zone: DRILLHOLE Year: 1970 Category: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Nt 43-101: N Sample Type: Drill Core Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: Drill Core Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Copper 0.42 per cent Copper 0.42 per cent Comments: over 6.1 metres Reference: Assay/analysis Reference: Assay/analysis
Comments: over 43.4 metres on an extension of previously started hole 374-3 Reference: Assessment Report 30271 Ore Zone: DRILLHOLE Vear: 1989 Category: Assay/analysis Report On: N Sample Type: Drill Core Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Vear: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Commodity Crade Copper 0.42 per cent Commodity Crade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Vear: 1982 Commodity Crade Category: Assay/analysis Report On: N Sample Type: Chip Commodity Crade Copper 0.45 per cent Comments: Over 6.1 metres Reference: Assessment Report 19927 Category: Chip Commodity Crade Copper 0.05 per cent
Comments: over 43.4 metres on an extension of previously started hole 374-3 Reference: Assessment Report 30271 Ore Zone: DRILLHOLE Year: 1989 Category: Assay/analysis Report On: N Sample Type: Drill Core Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Core Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Commodity Grade Copper 0.42 per cent Comments: Over 6.1 metres Reference: Assessment Report 19927 Category: Chip Commodity Grade Copper 0.05 per cent
Reference: Assessment Report 302/1 Ore Zone: DRILLHOLE Year: 1989 Category: Assay/analysis Report On: N Sample Type: Drill Core N1 43-101: N Commodity Grade Gold 0.035 grams per tonne N Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assay/analysis Report On: N Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Year: 1968 Category: Assay/analysis Report On: N Mit 43-101: N N Sample Type: Chip Comments: over 6.1 metres Report On: N Sample Type: Chip Commodity Grade
Ore Zone: Category:DRILLHOLE Assay/analysisYear:1989 Report On:N N N N N N N N N N
Ore Zone: DirkLCHOLL: Item: 1509 Category: Assay/analysis Report On: N Sample Type: Drill Core N 143-101: N Commodity Grade Gold 0.035 grams per tonne Commodity Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assay/analysis Report On: N Sample Type: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core N N Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Image: Second Sec
Category: Lawy analysis Report on: Sample Type: Drill Core Image: Commodity or and the second of the
Sample Type: Drill Core Commodity Gold Grade 0.035 grams per tonne 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Vear: 1970 Comments: over 6.1 metres Grade Copper 0.42 per cent Ore Zone: REPORT Distribution Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Orig Drill Core Year: 1968 Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Year: 1968 Commodity Grade Commodity Grade Commodity Grade Copper 0.05 per cent
Commodity Grade Gold 0.035 grams per tonne Copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: Drill Core Vear: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Ore Zone: Commodity Comments: over 6.1 metres Grade Copper 0.42 per cent 1968 Category: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Mit 43-101: N N N Sample Type: Chip Year: 1968 Category: Assay/analysis Report On: N Mit 43-101: N N N Sample Type: Chip Commodity Grade Commodity Grade Copper 0.05 per cent
Commodity Grade Gold 0.035 grams per tonne Copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Drill Core Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: Particle Particle Particle Particle Parti
Court 0.035 grams per tonne Copper 0.129 per cent Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: Drill Core Year: 1970 Comments: over 6.1 metres Grade Copper 0.42 per cent Constant Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Reference: Commodity Grade N N 143-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Comments: over 164 metres in hole 374-6, along with three drill holes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Commetts: over 104 interes in note 374-0, atong with three drift notes ending in greater than 0.1 per cent copper values Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Reference: Assessment Report 19927 Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Commodity Grade Control Connents: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Commodity Grade Commodity Grade N N Sample Type: Chip Year: 1968 Commodity Grade N N Sample Type: Chip Year: 1968 Commodity Grade N N Sample Type: Chip Year 1968 Commodity Grade N N N Commodity Grade One N N Sample Type: Chip Year 1968 N
Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Category: Assay/analysis Report On: N Massay/analysis Report On: N Massay/analysis NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Ore Zone: DRILLHOLE Year: 1970 Category: Assay/analysis Report On: N Sample Type: Drill Core Image: Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Year: 1968 Reference: Assay/analysis Report On: N Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Commodity Grade Image: Copper Commodity Grade Image: Chip Image: Chip Image: Chip Image: Chip Commodity Grade One Zone: Commodity Grade Image: Chip Image: Chip Commodity Commodity Grade Image: Chip Image: Chip </td
Category: Assay/analysis Report On: N Sample Type: Drill Core Image: Commodity of the constraint of the co
Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Sample Type: Drill Core Commodity Grade Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Commodity Grade Commodity Grade One Source Commodity Grade Copper 0.05 per cent One Source Commodity Grade
Commodity Copper Grade 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Copper Grade 0.05 per cent
Copper 0.42 per cent Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Comments: over 6.1 metres Reference: Assessment Report 19927 Ore Zone: TRENCH Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Reference: Assessment Report 19927 Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Commodity Copper 0.05 per cent
Ore Zone: TRENCH Year: 1968 Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Category: Assay/analysis Report On: N NI 43-101: N Sample Type: Chip Commodity Grade Copper 0.05 per cent
Sample Type: Chip Commodity Grade Copper 0.05 per cent
Sample Type: Chip Commodity Grade Copper 0.05 per cent
CommodityGradeCopper0.05 per cent
Copper 0.05 per cent
Comments: over 48.0 metres, including values up to 0.25 per cent copper over 3.0 metres Pafaranea: Assessment Report 1723
Keitelet. Assessment Report 1723

Capsule Geology

The Rayfield Copper occurrence is along the Rayfield River, approximately 7.5 kilometres northwest of the western end of Young Lake.

Regionally, the area is underlain by several phases of a concentrically zoned, probably Late Triassic to Early Jurassic, syenitic to monzonitic to dioritic plutonic complex. The complex occurs as a window through Miocene to Pleistocene alkaline plateau basalts of the Chilcotin Group, which blanket much of the Cariboo Plateau. The core of the complex consists of leucosyenite composed almost entirely of alkali feldspars with 1 to 3 per

cent amphibole and trace amounts of white mica, magnetite and quartz (Assessment Report 2135). Syenite pegmatite dikes are common, with feldspar making up more than 95 per cent of the rock. Other less common syenite pegmatites contain minor amphibole minerals, less common nepheline and rare quartz.

Locally, prospecting and sampling has identified visible low-grade copper mineralization, between 0.05 per cent and 0.1 per cent copper, over an area of approximately 600 by 2500 metres. Mineralization consists of bornite and chalcopyrite, largely altered to malachite, occurring in feldspar (alteration?) veinlets and fracture fillings and as disseminations replacing mafic minerals and blebs up to 3 millimetres in size associated with syenite pegmatite dikes. Chalcocite, cuprite and native copper mineralization have also been reported. The most widespread veinlet set is sheeted, trending north-northwest and dipping 40 to 60 degrees west. Alteration minerals include potassium feldspar, epidote, chlorite, sericite and hematite.

In 1968, chip sampling of the north trench averaged 0.05 per cent copper over 48.0 metres, including values up to 0.23 per cent copper over 3.0 metres (Assessment Report 1723).

In 1970, diamond drilling at the north end of the mineralized zone is reported to have yielded up to 0.42 per cent copper over 6.1 metres (Assessment Report 19927).

In 1989, diamond drilling yielded up to 0.129 per cent copper and 0.035 gram per tonne gold over 164 metres in hole 374-6, along with three drillholes ending in greater than 0.1 per cent copper values (Assessment Report 19927).

In 1990, diamond drilling is reported to have yielded intercepts of up to 0.19 per cent copper over 15.0 metres in hole 374-16, 0.17 per cent copper over 51.0 metres in hole 374-20 and 0.18 per cent copper over 43.4 metres on an extension of the previously started hole 374-3 (Assessment Report 30271).

In 2008, diamond drilling yielded intercepts of 0.13 per cent copper over 67 metres in hole 08-05 and 0.10 per cent copper over 33 metres in hole 08-07 (Assessment Report 30271).

In 2015, three grab samples (RD15-R02 to RD15-R04) yielded from 0.119 to 0.263 per cent copper (Assessment Report 35761).

In 2016, a grab sample (16PZR002) of malachite-stained pegmatite hosting blebby chalcopyrite and bornite mineralization assayed 0.292 per cent copper (Assessment Report 36513).

The earliest recorded work on the property was in 1963, when Kennco Explorations (Western) Limited completed programs of geological mapping and geochemical sampling (soil and stream sediments) on the Pat group of claims.

In 1966, Cominco Limited completed a program of soil sampling (800 samples) and magnetometer surveying on the I.D.S. 1 to 16 claims located adjacent to the Pat group. In 1967 and 1968, Rayfield Mining Company Ltd. completed ground and airborne geophysical surveys on the area immediately southeast as the Joe claims.

In 1968, Mr. C. Dansey restaked the property as the BD claims and undertook a program of bulldozer trenching, then subsequently optioned the property to Amax Exploration Inc. During 1968 through 1970, Amax Exploration Inc. completed programs of geological mapping, soil sampling (approximately 1230 samples), magnetometer and induced polarization surveys and 31 percussion drill holes, totalling 1749 metres, on the area.

In 1989, the Rayfield 1 to 7 group of claims were staked by The Vernon Exploration Group and optioned to Brenda Mines Limited, who completed a program of induced polarization (36 kilometres) and eight diamond drill holes, totalling 1140.9 metres. A further 15 diamond drill holes, totalling 3505 metres, were completed in 1990.

During 2006 through 2008, Candorado Operating Company Ltd. completed programs of soil sampling, seven diamond drill holes, totalling 1584.2 metres, and a 409.0 line-kilometre airborne geophysical survey on the area as the Rayfield River property. During 2014 through 2016, programs of prospecting, geological mapping and minor geochemical sampling were performed on the area as the Rayfield 1-2 claims.

Bibliography

EMPR AR 1966-135, 1967-127, 1968-159 EMPR ASS RPT 528, 859, 954, 1172, *1723, 1758, *2135, *19927, 29110, 29538, *30271, *35761, *36513 EMPR GEM 1969-184,367, *1970-218, 1972-316, 1973-271, 1972-316, 1973-271 EXPL 1990-53 EMPR OF 1991-10-81 GSC MAP 1966-3, 1278A GSC MEM *363

EMPR PFD 650224, 13503, 13504, 13505, 820325, 802086

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2019/12/07	Revised By:	Karl A. Flower (KAF)	Field Check:	N