

**NAME OF PROPERTY**  
**NOM DE LA PROPRIÉTÉ** ROCK CANYON CREEK (DEEP PURPLE, CANDY)

**OBJECT LOCATED** Mineralized zone  
**OBJET LOCALISÉ**

**UNCERTAINTY** 300 m  
**FACTEUR D'INCERTITUDE**

<b>Lat.</b>	50°12'50"	<b>Long.</b>	115°08'40"
<b>Lat.</b>		<b>Long.</b>	

<b>Mining Division</b> <i>Division minière</i>	Golden	<b>District</b> <i>District</i>	Kootenay
<b>County</b> <i>Comté</i>		<b>Township or Parish</b> <i>Canton ou paroisse</i>	
<b>Lot</b> <i>Lot</i>		<b>Concession or Range</b> <i>Concession ou rang</i>	
<b>Sec</b> <i>Sect.</i>	<b>Tp.</b> <i>Ct.</i>	<b>R.</b> <i>R.</i>	

**OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT**

**DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT**

The Rock Canyon Creek area is underlain by a Cambro-Ordovician to Middle Devonian carbonate-dominated sequence. The fluorspar and REE mineralization is ~~gratabound~~, hosted mainly by the basal Devonian unit. Four main types of fluorite mineralization have been identified. The first and most widespread consists of disseminations and fine veinlets of fluorite in a dolomitic carbonate matrix. Fluorite content generally varies from 2 to greater than 10 per cent of the rock. Neutron activation analyses of up to 2.3 per cent rare earth elements and 2.7 per cent barium are reported. Niobium, strontium and yttrium are also present in measurable amounts. Four of seven samples taken in 1985 showed on analysis an anomalous total rare earth element content in excess of 0.5 per cent. This type of mineralization has been mapped for a strike length of over a kilometre. Type 2 comprises float rocks of massive fine-grained purple and white fluorite with accessory barite and prosopite, which together comprise greater than 40 per cent of the rock. Type 3 consists of fine-grained fluorite disseminated in white gypsum and locally interbedded with dolomite. Fluorite

p.t.o.

Associated minerals or products  
**Minéraux ou produits associés** Barite, rare earths, gypsum, lead, zinc

**HISTORY OF EXPLORATION AND DEVELOPMENT**  
**HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR**

The property is located at 5 500 feet elevation on the south side of Rock Canyon Creek, some 65 km southeast of Windermere.

The showing was discovered in 1977 during regional exploration by Rio Tinto Canadian Exploration Limited; the ground was staked as the Deep Purple claim (18 units) and Candy claim (8 units). Work in 1977-79 included geological mapping, a geochemical survey comprising about 1 000 soil and silt samples, and trenching to assess the fluorspar-lead-zinc potential. A further geochemical soil survey (360 samples) was carried out in 1981 in an attempt to establish the economic potential of the property in terms of other commodities. It was during this latter work that the anomalous rare earth element (REE) content of the claims was recognized.

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

REFERENCES/BIBLIOGRAPHIE

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (con't )

is present in concentrations from trace amounts to a few per cent. Type 4 consists of massive fluorite forming the matrix of an interformational conglomerate that is tentatively assigned to the Fairholm Group, which unconformably overlies the basal Devonian unit; the fluorite constitutes greater than 20 % of the rock. Stratiform barite-lead-zinc showings are also reported.

Exploration in British Columbia; BCDM: 1978, p. 286; 1979, p. 332; 1981, p. 166.

Geological Fieldwork; BCDM: 1985, p. 241++; 1986, pp. 255-258+.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Open File 481, Kootenay, (Geol.). Sc.1: 1 000 000, Geol. Surv. of Canada, 1977.

#Geology of the Rock Canyon Creek fluorite/rare earth showing, Sc. 0.45 cm = 100 m, Fig 4-2-1, Geological Fieldwork 1986, p. 256.

\*Map 82 J/3, Mount Peck, (Topo.), Sc. 1: 50 000.

REMARKS/REMARQUES

BCI 82 J/SW-18

Comp./Rev. By Comp./rév. par	DMacR						
Date Date	09-87						