

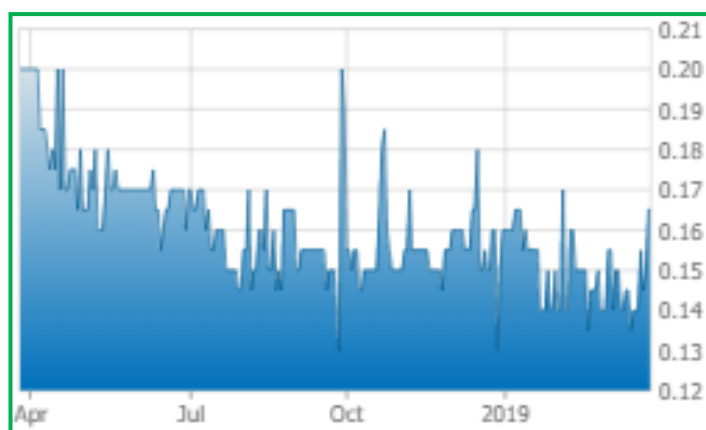
# Strategic Metals & Rare Earths Letter

## INTERNATIONAL

*the independent information and advisory publication on investing in Strategic Metals & Rare Earths*

**Investment Alert – November 5, 2019**

[www.happycreekminerals.com](http://www.happycreekminerals.com)



### Happy Creek Minerals (C\$ 0.09)

TSX.V : HPY  
 H + L prices (12 months) : C\$ 0.19 – 0.08  
 Net shares issued : 105.0 million  
 Fully diluted shares : million  
 Market Capitalization : C\$ 9.5 million

**2020 price target: C\$ 0.30**

## INVESTMENT ALERT

### Happy Creek Minerals (“Happy Creek”) drills at Fox Tungsten Project, B.C., Canada

On November 4, 2019, **Happy Creek Minerals (“Happy Creek”)** provided an update on its 100% owned **Fox Tungsten Project** in south central B.C., Canada.

In 2019, two drill holes were completed at the Fox tungsten property totalling 372.5 metres in the Nightcrawler zone within logging clear-cuts and roads. Since 2017, the Company has done more detailed work in this area and recognized a potential resource opportunity based on several widely spaced holes containing encouraging grade-widths. The 2 holes at the **Nightcrawler Zone** returned 4 metres of 0.29% W03 in F19-01 and 6.3 metres of 0.43% W03 in F19-02.

#### Summary of 2019 Drill Results Nightcrawler Zone

Drill Hole	From m	To m	Interval m	W03 %
F19-01	186.0	190.0	4.0	0.29
F19-02	71.5	77.8	6.3	0.43
Incl	74.0	77.8	3.8	0.59

At the **Nightcrawler zone**, there are multiple tungsten-bearing calc silicate layers that extend for three km along strike and at least 500 metres down dip. Five drill holes have now cut a tungsten calc silicate/skarn layer in an area approximately 500 metres by 250 metres in dimension with an average thickness of approximately 5 metres and similar grade to F19-02. This zone dips around 30 degrees south-southeast, remains open and is thought to daylight at surface on the north side of Deception Creek.

## **Company profile**

The **Fox Tungsten Property** is located 75 km northeast of 100 Mile House in south Central B.C. The Company has advanced the project from an early stage to discovery and as announced February 27, 2018, it currently hosts a resource of 582,400 tonnes of 0.826% WO<sub>3</sub> (indicated) and 565,400 tonnes of 1.231% WO<sub>3</sub> (Inferred), that is among the highest grade in the western world, and a portion is within an open pit shell. The Fox property has a mineral system with dimensions of 12 kilometres by 5 kilometres and numerous surface showings of tungsten and drill holes with intervals above cut-off grade that are open.

### **Investment comments:**

**Happy Creek's Rateria - West Valley Copper** and **Fox Tungsten** properties located in B.C. are at a more advanced stage of exploration, including resource definition and expansion, as well as engineering and economic evaluation stage for **Fox**, a new discovery for tungsten.

The total **Indicated Resource** of the **Ridley Creek Zone** on the **Fox Property** contains **582,400 tonnes of 0.826% WO<sub>3</sub>** and a total Inferred Resource of 565,400 tonnes of 1,231% **WO<sub>3</sub>** for the Ridley Creek, BN and BK Zones combined. All mineralized zones are open to further expansion.

**Plans include increasing the resource base and performing a Preliminary Assessment ("PEA") to advance **Fox** as a new high-grade tungsten project in the western world.**

**Happy Creek's Rateria - West Valley Copper Property** adjoins and surrounds the southern end of Teck's Highland Valley Copper Mine Property, Canada's largest copper producer.

Drill highlights on the discovered two new copper zones have identified continuous and positive grades and include 95.0 metres of 0.67% copper, 250.0 metres of 0.25% copper from **Zone 1** and 152.5 metres of 0.35% copper, 0.06 g/t gold and 105.5 metres of 0.37% copper, 0.14 g/t gold, 0.005% molybdenum and 0.63 g/t rhenium in **Zone 2**. High grades such as 5.0 metres of 4.4% copper also occur. There is thought to be clear resource potential in both Zone 1 and 2.

On October 27, 2019, **Happy Creek** announced it has identified two new areas of promising porphyry copper mineralization on recently constructed logging roads in the **Pimainus** and **Abott** areas of the **West Valley Property**.

Based on its **Fox** tungsten discovery, having the potential to emerge into a quality high-grade tungsten development project among the best in the western world and the **Rateria - West Valley Property**, having proven that new copper zones can be found with similar grade as Teck's Highland Valley Copper Mine, in my view, **Happy Creek**, at a depressed market valuation of C\$ 9.5 million, offers a high investment leverage potential.

This underpins my **2019 price target of C\$ 0.30**.

**WHAT IS SPECIAL ABOUT TUNGSTEN ?**



Example in agriculture: Tungsten tiller blades: Improves performance and working life.

Many more uses of tungsten....

**Tungsten is declared a "Critical Metal" in the USA, Europe.**

"Performs an essential function with few or no substitutes and..

**..a high probability of supply being disrupted."**

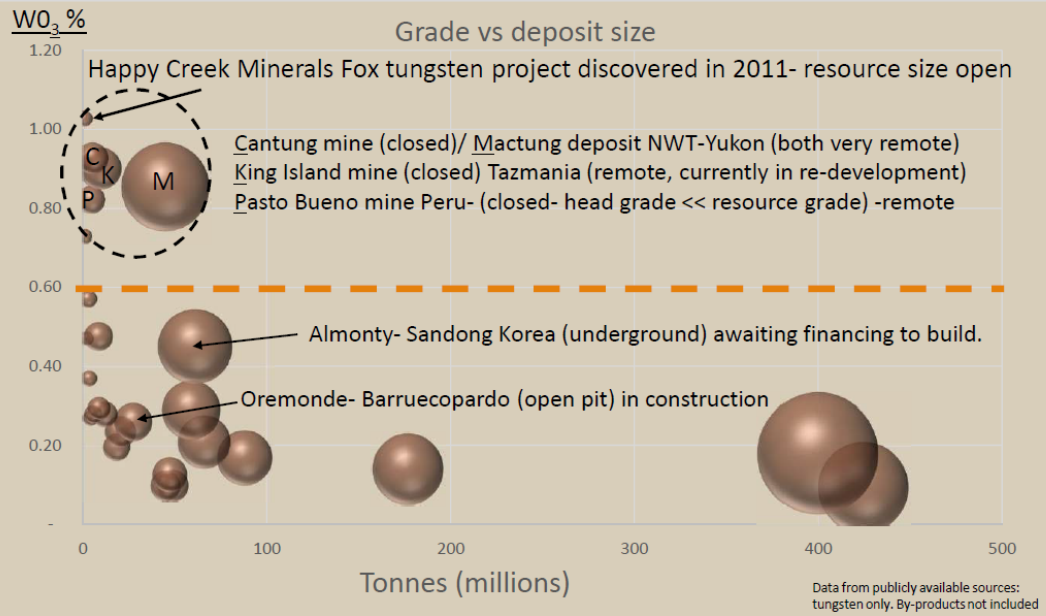
Modified after Minerals, Critical Minerals, and the U.S. Economy (2008), National Academy of Sciences.

- **WO<sub>3</sub> (tungsten trioxide)** is the compound used by the market to price a number of refined, intermediate tungsten products such as ammonium paratungstate (APT).
- WO<sub>3</sub> prices for APT have ranged from around US \$18 -\$45/kg WO<sub>3</sub>.
- China is the world's largest producer (80%) and consumer (60%) of tungsten and will largely set the global price.
- Tungsten concentrate is purchased by off-take agreement with refiners for around 80% of APT price.
- Current European APT price is around US \$27/Kg WO<sub>3</sub> and expected to be over US\$30/Kg by 2020.
- History shows it is very difficult to be profitable mining lower grade deposits, no matter what scale, when prices fall.

**The Fox resource grades 0.826% WO<sub>3</sub> Indicated and 1.231% WO<sub>3</sub> Inferred.**

**In the top 5% of tungsten deposits.**

**27 WESTERN TUNGSTEN PROJECTS**



**For projects above 0.60% WO<sub>3</sub> in North America, the Fox is the only one with hydropower nearby.**