

Formation Metals Inc. – EPCM

Idaho Cobalt Project, Idaho, USA

JDS Energy & Mining Inc.

OVERVIEW

The Idaho Cobalt Project, located in east central Idaho, is a primary cobalt deposit with production estimates of 1,525 tons annually of super-alloy grade high purity cobalt metal over a ten year mine life.

SCOPE

JDS was retained by Formation Metals Inc. to provide Engineering and Construction Management (EPCM) services for the Idaho Cobalt Project as well as life of mine planning and budgeting.

The mine-based scope of work for the project located 40 km west of Salmon, Idaho, at an elevation of 8,000' above sea level, included site access road construction, 1,800 metres of decline development for the underground mine, portal bench including mechanically stabilized earth structure, 1,000 foot vertical tram way to transport ore to the mill, an 800 ton per day mill and concentrator, dry stack tailings facility, site water management structures and an administration office and mine dry. JDS managed the selection, award and execution of the contractors on site as well as Samuels Engineering who completed the detailed engineering and equipment procurement.

The Sunshine Refinery based out of Kellogg Idaho involved the addition of the 30,000 square foot Cobalt Process Plant onto the existing refinery to produce high purity cobalt 99.7 with byproduct copper cathodes and gold. The cobalt plant included zinc solvent extraction, cobalt neutralization, nickel ion exchange, cobalt electrowinning, magnesium hydroxide production and gold recovery circuits.

Project Value: \$150M

Note: Project was suspended mid-construction due to lack of financing.

