

# **1 SUMMARY**

## **1.1 Introduction**

A technical report (the Report) has been prepared for Teck Resources Limited in compliance with National Instrument 43-101 “Standards of Disclosure for Mineral Projects” (NI 43-101) on the Red Dog mining operation (the Red Dog Mine or the Project), located in Alaska. As used in this report, “Teck” refers to Teck Resources Limited or its wholly owned subsidiaries, as applicable.

The Report is used in support of Teck’s annual information form (AIF) filing and in support of updated Mineral Resource and Mineral Reserve estimates for the operation.

## **1.2 Property Description, Location, and Access**

The Red Dog Mine is situated about 1,000 km north of Anchorage, 144 km north of Kotzebue and 140 km north of the Arctic Circle at an approximate latitude of 68°4’30”N and longitude of 162°49’44”W. The mine is 84 km inland from a shallow tidewater port on the Chukchi Sea, which is only open to shipping 100 days per year. A paved airstrip 5.5 km southwest of the mine supports jet access from Anchorage and Kotzebue.

The mine site is located on a ridge between the Middle and South Forks of Red Dog Creek, in the DeLong Mountains of the Western Brooks Range. The topography is moderately sloping, with elevations ranging from 260 m to 1,200 m above sea level. Permafrost has developed to depths more than 90 m. Vegetation is classified as woody tundra.

The Arctic climate is cold to very cold, with temperatures fluctuating seasonally from a low of about -41°C to summer peaks of 16°C. Precipitation is concentrated mainly in the summer months, increasing in June and reaching a peak during late August. Mining activities are conducted year-round.

The property consists of (i) a mining lease on land owned by the NANA Regional Corporation (NANA) and (ii) 2,479 Alaska state mining claims held in three separate claim blocks: Noatak, JAH and GOS. Seven deposits have been identified: Qanaiyaq, Main, Aqqaluk, Paalaaq, Aqjarraaq, Su and Aktigiruaq. The Aqqaluk, Main, Qanaiyaq and Paalaaq deposits are situated within the NANA-TAK mining lease. The Aqjarraaq, Su and Aktigiruaq deposits are within the Noatak block of state mining claims. The mine plan assumes mining of the Aqqaluk and Qanaiyaq deposits. The Main deposit is mined out; Mineral Resources are estimated currently at the Paalaaq and Aqjarraaq deposits.

Teck’s subsidiary, Teck Alaska Incorporated (TAK) operates the Red Dog Mine under the terms of a Mining Lease and Development and Operating Agreement with NANA. Under the agreement, TAK leases the property from NANA, operates the mine, and markets the concentrate produced. TAK pays NANA royalties on production from the Project. In addition to the royalties payable to NANA, the operation is subject to state and federal income taxes, and Alaskan mining taxes.