

Memo

To:	Loretta Ford, Pebble Limited Partnership	Client:	Pebble Limited Partnership
From:	Stephen Day, Claire Linklater	Project No:	1CP016.011
Cc:		Date:	May 21, 2018
Subject:	Additional Data Collected after Supplement to Environmental Baseline Document, Pebble Project		

1 Background

Geochemical data for Pebble Project was initially compiled and interpreted in “Chapter 11 Geochemical Characterization of Pebble Project Environmental Baseline Document 2004 through 2008 (with updates in 2010)” (referred to as the EBD) dated April 7, 2011.

Kinetic geochemical testwork programs continued after the EBD was issued and were reported in “Pebble Project Cumulative Baseline Data Report (2004-2012) 11. Geochemical Characterization Bristol Bay Drainages” (referred to as the CEBD) dated July 17, 2013. Kinetic test data were reported out to December 2012. This dataset formed the basis for development of geochemical source terms used to evaluate water quality management approaches for the project.

Parts of the kinetic test program continued after the CEBD with all programs being finished in August and September 2013. This included 25 waste humidity cells reported in the CEBD, 13 new waste rock humidity cells tests started after the CEBD was prepared (operated for 28 weeks), three rock subaqueous columns and 13 tailings humidity cells.

The data obtained between the CEBD and completion of the programs was reviewed to determine if the results obtained would materially affect interpretation of waste performance and development source terms for the current project configuration.

2 Review Findings

Except for the 13 new tests operated for 28 weeks, the additional approximately 35 weeks of data obtained from 39 humidity cells and three subaqueous columns after the CEBD represented less than 10% of the full duration of the tests.

Five tests showed downward trends in pH after the CEBD which resulted in accelerated weathering; however, except for one test, the trends were already initiated before the CEBD and the trends were partly reflected in the calculated averages. One rock test showed a sharp decline from pH of about 3.1 to 2.4 and rates increase above already elevated rates.

3 Conclusions

SRK's conclusion from the review is that inclusion of the data obtained between the CEBD report and completion project would result in slight changes in the average weathering rates used in the source term calculations but that the differences would not be sufficient to affect overall outcomes.

SRK Consulting (Canada) Inc.



Stephen Day, *PGeo (BC)*
Corporate Consultant (Geochemistry)

Reviewed by:



Claire Linklater, *PhD*
Principal Consultant (Geochemistry)

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