

DRAFT ENVIRONMENTAL BASELINE STUDIES 2006 STUDY PLANS

CHAPTER 8. GEOCHEMICAL CHARACTERIZATION AND METAL LEACHING/ACID ROCK DRAINAGE

JULY 2006

TABLE OF CONTENTS

TA	BLE	OF CONTENTS	8-i
LI	ST OF	FTABLES (attached)	8-ii
ΑC	CRON	YMS	8-iii
8.	GEC	OCHEMICAL CHARACTERIZATION AND ML/ARD	8-1
	8.1	Objectives of Study	8-1
	8.2	Proposed Work Plan	8-1
	8.3	Deliverables	8-1

LIST OF TABLES (attached)

Table 8-1, Summary of Geochemical Characterization and ML/ARD for Mine Study Area, 2004-2006

ACRONYMS

ABA acid-base accounting

ML/ARD metal leaching/acid rock drainage
NDM Northern Dynasty Mines Inc.
SRK SRK Consulting (Canada) Inc.

8. GEOCHEMICAL CHARACTERIZATION AND ML/ARD

The component of the study plan for geochemical characterization and metal leaching/acid rock drainage (ML/ARD) addresses the geochemical characterization of tailings and the mine-rock facilities for the mine site. The term "mine rock" includes waste rock, waste rock to be used for construction, the walls and floor of the open pit, and the stockpiles. SRK Consulting (Canada) Inc. (SRK) will lead the geochemical and ML/ARD work for the mine site.

8.1 Objectives of Study

The objectives and background of the study will be as described in Section 8.1 of the 2005 study plan.

8.2 Proposed Work Plan

The proposed work for 2006 is primarily the continuation of kinetic testing started in 2005. The following kinetic testing is currently underway:

- Waste Rock Humidity Cells 13 tests.
- Tailings Humidity Cells 2 tests.
- Waste Rock Subaqueous Columns 6 tests.
- Tailings Subaqueous Columns 6 tests

The data from these tests will be reviewed in June 2006 to determine which if any tests can be terminated. The balance of tests will continue through 2006.

In addition to this test work, SRK will continue to liaise with NDM's exploration geologist to include geochemical static testing (ABA) in ongoing drilling programs at the site. ABA testing will be conducted on selected overburden samples obtained from the 2006 drilling programs.

8.3 Deliverables

The main deliverables from these activities in 2006 will be the component on ML/ARD in the environmental baseline document.

Table 8-1 Pebble Project Environmental Studies Study Summary for 2004-2006 Consultant: SRK Consulting

	2004	2005	2006
Discipline	Data Collected or Tasks	Data Collected or Tasks	Tasks to be Completed
ML/ARDMineStudies	Selection of samples for static testing.	Initiation of humidity cells on rock samples.	Continue kinetic testing (waste rock and tailings).
	Static testing.	Initiation of humidity cells on tailings samples.	Static testing in new exploration areas.
	Selection of samples for kinetic testing.	Initiation of column tests on rock samples.	Prepare EBD
	Visit to site to review logging practices.	Initiation of column tests on tailings samples.	
	Selection of drill holes for mine walls.	Additional static testing on mine-wall drill holes.	
		Specific characterization of Tertiary rock samples.	
		2004 progress report.	