

APPENDIX D

**ARCHIBALD OUTFALL – 2012 CORING AND COMPRESSION
TEST INFORMATION**

KGS Group Inc.
3rd Floor - 865 Waverley St
Winnipeg, MB
R3T 5P4

March 12, 2012

Project: Mission Outfall

Attention: Matt Adamiec

On March 7, 2012, three core samples were recovered from the concrete pipe of the Mission Outfall. The location of the core samples were selected by KGS Group personnel. The purpose of the coring program was to recover core samples for KGS Group personnel to conduct a visual inspection of the concrete. After visual inspection, it was requested that testing be conducted to determine the compressive strength of the concrete core samples. Photographs of the core samples are attached to this report.

The core samples were recovered from the following locations:

- Core no. 1 - floor, 20 m upstream from manhole
- Core no. 2 - south wall, 20 m upstream from manhole, 1 m above floor
- Core no. 3 - floor, 9 m upstream from manhole

Based upon the visual examination of the core samples, it was determined that core nos. 1 to 3 are considered to be relatively sound concrete.

The three core samples were tested for compressive strength in accordance with CSA A23.2-14C, Obtaining and Testing Drilled Cores for Compressive Strength Testing. The core samples were conditioned in water at room temperature for 48 hours prior to testing. The compressive strength results are shown in the table below.

Core No.	Compressive Strength (MPa)
1	16.1
2	14.4
3	27.8

We appreciate the opportunity to assist you in this project. Please call if you have any questions regarding this report.



Jason Thompson, C.E.T.
Manager, Materials Testing Services



Core No. 1



Core No. 2



Core No. 3