

Ms. Rebecca Studer-Halbach, P.Eng.
Project Manager
Public Services and Procurement Canada – Western Region
Environmental Services and Contaminated Sites
Management
Government of Canada
5th Floor, ATB Place, 10025 Jasper Avenue
Edmonton, Alberta T5J 1S6

Date
October 14, 2021

Project #
60608868

Dear Rebecca,

**Subject: Kwet̓iḡaà (Rayrock) Remediation Project
July 2021 Sherman Lake Water Depth Measurements**

AECOM Canada Ltd. (AECOM) is pleased to provide Public Services and Procurement Canada (PSPC) this report summarizing the results of water depth measurements completed in Sherman Lake at a location proximate to proposed treatment water discharge for the upcoming Rayrock Remediation Project.

The field work was completed by AECOM on July 17, 2021. In summary, a weighted measuring tape was used to measure the depth from the top of surface water (Sherman Lake) to the top of sediment at 15 locations in the vicinity of proposed water treatment system discharge. Coordinates (northings and eastings) were obtained using a hand-held global positioning system and the data recorded.

The measurement results are tabulated in Table 1, attached and depicted on an aerial photograph (Figure 1, also attached). Photographs collected during the field work are further attached.

We trust this submission meets your requirements. Please contact the undersigned should you have any questions regarding this submission.

Sincerely,
AECOM Canada Ltd.



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Statement of Qualifications and Limitations

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- must be read as a whole and sections thereof should not be read out of such context;
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This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.

Appendix **A**

| Table 1 | | | | | |
|---|---------|----------|---|--|--|
| 2021 Sherman Lake Water Depths Rayrock Remediation Project Public Services and Procurement Canada | | | | | |
| Location ID | Easting | Northing | Sherman Lake Surface Water Elevation (m asl) | Depth from Water Surface to Top of Sediment (m) | Top of Sediment Elevation (m asl) |
| 2021 (July) Field Measurements - Weighted Tape Measure Method | | | | | |
| SLB1 | 523312 | 7036043 | 180.14 | 1.92 | 178.22 |
| SLB2 | 523320 | 7036016 | 180.14 | 2.72 | 177.42 |
| SLB3 | 523320 | 7035976 | 180.14 | 2.80 | 177.34 |
| SLB4 | 523293 | 7035985 | 180.14 | 2.28 | 177.86 |
| SLB5 | 523289 | 7036016 | 180.14 | 1.80 | 178.34 |
| SLB6 | 523290 | 7036049 | 180.14 | 1.51 | 178.63 |
| SLB7 | 523261 | 7036054 | 180.14 | 1.08 | 179.06 |
| SLB8 | 523262 | 7036018 | 180.14 | 1.40 | 178.74 |
| SLB9 | 523261 | 7035983 | 180.14 | 1.33 | 178.81 |
| SLB10 | 523280 | 7035970 | 180.14 | 0.82 | 179.32 |
| SLB11 | 523243 | 7036009 | 180.14 | 1.22 | 178.92 |
| SLB12 | 523275 | 7036005 | 180.14 | 1.68 | 178.46 |
| SLB13 | 523310 | 7036002 | 180.14 | 1.45 | 178.69 |
| SLB14 | 523276 | 7036040 | 180.14 | 1.46 | 178.68 |
| SLB15 | 523243 | 7036035 | 180.14 | 1.10 | 179.04 |
| | | | | | |
| Average | | | 180.14 | 1.64 | 178.50 |
| | | | | | |

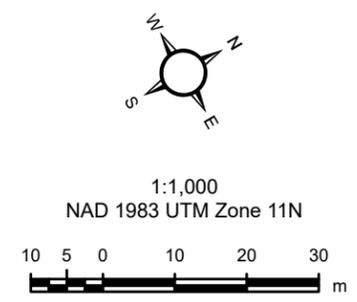
Note:

Coordinates for the locations provided in this table were collected using a Garmin handheld GPS (UTM Zone 11)

Appendix **B**



Legend
 ○ 2021 Water Depth Measurement Location



Ortho-Imagery: Arcadis Canada Inc. (Photo Date: May 26, 2017)
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Appendix **C**

| | | |
|---|---|--------------------------------|
| Client Name: Public Services and Procurement Canada | Site Location Sherman Lake, Rayrock Mine, NWT | Project No. 60608868 |
|---|---|--------------------------------|

| | |
|--|--------------------------|
| Photo No. 1 | Date 7/16/2021 |
| Direction Photo Taken West | |
| Description Image taken from the zodiac boat on Sherman Lake. View of the bay on the edge of the lake where water depth measurements were recorded. | |



| | |
|--|--------------------------|
| Photo No. 2 | Date 7/16/2021 |
| Direction Photo Taken Northwest | |
| Description Image taken from the zodiac boat while recording water depth measurements on Sherman Lake. | |



| | | |
|---|---|--------------------------------|
| Client Name: Public Services and Procurement Canada | Site Location Sherman Lake, Rayrock Mine, NWT | Project No. 60608868 |
|---|---|--------------------------------|

| | |
|--|--------------------------|
| Photo No. 3 | Date 7/16/2021 |
| Direction Photo Taken Northwest | |
| Description Image taken from the zodiac boat while recording water depth measurements on Sherman Lake. | |



| | |
|--|--------------------------|
| Photo No. 4 | Date 7/16/2021 |
| Direction Photo Taken Southwest | |
| Description Image taken from the zodiac boat while recording water depth measurements on Sherman Lake. | |

