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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: Kwet'it'wàà (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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Senior Project Manager
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Statement of Qualifications and Limitations

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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:

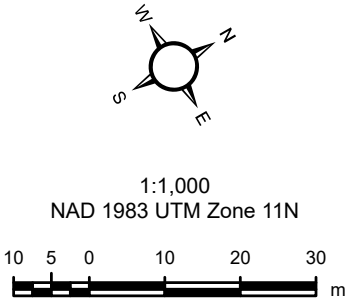
Coordinates for the locations provided in this table were collected using a Garmin handheld GPS (UTM Zone 11)

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
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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
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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.		