



September 20, 2017

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Ms. Tracey Braun
Director of Environmental Approvals
Manitoba Sustainable Development
160-123 Main Street
Suite 160 VIA Station
Winnipeg, Manitoba
R3C 1A5

via email

D-206.05

Dear Ms. Braun,

RE: Dauphin River First Nation – Lagoon Environmental Act Licence No. 3160

Pursuant to Clause 19 of the Environmental Act Licence No. 3160, attached are the test results completed in accordance with clause 18 of the licence. To date a total of 9 test results have been obtained on the lagoon primary cell dike, primary cell floor, storage cell dikes and storage cell floor with the following results:

Sample Date July 4, 2016 - ST4 - 4.67×10^{-9} cm/s
Sample Date July 4, 2016 - ST6 - 1.09×10^{-8} cm/s
Sample Date July 4, 2016 - ST7 - 7.47×10^{-9} cm/s
Sample Date Sept 13, 2016 - ST9 - 1.13×10^{-8} cm/s
Sample Date July 4, 2016 - ST2 - 6.93×10^{-9} cm/s
Sample Date Aug 17, 2016 - ST12 - 8.2×10^{-9} cm/s
Sample Date Aug 3, 2017 - ST3 - 4.4×10^{-9} cm/s
Sample Date Aug 3, 2017 - ST4 - 7.55×10^{-9} cm/s
Sample Date Aug 3, 2017 - ST5 - 5.15×10^{-9} cm/s

All of the test results meet the hydraulic conductivity requirements of the licence of 1×10^{-7} cm/s. A copy of the test results are attached.

Please provide approval for Dauphin River First Nation to place the entire lagoon into operation. Permission was provided in the call of 2017 for temporary conditional use of the primary cell.

If you have any questions, please contact the undersigned.

Yours truly,

JR Cousin Consultants Ltd.

David Kelly, P.Eng.
Municipal Engineer

enc. Soil Test Results
cc. Asit Dey, Manitoba Sustainable Development





Quality Engineering | Valued Relationships

August 15, 2016

File No. 1000-027-02

Mr. Brad Boyd
Quantum Murray
201 Portage Avenue - 18th Floor
Winnipeg MB
R3B 3K6

RE Dauphin River First Nation Wastewater Lagoon Construction – Lab Testing Update for Shelby Tube Samples

TREK Geotechnical Inc. (TREK) was retained by Quanrum Murray LP (QM) to provide testing services on an as requested basis at the above project. This report provides a summary of the hydraulic conductivity test results completed to date.

On July 5, 2016 QM delivered Shelby tube samples to Trek for testing. The Shelby tubes were identified as ST1 to ST10. Representatives from Manitoba Conservation, QM, J.R. Cousin Consultants Ltd. met at Trek's laboratory to observe the extrusion of Shelby tube samples. Manitoba Conservation selected which samples were to be extracted from the Shelby tubes as well as selected four samples to be tested for Hydraulic conductivity. Three tests have been completed to date (ST4, ST6, ST7) while testing of ST9 is in progress. A summary of results from the completed tests is provided below, and the completed reports are attached.

ST4 - 4.67×10^{-11} m/s (4.67×10^{-9} cm/s)

ST6 - 1.09×10^{-10} m/s (1.09×10^{-8} cm/s)

ST7 - 7.47×10^{-11} m/s (7.47×10^{-9} cm/s)

A final testing report will be issued once all testing has been completed. The test results presented are representative of the soil samples provided. The testing services undertaken by TREK constitutes testing services only and engineering evaluation or interpretation has not been undertaken, but is available upon request.



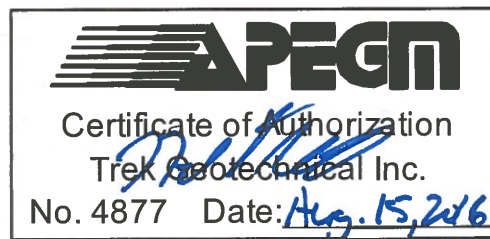
If you have any questions or require any additional information, please contact the undersigned.

TREK Geotechnical

Per:



Nelson Ferreira, M.Sc., P.Eng.
Geotechnical Engineer





Project No. 1000-027-02
Client Quantum Murray
Project Dauphin River First Nation
 Wastewater Lagoon Construction

Test Hole ST4
Trek Sample #
Depth (m) 1.54 - 2.16
Sample Date July 04, 2016
Test Date July 07, 2016 to Aug 02, 2016
Technician Paul Bevel

Specimen Details

Visual Classification Clay, silty, brown, firm, high plasticity

Comments The specific gravity of the soil was assumed to be 2.75.

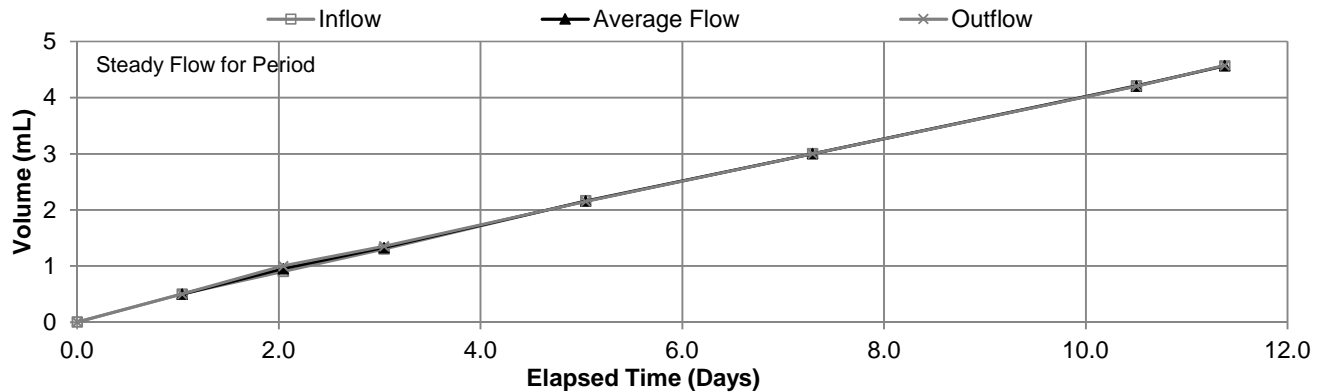
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 172.4 kPa
Influent Pressure 128.2 kPa
Effluent Pressure 110.3 kPa
Gradient 22.48

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
2.00	5.04	0.86	0.80	1.08	0.83	0.95	4.91E-11
2.25	7.29	0.84	0.85	0.99	0.85	0.95	4.44E-11
3.21	10.50	1.21	1.20	1.01	1.21	0.94	4.39E-11
0.88	11.38	0.35	0.37	0.95	0.36	0.96	4.93E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) 4.67E-11 (4.67×10^{-9} cm/s)

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m^3)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0808	0.0727	30.2	14.5	97.2	172.4	110.3
Final	0.0813	0.0727	31.9	14.5	101.5	172.4	110.3



Project No.	1000-027-02	Test Hole	ST6
Client	Quantum Murray	Trek Sample #	
Project	Dauphin River First Nation Wastewater Lagoon Construction	Depth (m)	0.62 - 1.23
		Sample Date	July 04, 2016
		Test Date	July 12, 2016 to Aug 04, 2016
		Technician	Paul Bevel

Specimen Details

Visual Classification Clay, silty, brown and grey, trace oxidation, firm, high plasticity

Comments The specific gravity of the soil was assumed to be 2.75.

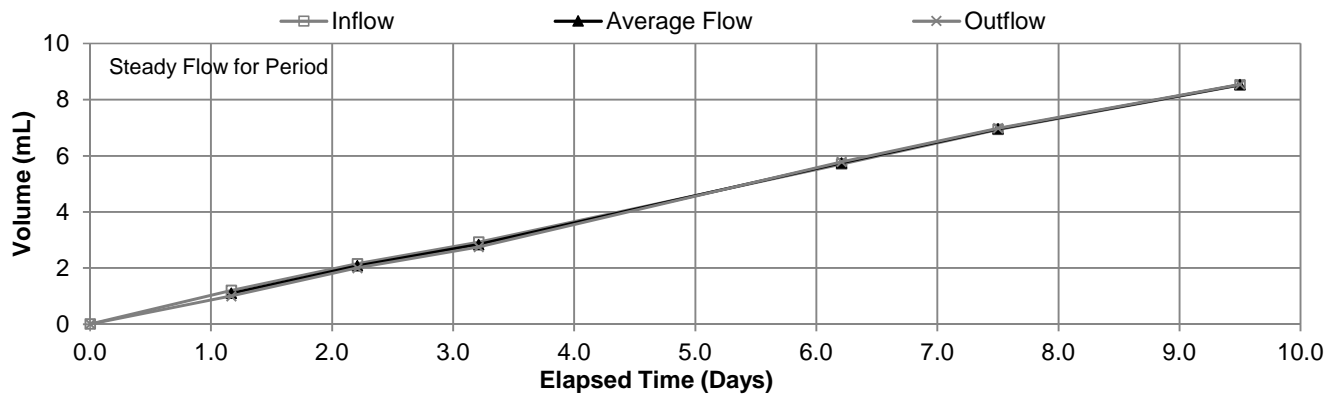
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 151.7 kPa
Influent Pressure 124.1 kPa
Effluent Pressure 110.3 kPa
Gradient 21.05

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.00	3.21	0.77	0.75	1.03	0.76	0.96	9.71E-11
3.00	6.21	2.78	3.03	0.92	2.91	0.95	1.22E-10
1.29	7.50	1.23	1.20	1.03	1.22	0.95	1.19E-10
2.00	9.50	1.59	1.56	1.02	1.58	0.95	9.94E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **1.09E-10 (1.09x10⁻⁸ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0841	0.0727	32.1	14.3	99.7	151.7	110.3
Final	0.0835	0.0727	32.2	14.4	101.8	151.7	110.3

Project No. 1000-027-02
Client Quantum Murray
Project Dauphin River First Nation
 Wastewater Lagoon Construction

Test Hole ST7
Trek Sample #
Depth (m) 1.54-2.16
Sample Date July 04, 2016
Test Date July 05, 2016 to July 22, 2016
Technician Paul Bevel

Specimen Details

Visual Classification Clay, silty, mottled brown and grey, firm, high plasticity
Comments The specific gravity of the soil was assumed to be 2.75.

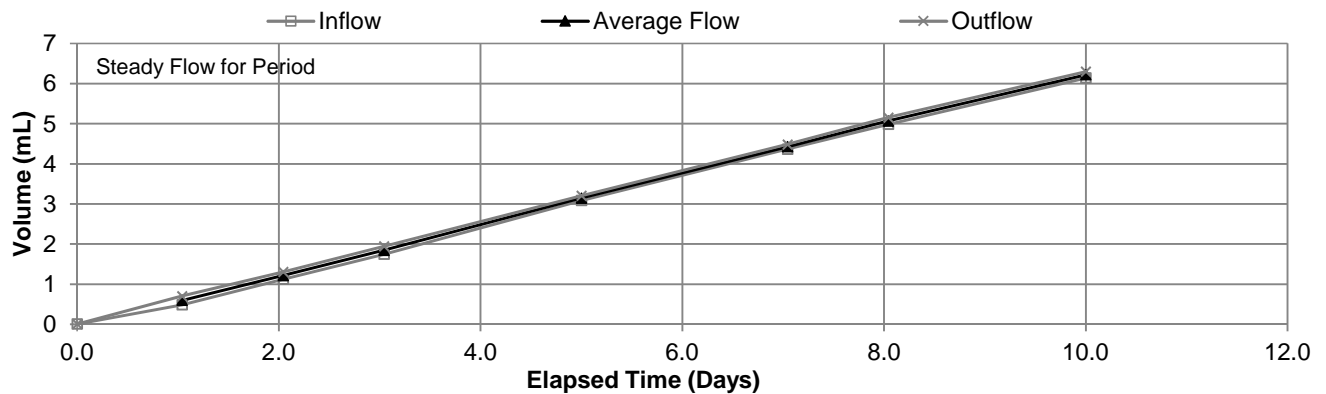
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 199.9 kPa
Influent Pressure 179.3 kPa
Effluent Pressure 160.6 kPa
Gradient 22.45

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.96	5.00	1.34	1.26	1.06	1.30	0.95	7.86E-11
2.04	7.04	1.28	1.28	1.00	1.28	0.95	7.42E-11
1.00	8.04	0.62	0.67	0.93	0.65	0.94	7.55E-11
1.96	10.00	1.16	1.15	1.01	1.16	0.96	7.07E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **7.47E-11 (7.47x10⁻⁹ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0783	0.0726	31.1	14.3	96.4	199.9	160.6
Final	0.0783	0.0727	33.2	14.2	101.3	199.9	160.6

October 14, 2016

File No. 1000-027-02

Mr. Brad Boyd
Quantum Murray
201 Portage Avenue - 18th Floor
Winnipeg MB
R3B 3K6

RE Dauphin River First Nation Wastewater Lagoon Construction – Lab Testing for Shelby Tube Sample

On September 15, 2016 Quantum Murray LP (QM) delivered Shelby tube samples to Trek Geotechnical Inc. (Trek) for testing. Hydraulic conductivity testing was requested for Shelby tube identified as ST9, Re-test Cell 1. The sample from the Shelby tube was extruded and tested using a flexible wall permeameter following ASTM D5080-10. The test report is attached and the calculated hydraulic conductivity value is as follows:

ST9 1.13×10^{-10} m/s (1.13×10^{-8} cm/s)

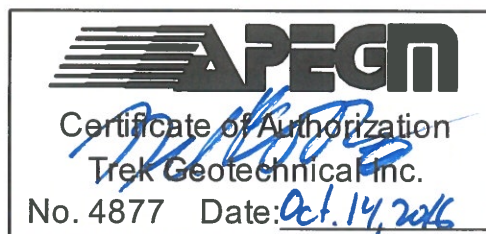
The test result presented is representative of the soil sample provided. The testing services undertaken by TREK constitutes testing services only and engineering evaluation or interpretation has not been undertaken, but is available upon request.

If you have any questions or require any additional information, please contact the undersigned.

TREK Geotechnical
Per:



Nelson Ferreira, M.Sc., P.Eng.
Geotechnical Engineer





Project No. 1000-027-02
Client Quantum Murray
Project Dauphin River First Nation
 Wastewater Lagoon Construction

Test Hole Retest Cell 1, ST9
Trek Sample # L539a
Depth (m) 2.8m - 3.3m
Sample Date Sept 13, 2016
Test Date Sept 19, 2016 to Oct 12, 2016
Technician Paul Bevel

Specimen Details

Visual Classification Clay, silty, brown, firm, high plasticity

Comments The specific gravity of the soil was assumed to be 2.75.

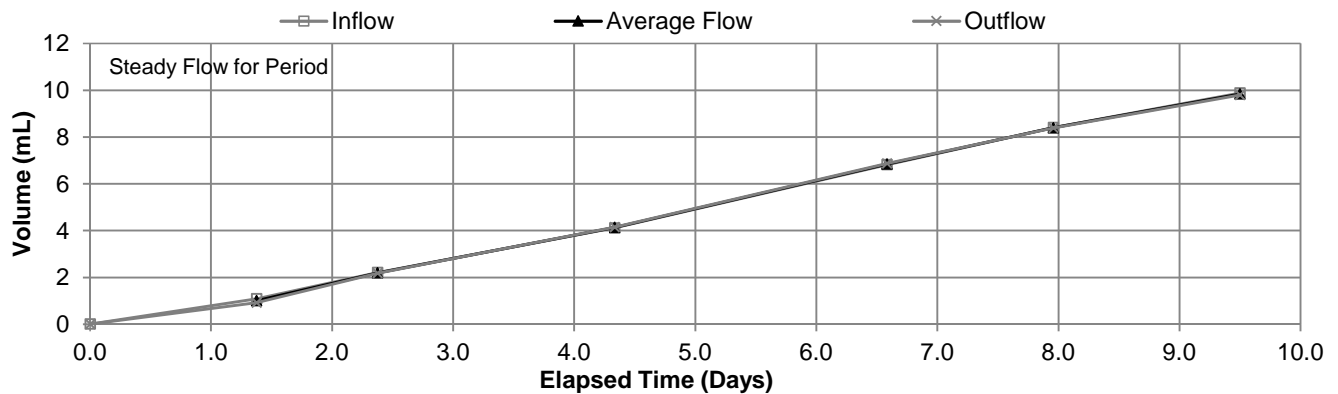
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 137.9 kPa
Influent Pressure 116.5 kPa
Effluent Pressure 98.6 kPa
Gradient 25.34

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.96	4.33	1.91	1.97	0.97	1.94	0.95	1.05E-10
2.25	6.58	2.70	2.72	0.99	2.71	0.95	1.28E-10
1.38	7.96	1.59	1.52	1.05	1.56	0.95	1.20E-10
1.54	9.50	1.48	1.41	1.05	1.45	0.94	9.81E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **1.13E-10** (1.13×10^{-8} cm/s)

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m^3)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0725	0.0722	25.3	15.7	96.3	137.9	98.6
Final	0.0721	0.0723	27.4	15.5	101.9	137.9	98.6



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December 01, 2016

File No. 1000-027-02

Mr. Brad Boyd
Quantum Murray
201 Portage Avenue - 18th Floor
Winnipeg MB
R3B 3K6

RE Dauphin River First Nation Wastewater Lagoon Construction – Lab Testing for Shelby Tube Samples

Brad Boyd from Quantum Murray LP (QM) requested that two Shelby tube samples be tested for hydraulic conductivity. The samples were identified as ST2 and ST12. A sample from each Shelby tube was extruded and tested using a flexible wall permeameter following ASTM D5080-10. The test report for each is attached and the calculated hydraulic conductivity values are as follows:

ST2 6.93×10^{-11} m/s (6.93×10^{-9} cm/s)
ST12 8.20×10^{-11} m/s (8.20×10^{-9} cm/s)

The test result presented is representative of the soil sample provided. The testing services undertaken by TREK constitutes testing services only and engineering evaluation or interpretation has not been undertaken, but is available upon request.

If you have any questions or require any additional information, please contact the undersigned.

TREK Geotechnical
Per:



Nelson Ferreira, Ph.D., P.Eng.
Geotechnical Engineer





Project No. 1000-027-02
Client Quantum Murray
Project Dauphin River First Nation
 Wastewater Lagoon Construction

Test Hole ST2
Trek Sample # N/A
Depth (m) 7.5'-9.5'
Sample Date Jul 04, 2016
Test Date Nov 04, 2016 to Nov 27, 2016
Technician Paul Bevel

Specimen Details

Visual Classification Clay, silty, brown, moist, firm, high plasticity

Comments The specific gravity of the soil was assumed to be 2.75.

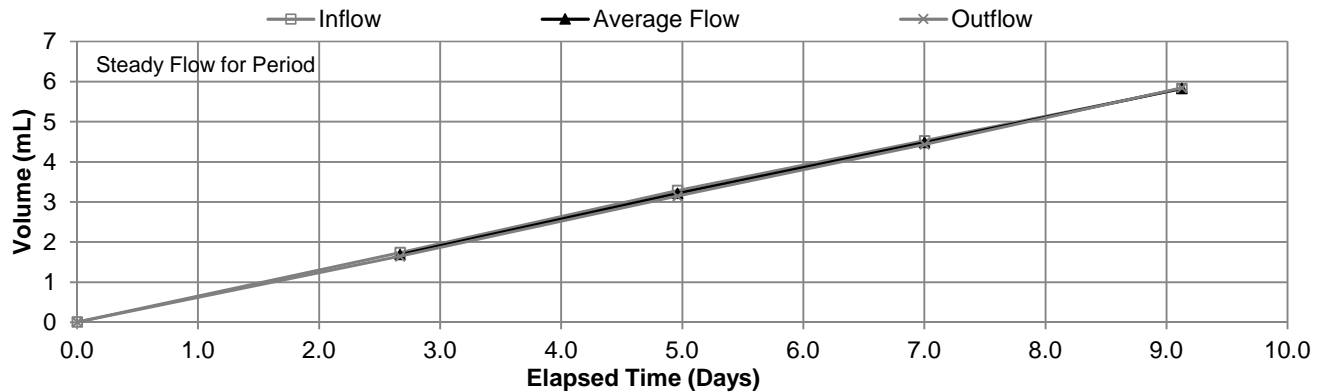
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 124.8 kPa
Influent Pressure 90.3 kPa
Effluent Pressure 73.8 kPa
Gradient 24.74

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
2.67	2.67	1.73	1.64	1.05	1.69	0.95	6.85E-11
2.29	4.96	1.55	1.50	1.03	1.53	0.96	7.30E-11
2.04	7.00	1.24	1.29	0.96	1.27	0.95	6.72E-11
2.13	9.13	1.30	1.41	0.92	1.36	0.94	6.83E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) 6.93E-11 (6.93x10⁻⁹ cm/s)

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0680	0.0715	30.1	14.7	99.1	124.8	73.8
Final	0.0682	0.0724	32.6	14.4	102.6	124.8	73.8



Project No. 1000-027-02
Client Quantum Murray
Project Dauphin River First Nation
 Wastewater Lagoon Construction

Test Hole ST12
Trek Sample # N/A
Depth (m) Unknown
Sample Date Aug 17, 2016
Test Date Oct 19, 2016 to Nov 14, 2016
Technician Paul Bevel

Specimen Details

Visual Classification Clay, silty, brown, firm, high plasticity

Comments The specific gravity of the soil was assumed to be 2.75.

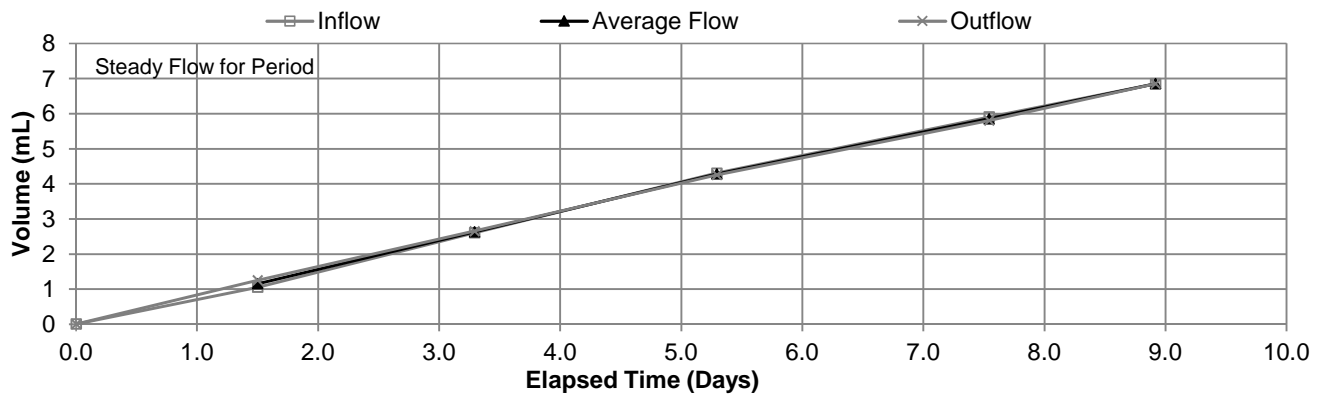
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 124.1 kPa
Influent Pressure 92.4 kPa
Effluent Pressure 73.1 kPa
Gradient 25.18

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.79	3.29	1.55	1.40	1.11	1.48	0.96	8.88E-11
2.00	5.29	1.70	1.60	1.06	1.65	0.95	8.79E-11
2.25	7.54	1.60	1.55	1.03	1.58	0.94	7.37E-11
1.38	8.92	0.95	1.05	0.90	1.00	0.95	7.75E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **8.20E-11 (8.20x10⁻⁹ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0781	0.0718	24.1	16.1	98.9	124.1	73.1
Final	0.0782	0.0724	25.5	15.9	101.0	124.1	73.1

September 05, 2017

File No. 1000-027-02

Mr. Brad Boyd
Quantum Murray
201 Portage Avenue - 18th Floor
Winnipeg MB
R3B 3K6

RE Dauphin River First Nation Wastewater Lagoon Construction – Lab Testing for Shelby Tube Samples

Brad Boyd from Quantum Murray LP (QM) requested that three Shelby tube samples be tested for hydraulic conductivity. The samples were identified as ST3, ST4 and ST5. A sample from each Shelby tube was extruded and tested using a flexible wall permeameter following ASTM D5080-16. The test report for each is attached and the calculated hydraulic conductivity values corrected to 20°C are as follows:

ST3 4.40×10^{-11} m/s (4.40×10^{-9} cm/s)
ST4 7.55×10^{-11} m/s (7.55×10^{-9} cm/s)
ST5 5.15×10^{-11} m/s (5.15×10^{-9} cm/s)

The test results presented are representative of the soil samples provided. The testing services undertaken by TREK constitutes testing services only and engineering evaluation or interpretation has not been undertaken, but is available upon request.

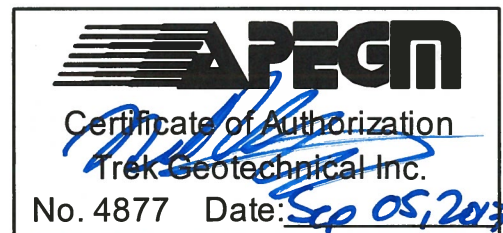
If you have any questions or require any additional information, please contact the undersigned.

TREK Geotechnical

Per:



Nelson Ferreira, Ph.D., P.Eng.
Geotechnical Engineer



Project No.	1000-027-02	Test Hole	-
Client	Quantum Murray	Sample #	ST-3
Project	Dauphin River First Nation Wastewater Lagoon Construction	Depth (m)	0.3 - 0.9
		Sample Date	August 03, 2017
		Test Date	August 07 to August 30, 2017
		Technician	Angela Fidler-Kliwer

Specimen Details

Visual Clay, silty, trace fine sand, trace silt inclusions < 10 mm, grey and brown, moist, firm, intermediate
Classification plasticity
Comments The specific gravity of the soil was assumed to be 2.75.

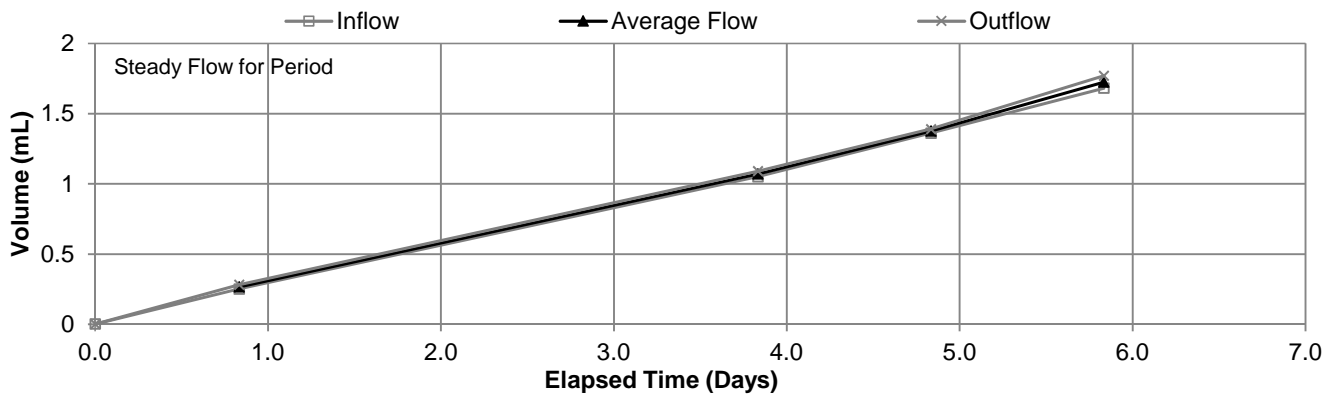
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 110.3 kPa
Influent Pressure 85.5 kPa
Effluent Pressure 70.0 kPa
Gradient 18.9

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
0.83	0.83	0.25	0.28	0.89	0.27	0.95	4.50E-11
3.00	3.83	0.80	0.81	0.99	0.81	0.97	3.86E-11
1.00	4.83	0.31	0.30	1.03	0.31	0.94	4.27E-11
1.00	5.83	0.32	0.38	0.84	0.35	0.96	4.96E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **4.40E-11 (4.40x10⁻⁹ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0826	0.0723	32.3	14.4	101.2	110.0	70.0
Final	0.0836	0.0724	33.0	14.3	102.2	110.0	70.0

Project No.	1000-027-02	Test Hole	-
Client	Quantum Murray	Sample #	ST-4
Project	Dauphin River First Nation Wastewater Lagoon Construction	Depth (m)	0.9 - 1.5
		Sample Date	August 03, 2017
		Test Date	August 07 to August 30, 2017
		Technician	Paul Bevel

Specimen Details

Visual Clay, silty, trace fine sand, trace silt inclusions < 5 mm, grey and brown, moist, firm, intermediate
Classification plasticity
Comments The specific gravity of the soil was assumed to be 2.75.

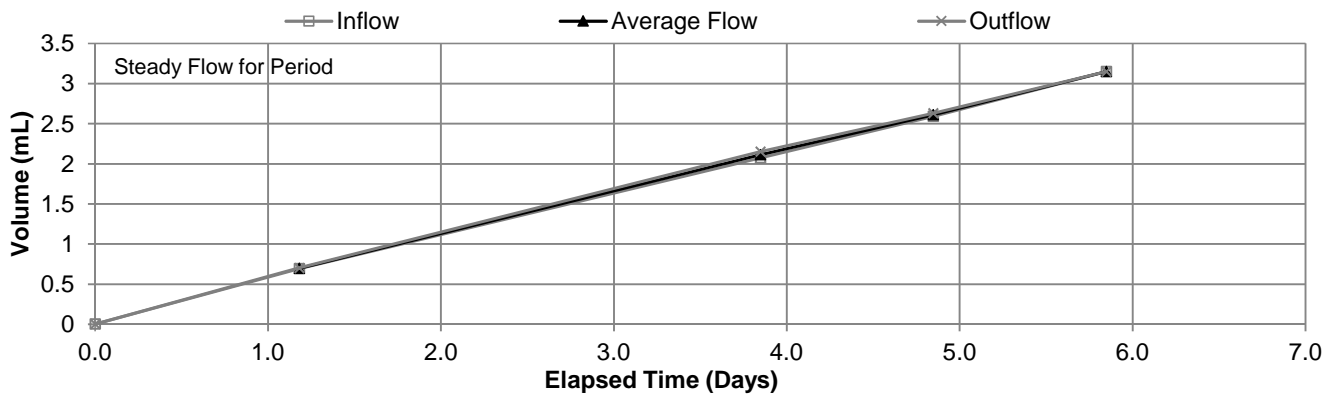
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 110.3 kPa
Influent Pressure 85.5 kPa
Effluent Pressure 70.0 kPa
Gradient 19.4

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.18	1.18	0.69	0.70	0.99	0.70	0.94	8.10E-11
2.67	3.85	1.38	1.45	0.95	1.42	0.97	7.51E-11
1.00	4.85	0.52	0.48	1.08	0.50	0.96	7.05E-11
1.00	5.85	0.56	0.52	1.08	0.54	0.96	7.54E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **7.55E-11 (7.55x10⁻⁹ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0808	0.0720	23.8	16.1	97.2	110.0	70.0
Final	0.0814	0.0721	26.0	15.8	101.3	110.0	70.0

Project No.	1000-027-02	Test Hole	-
Client	Quantum Murray	Sample #	ST-5
Project	Dauphin River First Nation Wastewater Lagoon Construction	Depth (m)	1.5 - 2.1
		Sample Date	August 03, 2017
		Test Date	August 11 to August 30, 2017
		Technician	Angela Fidler-Kliwer

Specimen Details

Visual Clay, silty, trace fine sand, trace silt inclusions < 15 mm, grey and brown, moist, firm, intermediate
Classification plasticity
Comments The specific gravity of the soil was assumed to be 2.75.

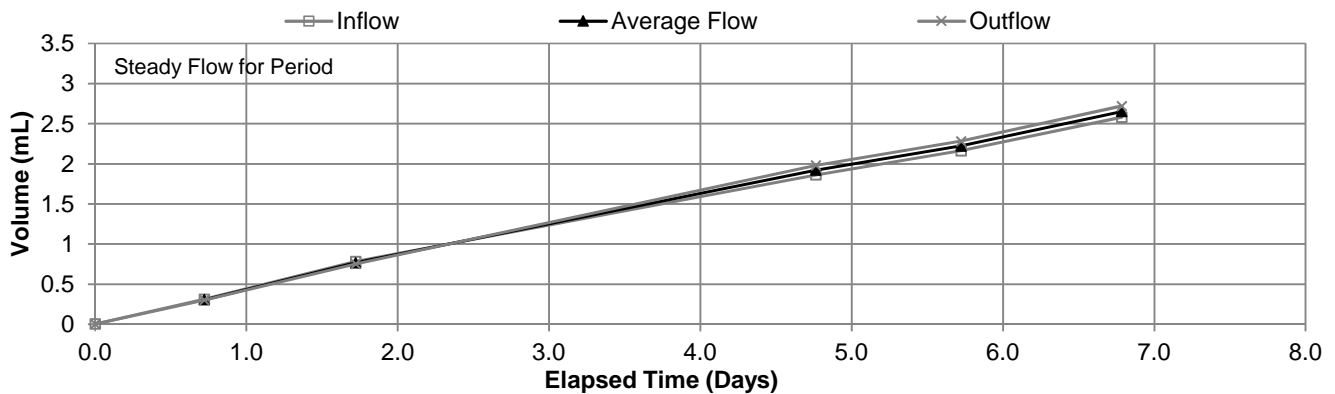
Atterberg Limits

Liquid Limit Not Requested
Plastic Limit Not Requested
Plasticity Index Not Requested

Test Details

Permeant Distilled, de-aired water
Method Constant Head
Cell Pressure 110.3 kPa
Influent Pressure 85.5 kPa
Effluent Pressure 70.0 kPa
Gradient 20.3

Permeation Graph



Steady Flow Permeation Data

Time Increment (Days)	Elapsed Time (Days)	Flow (Q)		Inflow / Outflow Ratio	Average Flow (mL)	Temperature Correction	Corrected Hydraulic Conductivity, k_{20} (m/s)
		Influent (mL)	Effluent (mL)				
1.00	1.72	0.47	0.45	1.04	0.46	0.94	6.02E-11
3.04	4.76	1.08	1.23	0.88	1.16	0.97	5.11E-11
0.96	5.72	0.30	0.30	1.00	0.30	0.94	4.10E-11
1.06	6.78	0.42	0.44	0.95	0.43	0.96	5.37E-11

Average Temperature Corrected Hydraulic Conductivity, k_{20} (m/s) **5.15E-11 (5.15x10⁻⁹ cm/s)**

Consolidation Data

	Average Height (m)	Average Diameter (m)	Moisture Content (%)	Dry Density (kN/m ³)	Degree of Saturation (%)	Cell Pressure	Back Pressure
Initial	0.0768	0.0723	30.1	14.5	96.8	110.0	70.0
Final	0.0779	0.0723	33.7	14.1	101.5	110.0	70.0