

COMPANY NAME/LOGO				PT ID No. PT- <ID> Sheet <#> of 2	
Prepared for: <div style="text-align: center;">AGENCY NAME / LOGO </div>			PROJECT: <contract area or project description> LOCATION / BOROUGH : <borough>		
INSPECTOR: <name> CONTRACTOR: <name> P.E./REP.: <name>		DRILLER: <name> HELPER: <name>		Start Date: <date> Start Time: <time> Weather: <weather and ambient temperature>	
Depth of PT: <depth> ft Rig Type: <type>		Drill Bit Type: <type> Casing Internal Diameter: 4 in Casing Length: <length> in		Weight of Hammer for casing: 140 lbs Type of Hammer: <type>	
<div style="display: flex; justify-content: space-between;"> <div> <p>General Formula:</p> <p>ASTM D-6391 – 11</p> <p>PERMEABILITY COEFFICIENT (Km) FORMULA:</p> <p>where:</p> </div> <div> $K_m = \pi R_t \times \frac{\left[D \left\{ \ln \left(\frac{h_1}{h_2} \right) \right\} \right]}{11 \times (t_2 - t_1)}$ $R_t = 2.2902(0.9842^T) / T^{0.1702}$ </div> <div> <p>Formula for 4" internal diameter casing (in/hr):</p> $K_m = 1.142 R_t \times \frac{\left[\ln \left(\frac{h_1}{h_2} \right) \right]}{(t_2 - t_1)}$ </div> </div>					
PT-<ID> @ <depth> ft					
TEST 1			TEST 2		
Water temperature (°C), T: Rt= -			Water temperature (°C), T: Rt= -		
FIELD DATA		CALCULATED DATA			
Time (min)	Depth (in)	Height (in)	Ln (H/Ho)	(t ₁ -t ₂)	*Kv (in/hr)
1		-	-	0.017	-
2		-	-	0.017	-
3		-	-	0.017	-
4		-	-	0.017	-
5		-	-	0.017	-
10		-	-	0.083	-
15		-	-	0.083	-

PT-<ID> @ <depth> ft

Test 1

Test 2

TEST 1 FINAL RESULTS		TEST 2 FINAL RESULTS	
Time Weighted Average Permeability Coefficient	K _m = 0.0000 in/hr	Time Weighted Average Permeability Coefficient	K _m = 0.0000 in/hr

AVERAGE PT-<ID> @ <depth> ft	
Time Weighted Average Permeability Coefficient	K _m = 0.0000 in/hr

Coordinates:	
Longitude:	<longitude>
Latitude:	<latitude>

Inspectors Remarks:

DEFINITION OF VARIABLES

*K_m= Mean permeability

T = Temperature of permeant (water), in °C

Ln = Natural Logarithmic

t₁ = Time at the start of the test in the same units selected for Km

R_t = Ratio of viscosity of water at test temperature to the viscosity of water at 20°C

t₂= Time at the end of the test in the units selected for Km

h₁= Height of the water above the bottom of the casing at the start of the test in the same units selected for Km

Km

h₂= Height of the water above the bottom of the casing at the end of the test in the same units selected for Km

Km

COMPANY NAME/LOGO				PT ID No. PT- <ID> Sheet <#> of 2	
Prepared for: <div style="text-align: center; margin-top: 10px;">AGENCY NAME / LOGO </div>			PROJECT: <contract area or project description> LOCATION / BOROUGH : <borough>		
INSPECTOR: <name>		DRILLER: <name>		Start Date: <date>	
CONTRACTOR: <name>		HELPER: <name>		Start Time: <time>	
P.E./REP.: <name>		Weather: <weather and ambient temperature>			
Depth of PT: <depth> ft		Drill Bit Type: <type>		Weight of Hammer for casing: 140 lbs	
Rig Type: <type>		Casing Internal Diameter: 4 in		Type of Hammer: <type>	
		Casing Length: <length> in			
General Formula: Formula for 4" internal diameter casing (in/hr): <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> ASTM D-6391 – 11 PERMEABILITY COEFFICIENT (Km) FORMULA: where: </div> <div style="text-align: center;"> $K_m = \pi R_t \times \frac{\left[D \left\{ \ln \left(\frac{h_1}{h_2} \right) \right\} \right]}{11 \times (t_2 - t_1)}$ $R_t = 2.2902(0.9842^T) / T^{0.1702}$ </div> <div style="text-align: center;"> $K_m = 1.142 R_t \times \frac{\left[\ln \left(\frac{h_1}{h_2} \right) \right]}{(t_2 - t_1)}$ </div> </div>					
PT-<ID> @ <depth> ft					
TEST 1			TEST 2		
Water temperature (°C), T: Rt= -			Water temperature (°C), T: Rt= -		
FIELD DATA		CALCULATED DATA			
Time (min)	Depth (in)	Height (in)	Ln (H/Ho)	(t ₁ -t ₂)	*Kv (in/hr)
1		-	-	0.017	-
2		-	-	0.017	-
3		-	-	0.017	-
4		-	-	0.017	-
5		-	-	0.017	-
10		-	-	0.083	-
15		-	-	0.083	-

FIELD DATA		CALCULATED DATA			
Time (min)	Depth (in)	Height (in)	Ln (H/Ho)	(t ₁ -t ₂)	*Kv (in/hr)
1		-	-	0.017	-
2		-	-	0.017	-
3		-	-	0.017	-
4		-	-	0.017	-
5		-	-	0.017	-
10		-	-	0.083	-
15		-	-	0.083	-

PT-<ID> @ <depth> ft

- - - - - Test 1
- - - - - Test 2

TEST 1 FINAL RESULTS		TEST 2 FINAL RESULTS	
Time Weighted Average Permeability Coefficient	K _m = in/hr	Time Weighted Average Permeability Coefficient	K _m = in/hr

AVERAGE PT-<ID> @ <depth> ft	
Time Weighted Average Permeability Coefficient	K _m = in/hr

Coordinates:	
Longitude:	<longitude>
Latitude:	<latitude>

Inspectors Remarks:

<Insert reason for PT termination here>

DEFINITION OF VARIABLES

 *K_m= Mean permeability

T = Temperature of permeant (water), in °C

Ln = Natural Logarithmic

 t₁ = Time at the start of the test in the same units selected for Km

 R_t = Ratio of viscosity of water at test temperature to the viscosity of water at 20°C

 t₂= Time at the end of the test in the units selected for Km

 h₁= Height of the water above the bottom of the casing at the start of the test in the same units selected for

Km

 h₂= Height of the water above the bottom of the casing at the end of the test in the same units selected for

Km