

**Project Name:** Supplemental Phase II / III ESA Test Hole ID: **MW19-21**

**Project Number:** [REDACTED]

**Site Location:** Carmacks Highway Maintenance Yard

**Coordinates**

**Easting:** 433265.359

**Northing:** 6885049.236

**Datum:** NAD83 UTM Zone 08N

**Drilling Details**

Drill Contractor: [REDACTED]  
 Drill Date: August 8, 2019  
 Drill Method: Sonic  
 Maximum Drilled Depth (mbgs): 10.67  
 Drillhole Diameter (mm): 152

Lithologic Description		Soil Sampling			Headspace Analysis	Well Construction Details					
Depth (ftbgs)	Symbol	Depth (ftbgs)	Sample Type	% Recovery	Sample ID	Sample Analyzed (Y,N)	Vapour Readings Instrument: MiniRae Units: ppm	Elevation (masl)	MW19-21S	MW19-21D	Comments
-1		-3						522			Monument
0	TOPSOIL: brown, organic, some rootlets, some fine sand	0						521			Concrete
1	SILTY SAND: brown, fine sand, no gravel, dense, moist, no odour	2	MW19-21-01			N	0.8				
2	SAND: brown, fine sand, minor silt, no gravel, dense, wet, no odour	6	MW19-21-02	100		N	0				
3	SANDY GRAVEL: small to large gravel, coarse sand, trace silt, well graded, loose, wet, no odour	10	MW19-21-03			N	0				
4		12	MW19-21-04/05			Y/Y	0				
5	ROCK	15	MW19-21-06	50		N	0				
6	No Recovery	21	MW19-21-07			N	0				
7	SANDY GRAVEL: small to medium gravel, coarse sand, trace silt, loose, wet, no odour	25	MW19-21-08	100		N	0				
8	SAND AND GRAVEL: medium to coarse sand, large gravel, some cobbles, trace silt, wet, loose										
	SAND: grey, fine to medium sand, no gravel, no silt, medium dense, wet, no odour										
		28						513			Bentonite Chips



**Report Date:** September 2019  
**Logged by:** [REDACTED]  
**Approved by:** [REDACTED]  
**Client:** Yukon Government

**MW19-21S**  
 Top of Casing Elevation (masl): 522.28  
 Ground Elevation (masl): 521.45  
 Screen Interval (mbgs): 1.22 - 4.27  
 Depth to Bottom (mbTOC): 5.23  
 Depth to Water (mbTOC): 3.434  
 Water Level Date: August 13, 2019  
 Casing Diameter (in.): 2  
 Screen Slot Size: 10  
 Casing Material: PVC

**MW19-21D**  
 Top of Casing Elevation (masl): 522.47  
 Ground Elevation (masl): 521.47  
 Screen Interval (mbgs): 8.53 - 10.06  
 Depth to Bottom (mbTOC): 10.725  
 Depth to Water (mbTOC): 3.612  
 Water Level Date: August 13, 2019  
 Casing Diameter (in.): 2  
 Screen Slot Size: 10  
 Casing Material: PVC

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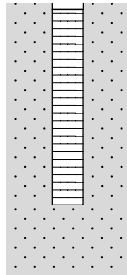
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**Coordinates**

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 Drill Date: **August 8, 2019**  
 Drill Method: **Sonic**  
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 Drillhole Diameter (mm): **152**

Lithologic Description		Soil Sampling		Headspace Analysis		Well Construction Details	
Depth (mbgs) Symbol		Depth (ftbgs) Sample Type % Recovery	Sample ID	Sample Analyzed (Y,N)	Vapour Readings Instrument: MiniRae Units: ppm	Elevation (masl)	MW19-21S MW19-21D Comments
9	@ 9.1 mbgs, minor silt	28	MW19-21-09	N	0.4	513	 <p>10/20 Filter Sand PVC Screen</p>
10	SANDY SILT: grey, very fine sand, dense, wet, no odour	29-31				512	
		32	MW19-21-10	N	0	511	
	@ 10.7 mbgs, end of borehole	33-35					



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 Screen Slot Size: **10**  
 Casing Material: **PVC**

**MW19-21D**  
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 Depth to Bottom (mbTOC): **10.725**  
 Depth to Water (mbTOC): **3.612**  
 Water Level Date: **August 13, 2019**  
 Casing Diameter (in.): **2**  
 Screen Slot Size: **10**  
 Casing Material: **PVC**