

RECORD OF BOREHOLE MI-FTF-001

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 12, 2011
 COMPLETED : June 12, 2011

Project No. 19-1605-126

DRILLER: BOART LONGYEAR
 N 7 976 119 E 503 609

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		11.17								
1	Sonic	SAND , coarse grained, some gravel, some organics, brown, moist, not frozen			1	RUN	100	Grain Size Analysis: Gr 30%/Sa 67%/ Si & Cl 4%				
2		medium to coarse grained permafrost starts at 1.37m			2	RUN	10					
3					3	RUN	80					
4		coarse grained			4	RUN	100	Grain Size Analysis: Gr 38%/Sa 55%/ Si & Cl 8%				
5		medium to coarse grained, wet			5	RUN	80					
6					6	RUN	100					
7		fine to coarse grained, brown to black			7	RUN	100					
8		sandy silt layer			8	RUN	100					
9		trace to some gravel										
10		occasional sandy silt layers										
11		trace silt										
12		END OF BOREHOLE AT -0.72m.		-0.72				Grain Size Analysis: Gr 1%/ Sa 93%/ Si & Cl 6%				
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-002

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 13, 2011

DRILLER: BOART LONGYEAR
 N 7 976 119 E 503 631

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT 	SHEAR STRENGTH: Cu, KPa nat V - ● Q - X rem V - ● Cpen ▲				ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION	
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	WATER CONTENT, PERCENT 					
										wp	w	wl			
		GROUND SURFACE		10.77											
1	Sonic	SAND , medium grained, trace gravel, trace organics, brown, moist, not frozen			1	RUN	100	Grain Size Analysis: Gr 35%/Sa 62%/ Si & Cl 3%							
		fine to medium grained, trace to some gravel			2	RUN	100								
2															
3				coarse grained, some gravel to gravelly, frozen		3	RUN	100	Grain Size Analysis: Gr 8%/ Sa 73%/Si & Cl 19%						
4						4	RUN	0							
5															
6				fine to medium grained, trace gravel, trace silt		5	RUN	100	Grain Size Analysis: Gr 8%/ Sa 82%/Si & Cl 11%						
7															
8				6	RUN										
9		occasional silt lenses		7	RUN		Grain Size Analysis: Gr 1%/ Sa 74%/Si & Cl 26%								
10		END OF BOREHOLE AT 0.71m. BOREHOLE BACKFILLED WITH SAND TO SURFACE.		0.71											
11															
12		Thermister reading: July 3, 2011 -12.5°C													
13															
14															
15															
16															
17															
18															
19															

PRELIMINARY

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-003

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 12, 2011
 COMPLETED : June 12, 2011

DRILLER: BOART LONGYEAR
 N 7 976 137 E 503 618

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		11.51								
1	Sonic	SAND, medium to coarse grained, trace gravel, occasional cobbles, brown, moist, not frozen			1	RUN		Grain Size Analysis: Gr 42%/Sa 56%/ Si & Cl 2%				
		coarse grained, some gravel										
2		frozen			2	RUN	100	Grain Size Analysis: Gr 41%/Sa 53%/ Si & Cl 6%				
3		medium to coarse grained			3	RUN	100					
4		coarse grained			4	RUN		Grain Size Analysis: Gr 28%/Sa 69%/ Si & Cl 3%				
5												
6		trace gravel			5	RUN	100					
7								Grain Size Analysis: Gr 4%/ Sa 82%/Si & Cl 14%				
8					6	RUN	60					
9												
10					7	RUN	70					
10		END OF BOREHOLE AT 1.45m.		1.45				Grain Size Analysis: Gr 37%/Sa 60%/ Si & Cl 3%				
11												
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-004

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 13, 2011

DRILLER: BOART LONGYEAR
 N 7 976 179 E 503 605

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE			SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT </
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PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-005

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 14, 2011

DRILLER: BOART LONGYEAR
 N 7 976 182 E 503 635

Project No. 19-1605-126

SHEET 1 OF 3

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE			SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT 50100150200250	SHEAR STRENGTH: Cu, KPa nat V - ● rem V - ● Q - ● Cpen - ● 4080120160				ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m	RECOVERY %		WATER CONTENT, PERCENT wp wl 10203040					
		GROUND SURFACE		10.26											
1		SAND, medium grained, some gravel, brown, moist, not frozen coarse grained, frozen		3.55	1	RUN	100	Grain Size Analysis: Gr 27%/Sa 65%/ Si & Cl 8% Grain Size Analysis: Gr 18%/Sa 69%/Si & Cl 13%							
2	2				RUN	100									
3	3				RUN	100									
4	4				RUN	100									
5	5				RUN	100									
6	6				RUN	100									
7		SAND, gravelly, coarse grained, brown, frozen medium to coarse grained		-7.42	7	RUN	100	Grain Size Analysis: Gr 0%/ Sa 95%/ Si & Cl 4% Grain Size Analysis: Gr 16%/Sa 72%/Si & Cl 12%							
8	8				RUN										
9	9				RUN	0									
10	10				RUN	80									
11	11				RUN	100									
12	12				RUN	80									
13		SAND, medium to coarse grained, trace gravel, trace silt, brown, frozen		-5.89	13	RUN	100	Grain Size Analysis: Gr 14%/Sa 72%/Si & Cl 14%							
14	14				RUN										
15	15				RUN										
16		SAND, gravelly, trace silt, brown, frozen		-4.37	16	RUN	80								
17	17				RUN										
18		SAND, fine to medium grained, some silt, trace gravel, brown, frozen		-2.85	18	RUN	100								
19	19				RUN										
		fine to coarse grained													

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-005

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 14, 2011

Project No. 19-1605-126

DRILLER: BOART LONGYEAR
 N 7 976 182 E 503 635

SHEET 2 OF 3
 DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT 50100150200250	SHEAR STRENGTH: Cu, KPa nat V - Q - rem V - Cpen				ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION	
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	WATER CONTENT, PERCENT wp w wl					
21	Sonic				15	RUN		100							
22					16	RUN		0							
				-11.99											
23		SAND and GRAVEL, medium to coarse grained, trace silt, frozen			17	RUN		100							
24		SILT and SAND, frozen			-13.51										
25					18	RUN		100		Grain Size Analysis: Gr 28%/Sa 56%/Si & Cl 16%					
26					19	RUN									
				-16.56											
27		SAND, fine to medium grained, trace gravel, trace silt, brown, frozen			20	RUN		100		Grain Size Analysis: Gr 0%/ Sa 86%/Si & Cl 14%					
28															
29				21	RUN		100								
30	fine grained														
31				22	RUN		100								
32	fine to medium grained														
33	fine grained			23	RUN		100								
34				24	RUN		100	Grain Size Analysis: Gr 0%/ Sa 94%/ Si & Cl 6%							
35				25	RUN			Grain Size Analysis: Gr 0%/ Sa 90%/Si & Cl 10%							
36															
37				26	RUN		0								
38															
39				27	RUN		10	Grain Size Analysis: Gr 0%/ Sa 88%/Si & Cl 12%							

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-005

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 14, 2011

DRILLER: BOART LONGYEAR
 N 7 976 182 E 503 635

Project No. 19-1605-126

SHEET 3 OF 3

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	nat V - rem V -		
41												
42		END OF BOREHOLE AT -31.80m. BOREHOLE BACKFILLED WITH SAND TO SURFACE.		-31.80	28	RUN	20					
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-006

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 13, 2011
 COMPLETED : June 13, 2011

DRILLER: BOART LONGYEAR
 N 7 976 203 E 503 619

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		10.23								
1	Sonic	SAND, gravelly, fine to medium grained, trace silt, brown, moist, not frozen			1	RUN	100					
2		wet, frozen			2	RUN	60					
3		SAND, fine to medium grained, trace gravel, trace silt, brown, wet, frozen		7.49	3	RUN	100	Grain Size Analysis: Gr 23%/Sa 70%/ Si & Cl 7%				
4					4	RUN	100					
5												
6		SAND, silty, fine to medium grained, trace to some gravel, brown, wet, frozen		4.44	5	RUN	100	Grain Size Analysis: Gr 51%/Sa 42%/ Si & Cl 6%				
7												
8		SAND, fine to coarse grained, some gravel, trace to some silt, brown, saturated, frozen		2.91	6	RUN	100					
9												
10					7	RUN	100					
11					8	RUN	100					
12		END OF BOREHOLE AT -1.66m.		-1.66								
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-007

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 15, 2011
 COMPLETED : June 15, 2011

DRILLER: BOART LONGYEAR
 N 7 976 178 E 503 650

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		9.89								
1	Sonic	SAND, gravelly, fine to coarse grained, trace silt, trace organics, trace rootlets, dark brown to brown, moist, not frozen		8.67	1	RUN	100	Grain Size Analysis: Gr 6%/ Sa 88%/ Si & Cl 6%				
2		SAND, silty, fine to coarse grained, some gravel, brown, frozen		7.15	2	RUN						
3		SAND, fine to medium grained, some gravel, trace silt, brown, frozen		5.62	3	RUN	40					
4		SAND, gravelly, fine to coarse grained, trace silt, brown, frozen		5.62	4	RUN		Grain Size Analysis: Gr 27%/Sa 67%/ Si & Cl 6%				
5		medium to coarse grained			5	RUN	100					
6					6	RUN	100					
7		SAND, fine to medium grained, trace gravel, brown, frozen		2.57	7	RUN	100	Grain Size Analysis: Gr 0%/ Sa 91%/ Si & Cl 9%				
8		trace silt										
9												
10												
11		END OF BOREHOLE AT -0.78m.		-0.78								
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-008

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 15, 2011
 COMPLETED : June 15, 2011

DRILLER: BOART LONGYEAR
 N 7 976 177 E 503 679

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		10.19								
1	Sonic	SAND and GRAVEL, medium to coarse grained, brown, wet, not frozen		8.97	1	RUN	75	Grain Size Analysis: Gr 10%/Sa 54%/Si & Cl 36%				
2		SAND, silty, fine to medium grained, trace to some gravel, brown, frozen			2	RUN	80					
3		fine to coarse grained			3	RUN	80					
4				5.92								
5		SAND, medium to coarse grained, trace silt, trace gravel, brown, frozen		4.40	4	RUN		Grain Size Analysis: Gr 4%/ Sa 93%/ Si & Cl 3%				
6		SILT, sandy, fine grained, trace gravel, brown, frozen			5	RUN	100					
7				2.87								
8		SAND, fine to medium grained, trace silt, trace gravel, brown, frozen			6	RUN	100					
9		medium to coarse grained										
10					7	RUN	100	Grain Size Analysis: Gr 12%/Sa 80%/ Si & Cl 7%				
11		END OF BOREHOLE AT -0.48m.		-0.48								
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-009

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 15, 2011
 COMPLETED : June 15, 2011

DRILLER: BOART LONGYEAR
 N 7 976 201 E 503 664

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE			SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT
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PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-010

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 16, 2011
 COMPLETED : June 16, 2011

DRILLER: BOART LONGYEAR
 N 7 976 221 E 503 603

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa				ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION	
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	WATER CONTENT, PERCENT					
										nat V -	rem V -	Q -			Cpen
		GROUND SURFACE		10.39											
1	Sonic	SAND, gravelly, fine to coarse grained, trace silt, brown, moist, not frozen		9.17	1	RUN	75	Grain Size Analysis: Gr 36%/Sa 58%/ Si & Cl 6%							
2		SAND, fine to coarse grained, some gravel, trace silt, brown, frozen			2	RUN	100								
3		fine to medium grained, trace gravel			3	RUN	60								
4				6.12											
5		SAND and GRAVEL, medium to coarse grained, trace silt, brown, frozen			4	RUN	80	Grain Size Analysis: Gr 0%/ Sa 98%/ Si & Cl 2%							
6		SAND, fine to medium grained, some silt, trace gravel, brown, frozen			5	RUN	80								
7				3.07											
8		SAND, silty, fine to medium grained, trace gravel, brown, frozen			6	RUN	100	Grain Size Analysis: Gr 0%/ Sa 86%/Si & Cl 14%							
9	SAND, gravelly, medium to coarse grained, frozen		1.55			Grain Size Analysis: Gr 0%/ Sa 87%/Si & Cl 13%									
10					7	RUN	100								
11		END OF BOREHOLE AT -0.28m.		-0.28											
12															
13															
14															
15															
16															
17															
18															
19															

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-011

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 15, 2011
 COMPLETED : June 15, 2011

DRILLER: BOART LONGYEAR
 N 7 976 224 E 503 632

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	40		
		GROUND SURFACE		9.83								
1	Sonic	SAND, gravelly, medium to coarse grained, trace organics, brown, moist, not frozen		8.92	1	RUN	100					
2		SAND, fine to medium grained, some gravel, brown, moist, not frozen		2	RUN	80						
3		SAND and GRAVEL, medium to coarse grained, brown, frozen		7.39	3	RUN	100					
4		SAND, gravelly, medium to coarse grained, brown, frozen		5.87	4	RUN	100					
5		SAND, silty, fine to medium grained, trace gravel, frozen		4.34	5	RUN	100					
6				2.82	6	RUN	100					
7		SAND, medium to coarse grained, trace gravel, brown, frozen			7	RUN						
8												
9												
10												
11		END OF BOREHOLE AT -0.53m.		-0.53				PRELIMINARY				
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-012

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 17, 2011
 COMPLETED : June 17, 2011

DRILLER: BOART LONGYEAR
 N 7 976 251 E 503 619

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION	
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	nat V - ● rem V - ●			Q - ● Cpen - ▲
		GROUND SURFACE		9.72									
1	Sonic	SAND, gravelly, fine to coarse grained, red/brown, saturated, not frozen			1	RUN	100	Grain Size Analysis: Gr 27%/Sa 61%/Si & Cl 11%					
2		medium to coarse grained			2	RUN	40						
3		SAND, silty, fine to medium grained, trace gravel, red/brown, saturated		7.28					Grain Size Analysis: Gr 27%/Sa 54%/Si & Cl 18%				
4					3	RUN	75						
5		SAND, gravelly, coarse grained, red/brown, saturated		5.76					Grain Size Analysis: Gr 24%/Sa 71%/ Si & Cl 6%				
6					4	RUN	75						
7		SAND, silty, coarse grained, trace gravel, red/brown, saturated		4.23					Grain Size Analysis: Gr 0%/ Sa 88%/Si & Cl 12%				
8	fine grained				5	RUN	100						
9		fine to medium grained											
10		END OF BOREHOLE AT 0.27m.		0.27				Grain Size Analysis: Gr 0%/ Sa 90%/Si & Cl 10%					
11													
12													
13													
14													
15													
16													
17													
18													
19													

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-013

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 15, 2011
 COMPLETED : June 15, 2011

DRILLER: BOART LONGYEAR
 N 7 976 225 E 503 653

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		9.76								
1	Sonic	SAND , medium to coarse grained, some gravel, brown, moist			1	RUN	100	Grain Size Analysis: Gr 51%/Sa 45%/ Si & Cl 4%				
		frozen										
2		becoming gravelly			2	RUN	100	Grain Size Analysis: Gr 25%/Sa 57%/Si & Cl 18%				
3		fine to coarse grained, some gravel			3	RUN	100					
4		fine to medium grained, trace gravel			4	RUN	100					
5		fine grained						Grain Size Analysis: Gr 0%/ Sa 98%/ Si & Cl 2%				
6					5	RUN	100					
7		fine to medium grained, some gravel						Grain Size Analysis: Gr 0%/ Sa 97%/ Si & Cl 3%				
8					6	RUN						
9		medium grained										
10					7	RUN						
10		END OF BOREHOLE AT -0.30m. BOREHOLE BACKFILLED WITH SAND TO SURFACE.		-0.30				Grain Size Analysis: Gr 0%/ Sa 90%/Si & Cl 10%				
11												
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-014

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 17, 2011
 COMPLETED : June 17, 2011

DRILLER: BOART LONGYEAR
 N 7 976 224 E 503 677

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT	SHEAR STRENGTH: Cu, KPa		ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		nat V - rem V -	Q - Cpen		
		GROUND SURFACE		9.55								
1	Sonic	SAND, gravelly, fine to coarse grained, red/brown, saturated, not frozen		8.64	1	RUN	83	Grain Size Analysis: Gr 37%/Sa 52%/Si & Cl 10%				
2		SAND, silty, fine to medium grained, dark brown, saturated			2	RUN	70					
3		red/brown			3	RUN						
4		medium to coarse grained, brown			4	RUN						
5								Grain Size Analysis: Gr 3%/ Sa 85%/Si & Cl 12%				
6		fine grained, red/brown			5	RUN						
7				2.54								
8		SAND, gravelly, fine to coarse grained, occasional cobble piece, red/brown, saturated		1.32	6	RUN	70	Grain Size Analysis: Gr 20%/Sa 63%/Si & Cl 17%				
9		SAND, silty, fine to medium grained, trace gravel, red/brown, saturated			7	RUN	100					
10		END OF BOREHOLE AT -0.20m.		-0.20				Grain Size Analysis: Gr 0%/ Sa 90%/ Si & Cl 6%				
11												
12												
13												
14												
15												
16												
17												
18												
19												

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :



RECORD OF BOREHOLE MI-FTF-015

PROJECT : Mary River Project
 LOCATION : Milne Inlet - Tank Area
 STARTED : June 17, 2011
 COMPLETED : June 17, 2011

DRILLER: BOART LONGYEAR
 N 7 976 246 E 503 666

Project No. 19-1605-126

SHEET 1 OF 1

DATUM: CGVD28

DEPTH SCALE (metres)	BORING METHOD	SOIL PROFILE		SAMPLES				COMMENTS DYNAMIC CONE PENETRATION RESISTANCE PLOT 	SHEAR STRENGTH: Cu, KPa nat V - ● rem V - ● Q - X Cpen ▲				ADDITIONAL LAB. TESTING	PIEZOMETER OR STANDPIPE INSTALLATION	
		DESCRIPTION	STRATA PLOT	ELEV. (m)	NUMBER	TYPE	BLOWS/0.3m		RECOVERY %	WATER CONTENT, PERCENT					
										wp	w	wl			
		GROUND SURFACE		9.55											
1 <															

PRELIMINARY

GROUNDWATER ELEVATIONS

▽ SHALLOW/SINGLE INSTALLATION
 WATER LEVEL (date)

▼ DEEP/DUAL INSTALLATION
 WATER LEVEL (date)

LOGGED : Thurber
 CHECKED :

