



NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-016

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 1 OF 5

POSITION : E: 527592.79, N: 5252309.93 (MGA2020-55)	SURFACE ELEVATION : 2.97 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 30/4/2024	DATE COMPLETED : 1/5/2024
DATE LOGGED : 2/5/2024	LOGGED BY : MIR	CHECKED BY : JRG

DRILLING				MATERIAL			
PROGRESS	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY	RELATIVE DENSITY	STRUCTURE & Other Observations
DRILLING & CASING	RL (m AHD)	GROUP SYMBOL	Soil Type, Colour, Plasticity or Particle Characteristic Secondary and Minor Components				
↑	0.0		FILL CONCRETE.				FILL Acid Sulfate Sampling every 0.5m to bedrock
	0.13m		FILL Gravelly SAND: fine to coarse grained, pale brown, gravel is fine to medium grained, sub-angular to angular; trace coarse grained gravel; trace cobbles.				
	1.0		FILL Clayey Gravelly SAND: fine to coarse grained, dark grey mottled orange-brown, gravel is fine to medium grained, sub-angular to angular; trace brick fragments.				D
	1.70m		FILL Clayey Gravelly SAND: fine to coarse grained, dark grey mottled orange-brown, gravel is fine to medium grained, sub-angular to angular; trace brick fragments.				
	2.0		2.70-3.00m: red-brown and grey, increasing brick fragments, metal fragment				3.00-3.60: PP=55kPa
	3.00m		FILL Gravelly CLAY: medium plasticity, dark brown mottled green, gravel is fine to medium grained, sub-angular to angular; shell and glass fragments. 3.20-3.50m: becoming mottled yellow-brown				
	3.00m SPT 2,3,3 N=6						w>PL
	3.45m		FILL Clayey CLAY: medium plasticity, dark brown and grey mottled green-yellow-brown, with glass, shells, foreign objects, sharps, roots.				
	4.0		FILL Clayey SAND: uniform, dark green-brown, trace fine to medium grained gravel; trace roots and seashells, possibly reworked estuarine soil.				4.20-4.50: PP=35kPa
	4.60m		FILL Clayey SAND: uniform, dark green-brown, trace fine to medium grained gravel; trace roots and seashells, possibly reworked estuarine soil.				
	5.0		SAND: uniform, dark grey, trace sea-shells.				M - W
	5.70m		SAND: uniform, dark grey, trace sea-shells.				
	6.00m SPT 2,1,3 N=4						ESTUARINE SOIL
	6.45m		6.55-6.80m: blue sheen, weak odour				
	7.0	SP					M - W VL
	7.50m SPT 0,1,4 N=5						
	7.95m						
	8.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

WSP-AU-GLB Log IS AU BOREHOLE 2A PS212776 MASTER.CPJ <DrawingFiles> 18/6/2024 12:29 10:03:00:09 D:\git\Lab and H. Silu\Doc - DGD [Lib: WSP-5.05.2.2023-08-23 Proj: WSP-5.04.0.2023-04-11



NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-016

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 2 OF 5

POSITION : E: 527592.79, N: 5252309.93 (MGA2020-55) SURFACE ELEVATION : 2.97 (AHD) ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max MOUNTING : Track CONTRACTOR : SWD DRILLER : GB
DATE STARTED : 30/4/2024 DATE COMPLETED : 1/5/2024 DATE LOGGED : 2/5/2024 LOGGED BY : MIR CHECKED BY : JRG

DRILLING					MATERIAL						
PROGRESS		DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	DEPTH (m) RL (m AHD)	GRAPHIC LOG	GROUP SYMBOL	MATERIAL DESCRIPTION Soil Type, Colour, Plasticity or Particle Characteristic Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY RELATIVE DENSITY	STRUCTURE & Other Observations
DRILLING & CASING	WATER										
					8.0 -5.0			SAND: uniform, dark grey, trace sea-shells. (continued)			ESTUARINE SOIL
				9.00m SPT 3,4,3 N=7	9.0 -6.0			9.00m-12.00m: no sonic soil samples recovered, sample washed away during drilling			
				9.45m							
					10.0 -7.0						
				10.50m SPT 2,2,2 N=4						VL	
				10.95m		SP			M - W		
		E			11.0 -8.0						
				12.00m SPT 2,0,0 N=0	12.0 -9.0						
				12.45m							
					13.0 -10.0						
				13.50m SPT 5,5,5 N=10	13.0 -10.0		13.70m				
				13.95m		SP		Gravelly SAND: fine to coarse grained, dark grey, gravel is fine to coarse grained, sub-rounded to sub-angular; trace clay; with coarse grained dolerite gravel (up to 80mm), trace sea-shells.		L - MD	ALLUVIAL SOIL
					14.0 -11.0						
				15.00m SPT 9/60mm HB N=R 15.06m	15.0 -12.0		15.00m	14.70-15.00m: with clay, medium plasticity, dark brown, without shell fragments		M - W	
		H-VH			15.0 -12.0			DOLERITE: fine to medium grained, pale grey, inferred as fresh, very high strength.		D - M	ROCK
					16.0 -13.0						

See Explanatory Notes for details of abbreviations & basis of descriptions.

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-016

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 3 OF 5

POSITION : E: 527592.79, N: 5252309.93 (MGA2020-55) SURFACE ELEVATION : 2.97 (AHD) ANGLE FROM HORIZONTAL : 90°
 RIG TYPE : MRS XL Max MOUNTING : Track CONTRACTOR : SWD DRILLER : GB
 DATE STARTED : 30/4/2024 DATE COMPLETED : 1/5/2024 DATE LOGGED : 2/5/2024 LOGGED BY : MIR CHECKED BY : JRG

DRILLING					MATERIAL							
PROGRESS		DRILLING PENETRATION	GROUND WATER LEVELS	SAMPLES & FIELD TESTS	DEPTH (m) RL (m AHD)	GRAPHIC LOG	GROUP SYMBOL	MATERIAL DESCRIPTION Soil Type, Colour, Plasticity or Particle Characteristic Secondary and Minor Components	MOISTURE CONDITION	CONSISTENCY	RELATIVE DENSITY	STRUCTURE & Other Observations
DRILLING & CASING	WATER											
S PWT		H-VH			16.0 -13.0			DOLERITE: fine to medium grained, pale grey, inferred as fresh, very high strength. (continued)	D - M		ROCK	
							16.40m	Continued as Cored Drill Hole				
					17.0 -14.0							
					18.0 -15.0							
					19.0 -16.0							
					20.0 -17.0							
					21.0 -18.0							
					22.0 -19.0							
					23.0 -20.0							
					24.0 -21.0							

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CORED DRILL HOLE LOG

HOLE NO : BH-016

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 4 OF 5

POSITION : E: 527592.79, N: 5252309.93 (MGA2020-55)	SURFACE ELEVATION : 2.97 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 30/4/2024	DATE COMPLETED : 1/5/2024
DATE LOGGED : 2/5/2024	LOGGED BY : MIR	CHECKED BY : JRG
CASING DIAMETER : 140 mm	BARREL (Length) : 1.50 m	BIT : IMPREG RC10
		BIT CONDITION : Good

DRILLING				MATERIAL				FRACTURES								
DRILLING & CASING	WATER	CORE LOSS % RUN (%)	ROD (%)	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	DESCRIPTION ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, etc as applicable)	WEATHERING	ESTIMATED STRENGTH				NATURAL FRACTURE (mm)	VISUAL	ADDITIONAL DATA (joints, partings, seams, zones, etc) Description, orientation, infilling or coating, shape, roughness, thickness, other	
									UCS-154 ₂₀₀	UCS	Di	Di				
		0% LOSS	63		16.0		16.40m START CORING AT 16.40m									
		17.07		Is(50) D>=6.36 MPa	17.0		DOLERITE: fine to medium grained, dark grey blue, phaneritic. 16.50-19.20m: iron staining along joints	FR								J, 30 - 40°, SN, PR, RF, Fe J, 10 - 30°, CT, PR, RF, Fe J, 10 - 20°, SN, CU, RF, Fe J, 0 - 10°, SN, PR, RF, Fe J, 45 - 85°, SN, UN, RF, partially healed, Fe J, 60°, SN, PR, RF, Fe
		0% LOSS	100	Is(50) A=6.81 MPa			17.14m: schlieren at 15-20°									J, 40 - 50°, SN, PR, RF, Fe
		17.21		Is(50) D>=10.2 MPa			17.61m: schlieren at 15° 17.67-17.80m: fine grained									J, 40 - 50°, CT, PR, RF, Fe
		0% LOSS	100	Is(50) A=4.90 MPa	18.0											J, 10°, SN, PR, RF, Fe
		18.77		Is(50) D>=5.95 MPa	19.0											J, 15°, SN, PR, RF, Fe J, 55°, CT, PR, RF, Zeo, Chl V, 55°, CT, PR, Zeo, Cal, 11mm
		0% LOSS	95	Is(50) A=8.70 MPa												
		20.32		Is(50) D=6.56 MPa	20.0											J, 15°, SN, PR, RF, Fe
		0% LOSS	100	Is(50) A=7.71 MPa												Jx2, 25°, SN, PR, RF, Fe
		21.76		Is(50) D>=6.04 MPa	21.0											
		0% LOSS	100	Is(50) A=9.23 MPa			21.83m									J, 15°, SN, PR, RF, Fe
		23.33		Is(50) D>=5.97 MPa	22.0		DOLERITE: fine to medium grained, dark grey blue, phaneritic.									J, 15°, SN, PR, RF, Fe
		0% LOSS	100	Is(50) A=4.94 MPa												
		23.33		Is(50) D>=7.85 MPa	23.0											J, 35°, SN, PR, RF, Fe
		0% LOSS	100	Is(50) D>=6.19 MPa			23.30m									
		23.33		Is(50) A=229 MPa	23.0											
		0% LOSS	100	Is(50) A=7.85 MPa	24.0											

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CORED DRILL HOLE LOG

HOLE NO : BH-016

CLIENT : MPDC
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PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 5 OF 5


POSITION : E: 527592.79, N: 5252309.93 (MGA2020-55)	SURFACE ELEVATION : 2.97 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 30/4/2024	DATE COMPLETED : 1/5/2024
DATE LOGGED : 2/5/2024	LOGGED BY : MIR	CHECKED BY : JRG
CASING DIAMETER : 140 mm	BARREL (Length) : 1.50 m	BIT : IMPREG RC10
		BIT CONDITION : Good

DRILLING				MATERIAL				FRACTURES				
DRILLING & CASING	WATER	CORE LOSS (CORE LOSS DRILL DEPTH)	ROD (%)	SAMPLES & FIELD TESTS	DEPTH (m)	GRAPHIC LOG	DESCRIPTION ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, etc as applicable)	WEATHERING	ESTIMATED STRENGTH UCS=194 MPa ● - Axial ○ - Diametral ■ - UCS □ - UCS	NATURAL FRACTURE (mm)	VISUAL	ADDITIONAL DATA (joints, partings, seams, zones, etc) Description, orientation, infilling or coating, shape, roughness, thickness, other
HGS	90% Polymer RETURN	24.92			24.0		DOLERITE: fine to medium grained, dark grey blue, phaneritic. (continued)					J, 60°, CT, PR, RF, Zeo, CRI
				Is(50) D=6.49 MPa	25.0		Hole Terminated at 24.92 m Target depth Grouted to Surface					
					26.0							
					27.0							
					28.0							
					29.0							
					30.0							
					31.0							
					32.0							

See Explanatory Notes for details of abbreviations & basis of descriptions.




PointID : BH-016 Depth Range: 0.00 - 3.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 1/11	




PointID : BH-016 Depth Range: 3.00 - 5.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-016 Depth Range: 5.00 - 7.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 3/11	




PointID : BH-016 Depth Range: 7.00 - 9.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-016 Depth Range: 12.00 - 13.50 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE
		CHECKED	DATE
		SCALE	A4
		PROJECT No	FIGURE No
		PS212776	5/11




PointID : BH-016 Depth Range: 13.50 - 15.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-016 Depth Range: 15.00 - 15.90 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE
		CHECKED	DATE
		SCALE	FIGURE No
		PROJECT No	FIGURE No
		18/6/2024	18/6/2024
		Not To Scale	A4
		PS212776	7/11




PointID : BH-016 Depth Range: 15.90 - 16.40 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE
		CHECKED	DATE
		SCALE	A4
		PROJECT No	FIGURE No
		PS212776	8/11




PointID : BH-016 Depth Range: 16.40 - 20.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE
		CHECKED	DATE
		SCALE	FIGURE No
		PROJECT No	FIGURE No
		18/6/2024	18/6/2024
		Not To Scale	9/11
		A4	
		PS212776	




PointID : BH-016 Depth Range: 20.00 - 24.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 10/11	



PointID : BH-016 Depth Range: 24.00 - 24.92 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-016	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No