



NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-005

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 1 OF 5

POSITION : E: 527530.25, N: 5252373.53 (MGA2020-55)	SURFACE ELEVATION : 3.76 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 27/4/2024	DATE COMPLETED : 28/4/2024
DATE LOGGED : 28/4/2024	LOGGED BY : TS	CHECKED BY : JRG

DRILLING				MATERIAL			
PROGRESS	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY	RELATIVE DENSITY	STRUCTURE & Other Observations
DRILLING & CASING	0.0						
WATER	0.06m		ASPHALT.				
DRILLING PENETRATION	0.10m		FILL Sandy GRAVEL: fine to medium, sub-angular to angular, grey yellow brown.				FILL Acid Sulfate Sampling every 0.5m to bedrock
GROUND WATER LEVELS	0.30m		FILL Gravelly SAND: fine to medium grained, dark grey, gravel is medium grained, sub-angular to angular.				
SAMPLES & FIELD TESTS	0.70m		FILL Gravelly SAND: fine to medium grained, yellow brown.				
	1.0		FILL Silty Clayey SAND: medium to coarse grained, dark grey brown mottled pale grey, with gravel; trace glass, ceramic fragments, sea-shells.				
	1.95m		1.80m: becoming clay dominant, yellow brown mottled green grey, with coarse grained sandstone gravel for 200mm				0.90-2.00: PP=185kPa
	2.00m		2.00m: with rootlets, trace nails and ceramic fragments				
	2.50m		2.50m: with wood fragments for 300mm				
	3.00m		2.90m 2.80m: broken ceramic bottles				ESTUARINE SOIL
SPT 5.3,5 N=8	3.00m		Silty CLAY: high plasticity, dark grey mottled green brown, with ironstone gravel, trace sand, trace rootlets, trace sea-shells.				
	3.45m		3.50m-4.50m: trace ceramic fragments				
	3.85m						
	4.50m		4.50m				3.10-4.30: PP=75kPa
SPT 1.1,1 N=2	4.95m						
	6.00m						
	6.45m						S
	7.0						
	6.00m						L
SPT 1.3,5 N=8	6.45m						
	7.0						M - W
	7.50m						
	8.00m						L
SPT 3.4 SPT Damaged, Mechanical Failure 7.80m	8.00m						
	8.0						

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

WSP-AU-GLB Log IS AU BOREHOLE 2A PS212776_MASTER.GPJ <DrawingFiles> 18/6/2024 12:11 10:03:00:09 D:\glb\lab and h. silu\Tech - DGD [Lib: WSP-5.05.2.2023-08-23 Pk: WSP-5.04.0.2023-04-11



NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-005

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 2 OF 5

POSITION : E: 527530.25, N: 5252373.53 (MGA2020-55)	SURFACE ELEVATION : 3.76 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 27/4/2024	DATE COMPLETED : 28/4/2024
DATE LOGGED : 28/4/2024	LOGGED BY : TS	CHECKED BY : JRG

DRILLING					MATERIAL							
DRILLING & CASING	WATER	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
					8.0 -4.2			SAND: uniform, dark grey, trace sea-shells, trace clay.				ESTUARINE SOIL
		VE			9.0 -5.2		SP	Gravelly SAND: uniform, dark grey, sub-rounded to rounded, with clay.		L		
					10.0 -6.2		SP	Silty CLAY: high plasticity, green brown mottled brown, trace gravel.				10.80-11.60: PP=50kPa
		E			11.0 -7.2		CH					11.70-12.30: PP=190kPa
					12.00m -8.2					w=PL	St - VSt	
					12.32m							
					13.0 -9.2			Gravelly Silty CLAY: medium to high plasticity, grey green-brown, with sand; fine to coarse grained gravel, sub-rounded to angular.				ALLUVIAL SOIL
		F			13.10m			13.10m: with medium to coarse grained pebble cobbles				12.50-13.00: PP=50kPa
					14.0 -10.2			14.00m: trace dolerite coarse grained gravel and cobbles				13.00-16.30: PP>350kPa
					15.0 -11.2		CI-CH			w<PL	H	
		H			16.0 -12.2							

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

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NON-CORE DRILL HOLE - GEOLOGICAL LOG

HOLE NO : BH-005

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 3 OF 5

POSITION : E: 527530.25, N: 5252373.53 (MGA2020-55) SURFACE ELEVATION : 3.76 (AHD) ANGLE FROM HORIZONTAL : 90°
 RIG TYPE : MRS XL Max MOUNTING : Track CONTRACTOR : SWD DRILLER : GB
 DATE STARTED : 27/4/2024 DATE COMPLETED : 28/4/2024 DATE LOGGED : 28/4/2024 LOGGED BY : TS 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		Is(50) 1>7.97 MPa	16.0 -12.2		CI-CH	Gravelly Silty CLAY: medium to high plasticity, grey green-brown, with sand; fine to coarse grained gravel, sub-rounded to angular. <i>(continued)</i>	w<PL	H		ALLUVIAL SOIL
					16.30m			DOLERITE: fine to coarse grained, brown with green-grey, inferred as extremely to highly weathered, very low to low strength rock.			ROCK	
					16.70m			DOLERITE: fine to medium grained, pale grey with green, inferred as extremely to highly weathered, iron stained, low strength.				
					17.00m			DOLERITE: fine to medium grained, grey brown, inferred as highly to moderately weathered, iron stained, low to medium strength.				
		VH			18.0 -14.2		18.10m	DOLERITE: fine to medium grained, dark grey, inferred as slightly weathered, high to very high strength.				
					18.80m		Continued as Cored Drill Hole					
					19.0 -15.2							
					20.0 -16.2							
					21.0 -17.2							
					22.0 -18.2							
					23.0 -19.2							
					24.0 -20.2							

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

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CORED DRILL HOLE LOG

HOLE NO : BH-005

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 4 OF 5

POSITION : E: 527530.25, N: 5252373.53 (MGA2020-55)	SURFACE ELEVATION : 3.76 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 27/4/2024	DATE COMPLETED : 28/4/2024
DATE LOGGED : 28/4/2024	LOGGED BY : TS	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 (DRILL DEPTH / CORE 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-194 ₂₀₀	UCS	UCS	UCS			
					16.0										
					17.0										
					18.0										
					18.80m		18.80m START CORING AT 18.80m								
		0% LOSS	71	Is(50) D>8.85 MPa Is(50) A>9.31 MPa	19.0		DOLERITE: fine to medium grained, dark grey with pale blue, equigranular to phaneritic.	FR						J, 70°, VN, PR, RF, Zeo	
		19.60	0% LOSS	100	20.0									J, 10°, VN, PR, RF, Fe J, 10°, VN, PR, RF, Fe J, 40°, CN, PR, RF J, 80°, VN, PR, RF, Zeo J, 0-5°, VN, PR, RF, Zeo J, 0°, CN, PR, RF	
		21.10	0% LOSS	96	21.0									J, 70°, VN, PR, RF, Zeo	
		22.66	0% LOSS	100	22.0			21.74m: schlieren at 25-30° 21.80m: schlieren at 25-30° 21.84m: schlieren at 25-30°						J, 60°, VN, PR, RF, Zeo, Cal J, 5°, CN, PR, RF	
				Is(50) D=5.53 MPa Is(50) A=6.16 MPa	23.0									J, 20°, VN, CU, RF, Zeo J, 75°, VN, PR, RF, Zeo	
				Is(50) D=5.83 MPa Is(50) A=4.82 MPa	24.0									J, 20-30°, CT, UN, RF, Zeo, Chl J, 55-75°, CT, PR, SM-RF, Chl, Zeo J, 10°, CN, PR, RF	

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CORED DRILL HOLE LOG

HOLE NO : BH-005

CLIENT : MPDC
LOCATION : Macquarie Point

PROJECT : Macquarie Point GI

FILE / JOB NO : PS212776
SHEET : 5 OF 5

POSITION : E: 527530.25, N: 5252373.53 (MGA2020-55)	SURFACE ELEVATION : 3.76 (AHD)	ANGLE FROM HORIZONTAL : 90°
RIG TYPE : MRS XL Max	MOUNTING : Track	CONTRACTOR : SWD
DRILLER : GB	DATE STARTED : 27/4/2024	DATE COMPLETED : 28/4/2024
DATE LOGGED : 28/4/2024	LOGGED BY : TS	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 (% LOSS)	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			
		24.18	100	A>8.02 MPa	24.0			FR							
		0% LOSS	100		24.18m		DOLERITE: fine to medium grained, dark grey with pale blue, equigranular to phaneritic.								J, 50°, VN, PR, RF, Zeo, Chl
					24.67m		schlieren at 10-15°								
					24.90m		DOLERITE: fine to medium grained, dark grey with pale blue.								J, 75°, CT, PR, RF, Zeo, Chl, 6mm
		25.73	91	Is(50) D=7.87 MPa Is(50) A>8.30 MPa	25.0										
		0% LOSS			26.0		26.00m-26.40m: fine grained								
		27.31	86	Is(50) D=9.08 MPa Is(50) A=8.06 MPa	27.0										J, 50°, CN, PR, RF J, 50°, CN, PR, RF Jx6, 10 - 15°, PR, Zeo, Chl
		0% LOSS		Is(50) D=2.53 MPa Is(50) A=5.04 MPa	27.71m										V, 10°, VN, PR, RF, Zeo, Chl Jx5, 10 - 20°, VN, PR, SM-RF, Zeo, Chl
				UCS =100 MPa	28.0										V, 5°, PR, Chl, Zeo V, 10°, PR, Chl, Zeo
		28.82		Is(50) D=6.88 MPa Is(50) A>7.10 MPa	28.82m										V, 15 - 20°, CT, PR, RF, Zeo, Chl
					29.0		Hole Terminated at 28.82 m Target depth Grouted to Surface								
					30.0										
					31.0										
					32.0										

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WSP-AU-GLB Log IS AU CORED BOREHOLE 2A PS212776_MASTER.GPJ <-DrawingFile> 18/6/2024 12:11 10.03.00.09 D:\glb\lib\wsp\5.03.2\2023-08-23 Proj\WSP-5.04.0\2023-04-11




PointID : BH-005 Depth Range: 0.00 - 1.50 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-005 Depth Range: 1.50 - 3.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 2/15	




PointID : BH-005 Depth Range: 3.00 - 4.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE
		CHECKED	DATE
		SCALE	A4
		PROJECT No	FIGURE No
		PS212776	3/15




PointID : BH-005 Depth Range: 4.00 - 5.50 m

	TITLE	DRAWN	DATE
	MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	CHECKED	DATE
		SCALE	FIGURE No
		PROJECT No	
		PS212776	4/15




PointID : BH-005 Depth Range: 5.50 - 7.50 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024	
		CHECKED	DATE	18/6/2024	
		SCALE	Not To Scale		A4
		PROJECT No	PS212776		FIGURE No




PointID : BH-005 Depth Range: 7.50 - 9.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-005 Depth Range: 9.00 - 11.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 7/15	




PointID : BH-005 Depth Range: 11.00 - 13.00 m

	TITLE	DRAWN	DATE
	MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	CHECKED	DATE
		SCALE	FIGURE No
		PROJECT No	
		PS212776	8/15




PointID : BH-005 Depth Range: 13.00 - 15.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No	PS212776	FIGURE No




PointID : BH-005 Depth Range: 15.00 - 16.50 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 10/15	




PointID : BH-005 Depth Range: 16.50 - 18.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 11/15	




PointID : BH-005 Depth Range: 18.00 - 18.80 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024	
		CHECKED	DATE	18/6/2024	
		SCALE	Not To Scale		A4
		PROJECT No	PS212776	FIGURE No	12/15




PointID : BH-005 Depth Range: 18.80 - 22.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE
		CHECKED	DATE
		SCALE	FIGURE No
		PROJECT No	FIGURE No
		18/6/2024	18/6/2024
		Not To Scale	A4
		PS212776	13/15




PointID : BH-005 Depth Range: 22.00 - 26.00 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE
		CHECKED	DATE
		SCALE	A4
		PROJECT No	FIGURE No
		PS212776	14/15



PointID : BH-005 Depth Range: 26.00 - 28.82 m

	TITLE MPDC Macquarie Point Macquarie Point GI Core Photo - BH-005	DRAWN	DATE	18/6/2024
		CHECKED	DATE	18/6/2024
		SCALE	Not To Scale	A4
		PROJECT No PS212776	FIGURE No 15/15	