



Borehole log

BH-012

Sheet 1 of 2

Project	Macquarie Point Gl	Location	Macquarie Point	Client	MPDC
Coordinates	527455.59mE; 5252450.38mN	Drill type	Sonic	Hole started	18/5/24
Datum	GDA2020	Drill rig	MRS XL Max	Hole finished	18/5/24
RL	5.71mAHD	Drill fluid(s)	Water (where indicated)	Drilled by	SWD (G. Bourke)
Inclination	Vertical	Logged by	W. Cromer	Checked by	G. Bremner
Bearing					

Method	Penet. resist	Water	Notes	metres	Recovery (%)	Graphic log	USCS	Materials	Moisture condition	Consistency Density index	Structure, geology, interpretation, additional observations
			Samples and field tests	RLmAHD Depth				Soil type, colour, plasticity or particle characteristics, secondary and minor components			
Sonic				0.25m	100		SP	Gravelly silty SAND: grey; fine-med. gr	D	MD	Fill
			ASS 0.5 - 0.6m	0.65m	100		SP	AS ABOVE: orange; occasional angular dolerite clasts to 20mm			
			ASS 0.9 - 1.0m	0.8m	100		SM	SILT: black			
				1.0m	100		GM	Silty sandy GRAVEL: light yellowish grey			
			ASS 1.4 - 1.5m	1.4m	30		GW	GRAVEL: pinkish red; 100% well-graded brick clasts to 75mm		L	
			ASS 1.9 - 2.0m	2m	50		GW	Silty sandy GRAVEL: grey, brown; matrix is fine dolerite gravel; clasts are well graded, angular to subangular SW-MW dolerite to 75mm; trace pink-red brick fragments to 10mm			
			ASS 2.4 - 2.5m	3m							
			ASS 2.9 - 3.0m	3.0m							
			PP (10mm) = 2.5 - 3kg/cm ²	3.5m	100		CL loc.	Silty sandy CLAY, clayey silty SAND: dark grey; low to mod plasticity; variable (up to 20%) well-graded angular to subangular dolerite clasts to 100mm' clay is flecked with white ?carbonate patches 4 - 4.3m	M>PL	F-St	
			Atterberg 3.5-3.6m	3.5m			SC		M-W	MD	
			SPT 4, 5, 10 N=15 Recovery: 300/450	3.95m					M>PL	F-St	
			ASS 4.0 - 4.1m	4m							
			ASS 4.5 - 4.6m	5.0m							
				5.57m	0						
		PSD 6.0 - 6.1m	6.0m								
		ASS 6.0 - 6.1m	6.2m	100			SP	Silty SAND: dark olive grey; fine-med. grained; trace (<1%) fine white shell? fragments	M - W	MD	
		SPT 4, 8, 4R (for 6cms) Recovery: 360/360	6.36m	80			GW	Silty sandy GRAVEL: light greyish brown; non-plastic; >60 - 70% well graded subangular to subrounded dolerite clasts to 100mm; some clasts spheroidally weathered	D	MD - D	Colluvial sediments
			7m								
			8m								
			9m								
			9.5m	80			GW	GRAVEL: light greyish brown	D		Dolerite bedrock
			10m					9.7m: end sonic; start HQ3 coring			

Consistency (silt, clay, sandy clay, silty clay) VS = Very soft (<25kPa; exudes in fingers when squeezed); S = Soft (25-50kPa; easily penetrated by fist); F = Firm (50-100kPa; easily penetrated by thumb); St = Stiff (100-200kPa; indented by thumb, penetrated with difficulty); VSt = Very Stiff (200-400kPa; easily penetrated by thumbnail); H = Hard (>400kPa; indented by thumbnail with difficulty); Fb = Friable (crumbles or powders when scraped by thumbnail)
Relative density (sand and gravel) VL = Very loose (ravelling); L = Loose (easy shovelling); MD = Medium dense (hard shovelling); D = Dense (picking); VD = Very dense (hard picking)



Engineering log – Cored borehole

BH-012

Sheet 2 of 2

Incorporating the Unified Rock Classification System (URCS)

Project	Macquarie Point GI	Location	Macquarie Point	Client	MPDC
Coordinates	527455.59mE; 5252450.38mN	Drill type	HQ3 diamond drilling	Hole started	18/5/24
Datum	GDA2020	Equipment	MRS XL Max	Hole finished	18/5/24
RL	5.71mAHD	Drilled by	SWD (G. Bourke)	Logged by	W. Cromer
Inclination	Vertical	Drill fluid(s)	Water	Checked by	G. Bremner
Bearing					

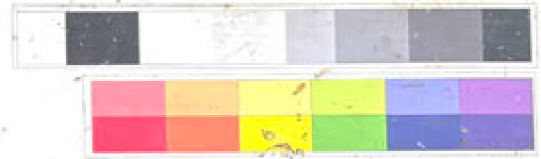
Drilling information				Rock substance				Rock mass defects						
Bit type/size	Case type/size/lift	Fluid/water	Notes Samples, field tests)	Core loss	RQD	metres	Graphic log	Substance description Rock type, Colour, Grain size, Structure (texture, fabric, mineral composition, hardness, alteration, cementation, etc as applicable)	Weathering	Est. strength	Nature of defects	Defect spacing (mm)	Defect description thickness, type, inclination, planarity, roughness, coating	Geol interp
				20% 40% 60% 80%	20% 40% 60% 80%	RLmAHD Depth			A B C D E A B C D E		30 100 300 1000 3000			
						9.7m		Sonic 0 - 9.7m						
HQ3	10.0 - 10.12m PLT(dia & ax) = >20kN			0	35	10		DOLERITE: AS ABOVE			3 joint sets: set 1 (dominant) steeply dipping (c.75° to subvertical); set 2 subhorizontal; set 3 inclined c 20° - 30°. All sets variably PR-I, stained orange brown	— SH, RF, I, CN — SV, RF, I, Fe, clay — SV, RF, I, Fe — SV, RF, I, Fe — SH, RF, I, CN	Jurassic dolerite	
						11		EOH 11.0mbg						
						12								

Drilling T = Triple tube coring B = Blades R = Roller/Tricone A = Auger W = Wash boring DT = Double tube coring HAM = Rotary hammer S = Sonic Case lift Fluid/water 	RQD (Rock Quality Designation Index) The sum of the lengths of 'sound' core pieces >100mm in a drilling run is divided by the total core run length. Expressed as %. Core length measured along centreline. Core drilling breaks not included	Water	Samples and Notes R = SPT penetration refusal D = Disturbed sample N = Standard Penetration Test PP = Pocket penetrometer test SV = In-situ Shear Vane test cSV = Shear Vane test on core CS = Core Sample Ux = Undisturbed tube sample (x mm diameter) Nd = SPT and Disturbed Sample	Soil consistency Fine grained soils VS = Very Soft S = Soft F = Firm St = Stiff VSt = Very stiff H = Hard	Defects Joint Vein Shear zone Crush zone Infill seam EW seam Orientation Dip (degrees) relative to horizontal plane, or to core axis if inclined. SH, SV = subhoriz, subvert
		Strength Hammer impact test Approx. point load strength index Approx. UCS MPa Is(50), MPa			

M MAC POINT Macquarie Point Geotechnical Investigation

WILLIAM C. CROMER P/L

BH ID: BH012
 Depth: 0-2m
 Core Tray No.:
 Date: 18/05/24



X Chalk marks denotes handling breaks



PointID: BH-012 Depth Range: 0.0 – 2.0 m



TITLE
 MPDC
 Macquarie Point
 Macquarie Point GI
 Core Photo – BH-012

DRAWN	WCC	DATE	29/5/24
CHECKED		DATE	
SCALE	Not to Scale		A4
PROJECT No.	PS212776	FIGURE No.	1/6

MAC POINT Macquarie Point Geotechnical Investigation

WILLIAM C. CROMER P/L

BH ID: BH012
 Depth: 2-4m
 Core Tray No.:
 Date: 18/05/24



X Chalk marks denotes handling breaks



PointID: BH-012 Depth Range: 2.0 – 4.0 m

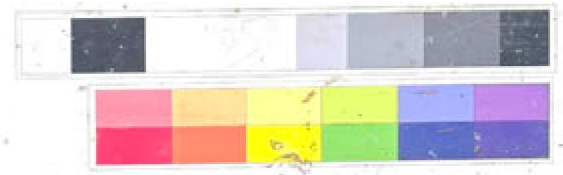


TITLE
 MPDC
 Macquarie Point
 Macquarie Point GI
 Core Photo – BH-012

DRAWN	WCC	DATE	29/5/24
CHECKED		DATE	
SCALE	Not to Scale		A4
PROJECT No.	PS212776	FIGURE No.	2/6

MAC POINT Macquarie Point Geotechnical Investigation
 WILLIAM C. CROMER P/L


BH ID: BH012
 Depth: 4-6m
 Core Tray No.:
 Date: 18/05/24

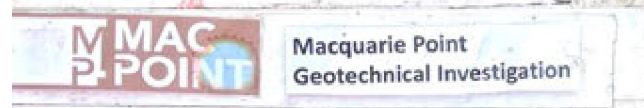


X Chalk marks denotes handling breaks



PointID: BH-012 Depth Range: 4.0 – 6.0 m

	TITLE	DRAWN	DATE	
	MPDC Macquarie Point Macquarie Point GI Core Photo – BH-012	WCC	29/5/24	
		CHECKED	DATE	
		SCALE	Not to Scale	A4
	PROJECT No.	PS212776	FIGURE No.	3/6



WILLIAM C. CROMER P/L

BH ID: BH012
 Depth: 6-8m
 Core Tray No.:
 Date: 18/05/24



X Chalk marks denotes handling breaks



PointID: BH-012 Depth Range: 6.0 – 8.0 m



TITLE
 MPDC
 Macquarie Point
 Macquarie Point GI
 Core Photo – BH-012

DRAWN WCC	DATE 29/5/24
CHECKED	DATE
SCALE Not to Scale	A4
PROJECT No. PS212776	FIGURE No. 4/6

MAC POINT
 Macquarie Point
 Geotechnical Investigation

WILLIAM C. CROMER P/L

BH ID: **BH012**
 Depth: **8.0 - 9.7m**
 Core Tray No.:
 Date: **18/05/24**



X Chalk marks denotes handling breaks



PointID: BH-012 Depth Range: 8.0 – 9.7 m



TITLE
 MPDC
 Macquarie Point
 Macquarie Point GI
 Core Photo – BH-012

DRAWN WCC	DATE 29/5/24
CHECKED	DATE
SCALE Not to Scale	A4
PROJECT No. PS212776	FIGURE No. 5/6



PointID: BH-012 Depth Range: 9.7 – 11.0 m EOH



TITLE

MPDC
Macquarie Point
Macquarie Point GI
Core Photo – BH-012

DRAWN WCC	DATE 29/5/24
CHECKED	DATE
SCALE Not to Scale	A4
PROJECT No. PS212776	FIGURE No. 6/6