



Client:	Tas	smanian Networks	Title:	L	IB-BH06-C	
Project:	Project I	Marinus - Heybridge SI	Title.	r	ID-DI IU-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	3/6



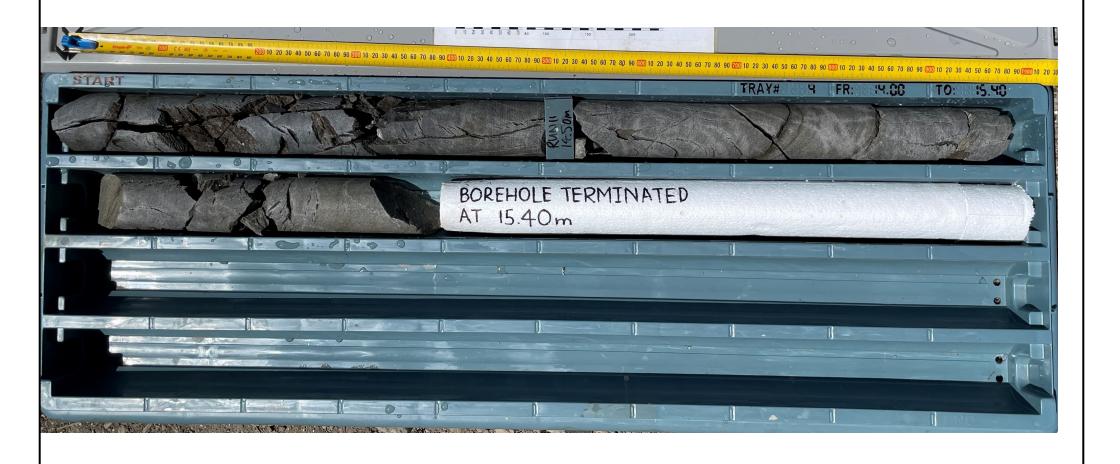


Client:	Tas	manian Networks	Title:	L	IB-BH06-C	
Project:	Project N	Marinus - Heybridge SI	Title.	'	IB-BI 100-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	4/6





Client:	Tası	manian Networks	Title	. .	Ц	B-BH06-C	
Project:	Project M	Marinus - Heybridge SI	iille	;.	п	D-DI 100-C	
Drawn:	wn: MW Checked:				NTS	Drawing Number:	5/6





Client:	Tası	manian Networks	Title:	Ц	B-BH06-C	
Project:	Project N	Narinus - Heybridge SI	ritie.	П	Б-БП00-С	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	6/6

Engineering Log - Excavation

HBLF-BH01-C

Project:Heybridge Converter StationPage:1 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1 S360318 -1

 Contractor:
 Tasmanian Drilling
 Easting:
 414163.8 m
 Elevation:
 5.43 m
 Started:
 08/02/2022

 Plant:
 Hanjin D&B 8-D
 Northing:
 5452650.9 m
 Datum:
 AHD
 Finished:
 09/02/2022

 Logged By:
 MW
 Checked By:
 AC
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Log	iit: jged B		nanjin D&E MW		ced B	y: AC	Grid:	5452650.9 m GDA2020	Inclination:	-90°					nea: ntation	: N/A	2022
EX	(CAVA	OIT	NINFOR	MATI	ON	MA	TERIAL SUBSTAN	NCE									
Method	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Descriptio :: Plasticity or Particle (Secondary and Minor (Characteristics,		Moisture	Consistency Relative Density	, DCP	100mm) ≈ 100mm	8	Field Tes Other Obs	st Data servations
1					-		SAND: fine to medium rootlets	n grained, dark grey bla	ack; trace silt; with						MARINE	DEPOSIT	S
					[0.10m: colour becom	ming pale yellow brown	n, trace silt								
			D	5 -	- 0.5		0.50m: reduced silt of	content									
			U	-	-		1										
				-	- - 1.0												
			SPT N=5		-												
			2,2,3	4-			1				M	L					
					- 1.5 -												
HA			D		-		1.75m: sand become grained content	ing fine to coarse grain	ned, minor coarse								
				-	2.0		gramed dement										
					-												
				3 -	- - 2.5												
			SPT N=27		[o coarse grained, brow to rounded gravel; trac									
			3,10,17	-	- - 3.0							MD					
					-						W						
			D	2 -	}							D					
_					- 3.5 -		Con	ntinued as cored hole fr	rom 3.50m								

				-	- 4.0	****	× ×										
					-	× × × × ×	× ×										
				1 -	- - 4.5	* * * * * * * * * *	×										
					-	* * * * * * * * * *	×										
				-	- 5.0		× ×										
					-		· × ×										
				0 -	<u>-</u>	****											
					- 5.5 -	* * * * *	:										
					-	× × × × ×	×.										
				-	- 6.0	* * * * *	<u> </u>										
					-	××××											
				-1 -	- - 6.5	× × × × ×	<u>*</u>										
					[* * * * *	×										
				-	- 7.0	* * * * * * * * * *											
					-		*										
				-2 -	<u> </u>		×										
					- 7.5 -	· · · · · · · · · · · · · · · · · · ·	:										
					[· · · · · · · · · · · · · · · · · · ·	:										
	DD & SUPPO		PENETRATION	GROU	INDWATE		SAMPLES & FIE	ELD TESTS	MOISTURE		DE	ENSITY (N	l-value)	<u> </u>		CONSISTENC	Y (SU) {N-value}
E E	Natural/Exist cutting Excavator	ra	No resistance anging to refusal	_ = "	Vater leve		B Bulk Sample H	IP Hand Penetrometer IV Hand Vane Shear	D = Dry M = Moist W = Wet	VL L MD	Very I	9		0 - 4 4 - 10	VS S	Very Soft Soft	< 12 kPa {0-2} 12 - 25 {2-4} 25 - 50 {4-8}
B E	Backhoe Bu Buldozer Ripper	cket	VE E	_	Vater leve atic) Vater inflo		SPT SPT Sample (P U Undisturbed Sample E Enviro Sample W Water Sample	P: Peak Su R: Residual Su)	W = Wet Wp = Plastic Limit WI = Liquid Limit	MD D VD	Mediu Densi Very I	um Dense e Dense		10 - 30 30 - 50 50 - 10	St	Firm Stiff Very Stiff Hard	50 - 100 {8-15} 100 - 200 {15-3
		- 1					rator ourripit								100		> 200 kPa {>30

Engineering Log - Cored Borehole

HBLF-BH01-C

Project:Heybridge Converter StationPage:2 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

 Contractor:
 Tasmanian Drilling
 Easting:
 414163.8 m
 Elevation:
 5.43 m
 Started:
 08/02/2022

 Plant:
 Hanjin D&B 8-D
 Northing:
 5452650.9 m
 Datum:
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 Finished:
 09/02/2022

 Logged By:
 MW
 Checked By:
 AC
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Plar				ijin D&B		Northing:	5452650.9 m		Datum:		AHD		Finished:	09/02/2022	
	ged E	_	MW		Checked By: AC		GDA2020		Inclination		90°		Orientation:	N/A	
DRI	LLIN	G		MATE	ERIAL SUBSTA	NCE				ROC	K MA	ASS DEFI	ECTS		
Method	Groundwater/ Water Loss (%)	(m) 'B	Depth (m)	Graphic Log	ROCK TYF (texture, fabrual alteration,	Description of Strata PE: Colour, Grain size, Sic, mineral composition, cementation, major defe	hardness ect type)	Weathering	Estimated Strength Is(50) (MPa) □ - Axial ○- Diametral	Point Load Strength Index Is(50) (MPa)	RQD (%) TCR (%)	Defect Spacing (mm)	additional (type, inclina roughne	scriptions and observations ation, planarity, ss, coating, ess, other)	General
		5	- 0.5		s	tarting coring from 3.50 i	m								
		3 -	- 2.5 3.0 - 3.5												
		1 -	- 4.0 	****** ****** ****** ****** *****	rounded, pale grey QUARTZWACKE: 1 staining; medium b externely high strer	narse grained, sub-angul (Quartzwacke and Quar ine grained, grey with medded; slightly weathere agth coming grey with very managery with very with very with very with very with very managery with very with v	rtz) ninor yellow ed; high to	SW			83 0 100 100		JT, 35°, PR, RF JT, 60°, UN, RF JT, 30°, PR, RF JT, 30°, PR, RF JT, 30°, UN, RF	F, SN, (Fe), x2 F, VNR, (clay), x2 F, SN, (Fe), x2	
HQ3	20	0 -	- 5.5					FR			49		FZ FZ JT, 10°, UN, RF JT, 10°, UN, RF BP, 50°, PR, RI JT, 10°, UN, RF JT, 80°, UN, RF	F, CN F, CN, x13 F, CN	
		-1 -	- 6.5 - 7.0 - 7.5	× × × × × × × × × × × × × × × × × × ×						a=6.90	47 40 100 100		JT, 5°, UN, RF, BP, 45°, PR, RI JT, 80°, PR, RF JT, 30°, UN, RF BP, 40°, PR, RI BP, 30°, PR, RI BP, 30°, PR, RI BP, drilling JT, 15°, UN, RF JT, 80°, UN, RF	F, CN, x7 F, CN F, CN, x3 F, CN, x4 F, CN F, CN, disturbed F, CN	
NMLC NI NQ NQ O HQ HQ O PQ PQ C	oring oring = Wate		TCF RQ (soi ROUNDW	RILLING R % core run D % core run und rock fract	n > 100mm long F	WEATHERING IS residual soil W extremely weathered W distinctly weathered W distinctly weathered W moderately weathered W slightly weathered R fresh	0.03-0.1 0.1-0.3 0.3-1.0 1.0-3.0 3.0-10	Very Low Low (L) Medium High (H) Very Hig	M)	TYPE BP Beddir JT Joint SM Seam CS Crush CZ Crush SZ Shear	ed Seam	FZ Fracture Zone VN Vein FL Foliation VO Void DB Drilling Break HB Handling Break	CN Clean C CT Coating II SN Stain F VR Veneer S FILLED Filled U	PLANARITY ROUGH CU Curved VR Veng R Irregular RF Rou RP Planar S Smoot	/ Rough gh ith

DRILLING

GROUNDWATER SYMBOLS

MLC NMLC Coring

= Water level (static)

NQ NQ Coring HQ HQ Coring PQ PQ Coring

TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured)

Engineering Log - Cored Borehole

HBLF-BH01-C

Project: Heybridge Converter Station Page: 3 of 5 Client: Location: Heybridge Landside Landfall Site, Heybridge TAS Project No: IS360318 -1

Contractor: Tasmanian Drilling 4141638 m Elevation: 5 43 m Started: 08/02/2022 Easting: AHD Plant: Hanjin D&B 8-D Northing: 5452650.9 m Datum: Finished: 09/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Depth (m) Defect 8 additional observations Ξ Graphic Log Strengt (type, inclination, planarity, roughness, coating, Spacing ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness R (mm) General Is(50) (MPa) thickness, other) alteration, cementation, major defect type) QUARTZWACKE: fine grained, grey with minor yellow staining; medium bedded; slightly weathered; high to externely high strength BP, 40°, PR, RF, CN BP, 40°, PR, RF, CN, x4 BP, 40°, PR, RF, CN 100 8.5 BP, 40°, PR, RF, CN BP, 40°, PR, RF, CN JT, 5°, PR, RF, CN JT, 20°, PR, RF, CN 9.0 20 JT, 90°, PR, RF, CN JT, 20°, PR, RF, CN BP, 30°, PR, RF, CN, x5 a=5.00 25 9.5 JT. 45°. IR. RF. CN JT, 5°, PR, RF, CN JT, 45°, PR, RF, CN JT, 70°, PR, RF, CN JT, 20°, UN, RF, CN BP, 30°, PR, RF, CN 10.0 JT, 20°, UN, RF, Filled, (sand) JT, 45°, IR, RF, CN JT, 30°, UN, RF, VNR, (clay) BP, 40°, PR, RF, CN, disturbed 00 -5 0 10.5 FR 10.54m: minor yellow staining by drilling FZ, disturbed by drilling BP, 30°, UN, RF, VNR, (clay) 11.0 100 BP, 30°, PR, RF, SN, (Fe), x6 0 JT, 30°, UN, RF, CN JT, 60°, PR, RF, CN -6 BP BP, 40°, PR, RF, CN, x4 11.5 BP, 40°, PR, RF, CN, x4
BP, 40°, PR, RF, CN
FZ, disturbed by drilling
JT, 45°, PR, RF, CN
JT, 30°, UN, RF, CN
JT, 50°, PR, RF, CN, subverticle
JT, 20°, UN, RF, CN
JT, 30°, UN, RF, CN
JT, 30°, UN, RF, CN
BP, 45°, PR, RF, CN HQ3 12.0 a=12.00 ගු දි 12.5 JT, 30°, PR, RF, CN BP, 40°, PR, RF, CN JT, 30°, PR, RF, Filled, (sand JT, 30°, PR, RF, Filled, (sand and gravel)
JT, 30°, PR, RF, CN
BP, 30°, PR, RF, CN, x4
FZ, disturbed by drilling
JT, 60°, PR, RF, SN, (Fe)
JT, 20°, IR, RF, CN
JT, 30°, PR, RF, CN
JT, 25°, PR, RF, CN
BP, 40°, PR, RF, SN, disturbed
by drilling 13.0 12.96m: minor yellow staining 40 100 SW -8 13.5 Ħ 13.70m: reduced yellow staining BP, 40°, PR, RF, SN, distuby drilling JT, 70°, PR, RF, SN, (Fe) BP, 30°, PR, RF, CN, x4 JT, 15°, IR, RF, CN, x3 JT, 10°, UN, RF, CN BP, 30°, PR, RF, CN JT, 45°, UN, RF, CN JT, 60°, UN, RF, CN 14.10m: calcite/carbonate deposits 9 9 -9 FR 14.70m: minor yellow staining BP, 40°, PR, RF, CN, disturbed 15.0 JT, 60°, IR, RF, CN 9 28 BP. 35°. PR. RF. CN. disturbed -10 BP, 35°, PR, RF, CN, disturbed dilling
JT, 90°, UN, RF, SN, (Fe)
BP, 40°, PR, RF, CN
JT, 10°, UN, RF, SN, (Fe)
JT, 30°, IR, RF, SN, (Fe) 15.5 15.50m: colour becoming pale grey with yellow brown 15.80m; increased vellow brown staining with minor dark brown staining

3.0-10

ROCK STRENGTH (Is50 MPa

Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH)

DEFECT ABBREVIATIONS

COATING CN Clean CT Coating SN Stain

dding Parting FZ Fracture Zone
tt VN Vein
am FL Foliation
shed Seam VO Void
shed Zone bar Zone
HB Handling Break
HB Handling Break

PLANARITY CU Curved IR Irregular PR Planar ST Stepped UN Undulate DIS Disconti

WEATHERING

residual soil
extremely weathered
highly weathered
distinctly weathered
moderately weathered
slightly weathered

Engineering Log - Cored Borehole

HBLF-BH01-C

Project:Heybridge Converter StationPage:4 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

Contractor: Tasmanian Drilling 4141638 m Elevation: 5 43 m Started: 08/02/2022 Easting: AHD Plant: Hanjin D&B 8-D Northing: 5452650.9 m Datum: Finished: 09/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Depth (m) Defect 8 additional observations Ξ Graphic Log Strenat (type, inclination, planarity, roughness, coating, Spacing ROCK TYPE: Colour, Grain size, Structure R (mm) General (texture, fabric, mineral composition, hardness Is(50) (MPa) thickness, other) alteration, cementation, major defect type) QUARTZWACKE: fine grained, grey with minor yellow BP 40° PR RF CN staining; medium bedded; slightly weathered; high to externely high strength SM, sand and sub-angular to angular gravel
JT, 10°, UN, RF, SN, (Fe)
JT, 30°, UN, RF, SN, (Fe), x2 16.5 Þ BP, 20°, PR, RF, CN. x4 d=0.60 BP, 30°, PR, RF, CN JT, 10°, IR, RF, CN JT, 60°, PR, RF, CN, x2 JT, 30°, PR, RF, SN, (Fe) JT, 60°, UN, RF, CN CS, 45°, sand and sub-agular to 17.0 34 -12 SW 17.5 angular gravel BP, 30°, PR, RF, SN, (Fe) BP, 30°, FR, RF, SN, (Fe)
JT, 70°, IR, RF, SN, (Fe)
JT, 60°, UN, RF, CN
JT, 50°, UN, RF, CN
BP, 40°, PR, RF, SN, (Fe)
JT, 80°, UN, RF, CN
JT, 45°, PR, RF, SN, (Fe)
JT, 35°, IR, RF, SN, (Fe)
JT, 5°, UN, RF, SN, (Fe)
JT, 30°, UN, RF, SN, (Fe)
JT, 20°, PR, RF, SN, (Fe)
JT, 20°, PR, RF, SN, (Fe)
JT, 30°, UN, RF, SN, (Fe)
JT, 20°, PR, RF, SN, (Fe)
JT, 30°, UN, RF, SN, (Fe)
JT, 30°, UN, RF, SN, (Fe) 17.56m: quartz/calcite deposit 18.0 00 þ -13 18.5 a=3.10 JT, 30°, UN, RF, SN, (Fe) JT, 35°, PR, RF, SN, (Fe) CORFLOSS 19.0 QUARTZWACKE: fine grained, pale grey with minor yellow 92 JT, 50°, PR, RF, CN JT, 30°, UN, RF, CN staining and dark brown streaking; thinly to medium bedded; slightly weathered; very high strength JT, 50°, UN, RF, Filled, (sand) JT, 10°, IR, RF, CN BP, 30°, PR, RF, CN JT, 40°, IR, RF, Filled, sand, sub-19.5 SW angular to sub-rounded gravel JT, 10°, IR, RF, CN JT, 70°, PR, RF, CN JT, 20°, UN, RF, CN BP, 30°, UN, RF, CN, x4 a = 0.36d=1.70 40 20.0 JT, 10°, UN, RF, SN, (Fe) 100 20.20m: very minor yellow staining disturbed by drilling -15 20.5 E BP, 30°, UN, RF, CN, x11, 30, CN 60°, IR, RF, CN BP, 40°, PR, RF, CN JT, 45°, PR, RF, CN 20.85m: highly bedded, colour becoming dark grey 21.0 001 BP, 60°, PR, RF, CN FR JT, 50°, PR, RF, CN -16 - 21.5 JT, 0°, PR, RF, CN BP, 30°, PR, RF, CN, x4 JT, 90°, IR, RF, CN JT, 5°, PR, RF, CN 23 JT, 40°, PR, RF, CN BP, 30°, PR, RF, CN, disturbed CORFLOSS by drilling JT, 20°, UN, RF, CN QUARTZWACKE: fine grained, pale grey and white; thinly to medium bedded; fresh; medium to high strength -17 22.35m: calcite/carbonate seam colour becoming dark 22.5 JT, 20°, IR, RF, CN FZ, disturbed by drilling 22.33ml. carcite/carbonate seam colour becoming dark grey with minor white streaking MUDSTONE: fine grained, dark grey and white streaking, thinly to medium bedded; medium strength FR JT, 45°, IR, RF, CN BP, 30°, PR, RF, CN 10 86 22.90m: colour becoming black CORELOSS Gravelly CLAY: low plasticity, fine to medium grained, sub-angular to sub-rounded gravel, black FZ, disturbed by drilling MUDSTONE: fine grained, dark grey; laminated to very thinly bedded; fresh; medium to high strength -18 23.5 FR 23.30m: colour becoming arev 9 FΖ CORELOSS DRILLING WEATHERING ROCK STRENGTH (Is50 MPa DEFECT ABBREVIATIONS TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured) MLC NMLC Coring Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH) NQ NQ Coring HQ HQ Coring PQ PQ Coring extremely weathered highly weathered distinctly weathered dding Parting FZ Fracture Zone
tt VN Vein
am FL Foliation
shed Seam VO Void
shed Zone DB Drilling Break
aar Zone HB Handling Break CU Curved IR Irregular PR Planar GROUNDWATER SYMBOLS 3.0-10 = Water level (static)

Engineering Log - Cored Borehole

HBLF-BH01-C

Project: Heybridge Converter Station Page: 5 of 5 Client: Location: Heybridge Landside Landfall Site, Heybridge TAS Project No: IS360318 -1

414163.8 m 08/02/2022 Contractor: Tasmanian Drilling Easting: Elevation: 5.43 m Started: ΔHD

	Plar	nt:		Han	jin D&B	3 8-D	Northin	g : 54	452650.9 m		Datum:		AHD		Finished:	09/02/2022	
L	Log	ged E	Ву:	MW	•	Checked By:	AC Grid :	GI	DA2020		Inclinat	ion: -	90°		Orientation:	N/A	
	DRI	ILLIN	G		MATI	ERIAL SUBS	TANCE					ROC	CK M	IASS DEF	ECTS		
	Method	Groundwater/ Water Loss (%)	RL (m)	Depth (m)	Graphic Log	(texture, f alteration	Description of Stra TYPE : Colour, Grain s abric, mineral compos on, cementation, major	ze, Struc ition, hard defect ty	dness /pe)	Weathering	Estimated Strength Is(50) (MPa) - Axial - Diametral	Point Load Strength Index Is(50) (MPa)	RQD (%)	Defect Spacing (mm)	additional o (type, inclina roughnes	criptions and observations tion, planarity, s, coating, ss, other)	General
			-19 -	- 24.5 - 24.5 - 25.0 - 25.5		thinly bedded; fr	ne grained, dark grey; l esh; medium to high s r becoming dark grey		i to very	FR			0 6	90	FZ, disturbed by BP, 30°, PR, RF SM, Calcite BP, 30°, PR, RF FZ, disturbed by JT, 45°, PR, RF, BP, 30°, PR, RF BP, 30°, PR, RF JT, 10°, IR, RF, JT, 70°, UN, RF, JT, 15°, UN, RF,	CN CN CN drilling CN CN CN CN CN CN CN CN CN	
			-21 -	- 26.0 - - - - - 26.5 -	><	bedded; fresh; h	ne grained, dark grey; ligh strength	hinly to m	nedium			a=0.64	0 0		BP, 20°, PR, RF JT, 35°, PR, RF, JT, 35°, IR, RF, □ JT, 20°, UN, RF, □ BP, 50°, PR, RF	, CN CN CN, x3	-
	08	40	-22 -	- - 27.0 - - - - - 27.5		27.35m: CaCC	03/calcite seam					a=4.00	23	22	BP, 50°, PR, RF by drilling FZ, disturbed by BP, 50°, PR, RF	drilling	
			-23 -	- 28.0 - 28.0 28.5						FR			13		JT, 30°, IR, RF, JT, 80°, IR, RF, BP, 30°, PR, RF, JT, 80°, IR, RF,	CN , CN CN	
			-24 -	- 29.0 - 29.5 - 29.5 30.0		Exploratory hole	e terminated at 30.00 n						17		BP, 40°, PR, RF, by drilling BP, 40°, PR, RF BP, 40°, PR, RF CN CS, sand, fine g angular to angu	CN, disturbed CN, x4 CN, x9, 30-40, rained, sub-	-
			-25 –	- - - - 30.5		Target depth									angular to angu JT, 30°, UN, RF, CS, clay, fine to sand and fine gr angular to angu	CN coarse grained rained, sub-	
			-26 -	- 31.0 - 31.5 - 31.5													-
No Ho	MLC NI Q NQ O Q HQ O	Coring Coring = Wate		TCF RQI (sou	RILLING R % core run D % core ru und rock fract ATER SYMB	in > 100mm long tion only measured)	WEATHERING RS residual soil extremely weathered highly weathered DW distinctly weathered moderately weathered FR resh	ı	0.03-0.1 0.1-0.3 0.3-1.0	Very Lov Low (L) Medium	(M)	TYPE BP Bedd JT Joint SM Sean CS Crusl CZ Crusl SZ Shea	n ned Sear ned Zone	ng FZ Fracture Zone VN Vein FF Foliation In VO Void DB Drilling Break HB Handling Bre	CN Clean CL CT Coating IR SN Stain PF VR Veneer ST FILLED Filled UN	ANARITY ROUGHN I Curved VR Very F Irregular RF Rough F Planar S Smooth Stepped POL Polis U Indulated S Discontinuous	Rough n shed

Engineering Log - Excavation

HBLF-BH02-C

Project:Heybridge Converter StationPage:1 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1360318 -1

 Contractor:
 Tasmanian Drilling
 Easting:
 414287.2 m
 Elevation:
 5.11 m
 Started:
 10/02/2022

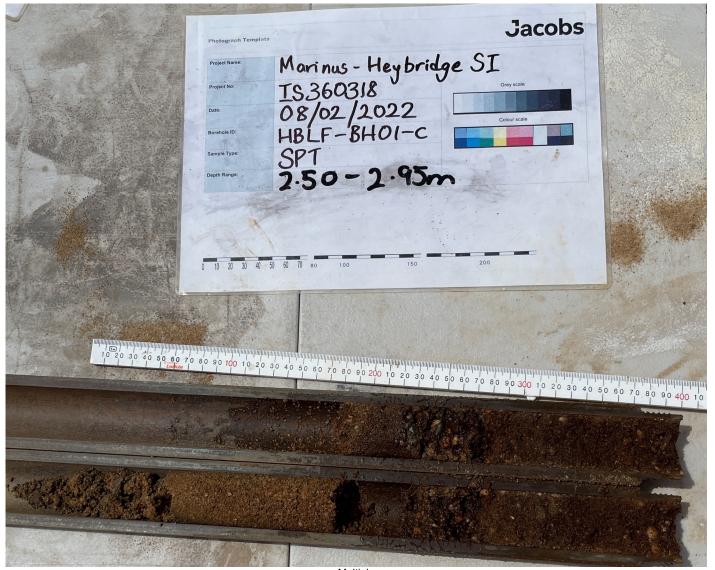
 Plant:
 Hanjin D&B 8-D
 Northing:
 5452577.0 m
 Datum:
 AHD
 Finished:
 11/02/2022

 Logged By:
 MW
 Checked By:
 AC
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

- 1	lan			Hanjin D&E				Northing:	5452577.0 m	Datum:	AHD				nished:		2022
L	.og	ged By	/: I	MW	Checl	ked B	y: AC	Grid:	GDA2020	Inclination:	-90°			Oı	rientatio	on: N/A	
L	ΕX	CAVA	TIOI	NINFOR	MATI	ON	MA	TERIAL SUBSTA	NCE								
77.74	Method	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Description E: Plasticity or Particle C Secondary and Minor C	Characteristics,		Moisture	Consistency Relative Density	DCP (blows/		Field Tes & Other Obs	st Data servations
7					5 -		× × ,	Silty GRAVEL: fine to brown, low plasticity	o medium grained, sub-a silt	angular to angular,	red	D-M	MD			NE DEPOSIT	S
Ħ			Not Observed	SPT N=R 3, 23/20mm	- - 4 -	- 0.5	· · · · ·	1	yellow brown; trace silt			М	L D- VD				-
þ,					-	- 1.5		Co	ntinued as cored hole fr	om 1.50m			VD		-		
					3 -	- 2.0	××××× ××××××××××××××××××××××××××××××××										-
					-	- 2.5 -	*****										-
					2 -	- 3.0	× × × × × × × × × × × × × × × × × × ×										-
						- 3.5	· · · · · · · · · · · · · · · · · · ·										-
					1-	- 4.0 - 4.5	* * * * * * * * * * * * * * * * * * *										-
					0 -	- 5.0 - 5.5	****** ***** ***** ***** *****										-
					-1 -	- 6.0 - 6.5	*****										-
					-2 -	- 7.0 - 7.5	· · · · · · · · · · · · · · · · · · ·										-
		D & SUPPO		PENETRATION	GROU	JNDWATE		SAMPLES & F	IELD TESTS	MOISTURE		DE	NSITY (N	I-value)	·	CONSISTENC	Y (SU) {N-value}
В	E E BH B	atural/Existi utting xcavator ackhoe Buc uldozer ipper	r	No resistance anging to refusal	(st	Nater leve atic) Nater inflo		B Bulk Sample	HP Hand Penetrometer HV Hand Vane Shear (P: Peak Su R: Residual Su)	D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit	VL L MD D VD	Very L Loose Mediu Dense Very E	m Dense	10 30	4 VS 10 S -30 F -50 St -100 VSt H	Very Soft Soft Firm Stiff Very Stiff Hard	< 12 kPa {0-2} 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30}



Client:	Tasr	manian Networks	Title:	ЦВ	BLF-BH01-C	
Project:	Project M	larinus - Heybridge SI	Title.	ПВ	DLT-DHUI-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	1/9



Multiple

Client:	Tası	manian Networks	Title:	ЦВ	LF-BH01-C	
Project:	Project M	larinus - Heybridge SI	Title.	ПБ	LF-DHUI-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	2/9





Client:	Tas	manian Networks	Title:	ЦЕ	BLF-BH01-C	
Project:	Project N	Marinus - Heybridge SI	Title.	П	DLF-DI 10 I-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	3/9



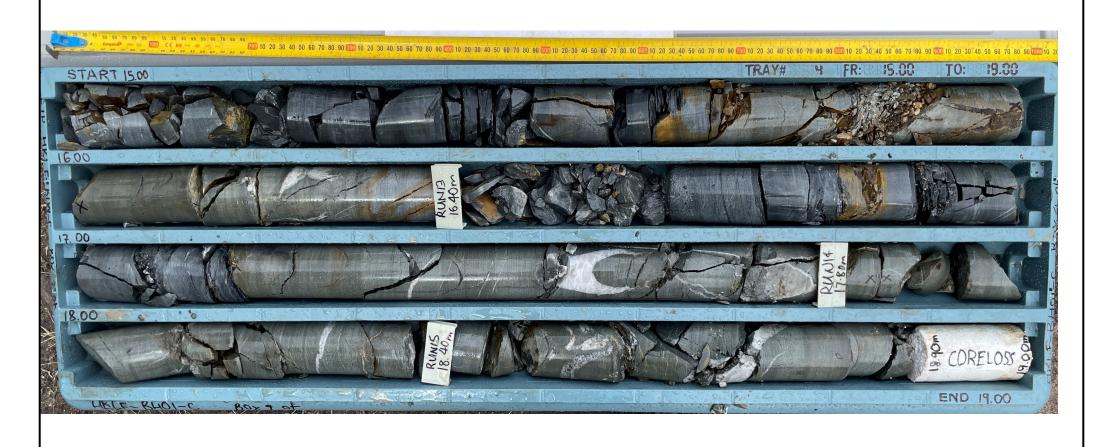


Client:	Tası	manian Networks	Title:	ШΒ	SLF-BH01-C	
Project:	Project M	Narinus - Heybridge SI	ritie.	ПБ	SLT-DHUI-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	4/9





Client:	nt: Tasmanian Networks		Title	UDI E DUN1 C		
Project:	Project N	Marinus - Heybridge SI	Title: HBLF-BH01-C		ILF-DI IU I-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	5/9





Client:	t: Tasmanian Networks		Title	UDI E DUO1 C		
Project:	Project I	Marinus - Heybridge SI	- Title: HBLF-BH01-C			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	6/9





Client:				Title:	HBLF-BH01-C		
Project:							
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	7/9





Client:	t: Tasmanian Networks			Title	UDI E DUO1 C		
Project:	Project N	Marinus - Heybridge SI	Title:		П	HBLF-BH01-C	
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	8/9





Client:	Tas	manian Networks	Title:	HBLF-BH01-C		
Project:	Project N	Marinus - Heybridge SI		TIBEL BROTTO		
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	9/9

Engineering Log - Cored Borehole

HBLF-BH02-C

Project:Heybridge Converter StationPage:2 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

Contractor: Tasmanian Drilling Easting: 414287 2 m Elevation: 5 11 m Started: 10/02/2022 AHD Plant: Hanjin D&B 8-D Northing: 5452577.0 m Datum: Finished: 11/02/2022 Logged By: GDA2020 Inclination: Orientation: N/A MW Checked By: AC Grid: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Depth (m) Defect 8 additional observations $\widehat{\Xi}$ Graphic Log Strenat (type, inclination, planarity, roughness, coating, Spacing ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, major defect type) R □ - Axial (mm) General Is(50) (MPa) thickness, other) Starting coring from 1.50 m 5 0.5 1.0 9 1.5 CORELOSS GRAVEL: medium to coarse grained, sub-angular to JT, 30°, UN, RF, SN, (Fe) JT, 60°, PR, RF, SN, (Fe), x3 BP, 30°, PR, RF, SN, (Fe) 2.0 QUARTZWACKE: fine grained, red brown with yellow staining; medium bedded; moderately to highly weathered, 3 medium strength meaium strength
Extremely weathered QUARTZWACKE: Recovered as:
Gravelly CLAY: low plasticity, grey mottled yellow brown,
medium to coarse grained, sub-angular to angular gravel
QUARTZWACKE: fine grained, red brown with yellow JT, 60°, PR, RF, SN, (Fe) BP, 40°, PR, RF, SN, (Fe), x3 2.5 001 CS, clay, sand, fine to medium 63 grained, sub-angular to angular 20 staining; medium bedded; moderately to highly weathered, JT, 30°, UN, RF, SN, (Fe) medium to high stregth 2.50m: increased red and yellow staining 2.70m: yellow and red staining decreasing 3.0 JT, 90°, PR, RF, CN BP, 35°, PR, RF, CN, x7 JT, 35°, UN, RF, CN, x2 2 00 JT, 30°, UN, RF, CN 3.5 3.47m: colour red brown with yellow/orange staining JT, 90°, PR, RF, CN BP, 40°, PR, RF, CN, x4 3.75m: reducing yellow and orange staining MW-HW a=2.10 4.0 BP, 50°, PR, RF, CN 001 64 JT, 15°, UN, RF, CN 4.5 CS, sand, sub-angular to angular gravel and silt JT, 90°, PR, RF, CN JT, 20°, PR, RF, CN FZ, disturbed by drilling 4.56m: colour becoming yellow brown HQ3 4.62m: colour change to pale grey 5.0 5.00m: colour becoming yellow brown pale grey BP, 30°, PR, RF, CN, x5 FZ, disturbed by drilling 0 100 5.5 Ē BP, 40°, PR, RF, CN, x5 JT, 60°, PR, RF, Filled, (Calcite) JT, 30°, IR, RF, CN 40 6.0 FZ, disturbed by drilling FZ, disturbed by drilling QUARTZWACKE: fine grained, yellow brown pale grey; -1 medium bedded; moderately weathered, high strength JT, 60°, PR, RF, CN JT, 80°, IR, RF, CN စ္က MW-HW 24 JT, 30°, UN, RF, CN BP, 45°, PR, RF, CN, x5 6.5 CORFLOSS 8 -2 QUARTZWACKE: fine grained, pale grey with yellow brown FZ, disturbed by drilling staining; medium bedded; moderately weathered; high BP, 40°, PR, RF, CN MW 7.34m: colour becoming pale grey with yellow brown 100 staining BP, 50°, PR, RF, CN, x5 JT, 60°, ST, RF, CN 7.87m: colour becoming pale grey with yellow brown JT, 60°, PR, RF, CN staining DRILLING WEATHERING ROCK STRENGTH (Is50 MPa DEFECT ABBREVIATIONS TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured) MLC NMLC Coring Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH) NQ NQ Coring HQ HQ Coring PQ PQ Coring residual soil
extremely weathered
highly weathered
distinctly weathered
moderately weathered
slightly weathered CU Curved IR Irregular PR Planar GROUNDWATER SYMBOLS 3.0-10 = Water level (static)

Engineering Log - Cored Borehole

HBLF-BH02-C

Project:Heybridge Converter StationPage:3 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

Contractor: Tasmanian Drilling Easting: 414287 2 m Elevation: 5 11 m Started: 10/02/2022 AHD Plant: Hanjin D&B 8-D Northing: 5452577.0 m Datum: Finished: 11/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Depth (m) Defect 8 additional observations Ξ Graphic Log Strenat (type, inclination, planarity, roughness, coating, Spacing ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness R □ - Axia (mm) General Is(50) (MPa) thickness, other) alteration, cementation, major defect type) 600 200 200 200 200 QUARTZWACKE: fine grained, pale grey with yellow brown SW-MW -3 staining; medium bedded; moderately weathered; high JT, 90°, PR, RF, CN, x2, a=2.308.00m: colour becoming pale grey with red staining JT, 30°, UN, RF, CN, x4 2 | 6 8.40m: colour becoming red brown with orange staining 8.5 CS sand fine to medium grained, sub-angular to angular gravel MW þ BP, disturbed by drilling 9.0 BP, 45°, PR, RF, CN, multiple -4 BPs FZ, disturbed by drilling BP, 45°, PR, RF, CN, x7 JT, 60°, UN, RF, CN, x3 JT, 90°, PR, RF, SN, (Fe) JT, 45°, UN, RF, SN, (Fe) 9.20m: colour becoming dark grey with minor yellow 100 4 9.36m: colour becoming pale grey with red and yellow 9.5 9.45m: colour becoming yellow brown MW JT, 30°, PR, RF, SN, (Fe), x2 BP, 45°, PR, RF, CN, x6 9.85m: colour changing to pale grey with minor yellow 10.0 -5 10.10m: colour changing to yellow brown MW CORFLOSS QUARTZWACKE: fine grained, yellow brown; thinly to medium bedded; moderately weathered; high to very high FZ, disturbed by drilling 10.5 CS, silt BP, 30°, PR, RF, CN, x3 100 25 10.70m: colour changing to red brown with yellow JT, 75°, PR, RF, CN JT, 10°, IR, RF, CN a=7 20 11.0 FZ, disturbed by drilling -6 11.13m: colour changing to pale grey with red brown MW BP. 45°, PR. RF. CN. x4 BP, 45°, PR, RF, CN, X4 JT, 35°, IR, RF, CN JT, 20°, UN, RF, CN JT, 30°, UN, RF, SN, (Fe) JT, 60°, UN, RF, SN, (Fe) 00 53 11.30m: colour changing to yellow brown 11.5 JT, 40°, UN, RF, CN, x3 BP, 45°, PR, RF, CN 00 11.90m: colour becoming pale grey with minor yellow 09 40 12.0 staining -7 12.20m: colour becoming yellow brown FZ, disturbed by drilling 12.5 12.53m: colour becoming pale grey with yellow brown 8 stainina 24 JT, 40°, UN, RF, CN, x3 JT, 60°, PR, RF, SN, (Fe) JT, 20°, UN, RF, CN MW 13.0 13.00m: colour becoming red brown -8 FZ, disturbed by drilling JT, 45°, IR, RF, SN, (Fe) 00 JT, 30°, UN, RF, SN, (Fe) JT, 30°, PR, RF, SN, (Fe) BP, 45°, PR, RF, CN, x2 99 13.5 CORELOSS QUARTZWACKE: fine grained, dark grey; thinly to medium bedded; moderately weathered; high to very high strength 13.80m: colour changing to dark grey FR BP, 30°, PR, RF, CN, x3 JT, 20°, UN, RF, CN, x2 -9 34 CS, fine to medium grained, sub-angular to angular gravel 14.34m: colour changing to red brown with yellow JT, 60°, UN, RF, SN, (Fe), x2 JT, 20°, UN, RF, CN MW FZ, disturbed by drilling CORFLOSS 15.0 QUARTZWACKE: fine grained; red brown with yellow FZ, disturbed by drilling -10 82 brown staining; thinly to medium bedded; moderately Ь BP, 30°, PR, RF, CN, x3 weathered; high strength CS, fine to medium grained, sub-MW 15.37m: colour becoming pale grey with red brown and angular to angular gravel JT, 60°, PR, RF, SN, (Fe) JT, 45°, IR, RF, SN, (Fe) JT, 30°, PR, RF, SN, (Fe) 15.5 yellow brown staining П FZ, disturbed by drilling DRILLING WEATHERING ROCK STRENGTH (Is50 MPa DEFECT ABBREVIATIONS TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured) MLC NMLC Coring Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH) NQ NQ Coring HQ HQ Coring PQ PQ Coring dding Parting FZ Fracture Zone
tt VN Vein
am FL Foliation
shed Seam
shed Zone DB Drilling Break
bar Zone HB Handling Break extremely weathered highly weathered distinctly weathered CU Curved IR Irregular PR Planar GROUNDWATER SYMBOLS 3.0-10 = Water level (static)

Engineering Log - Cored Borehole

HBLF-BH02-C

Project:Heybridge Converter StationPage:4 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

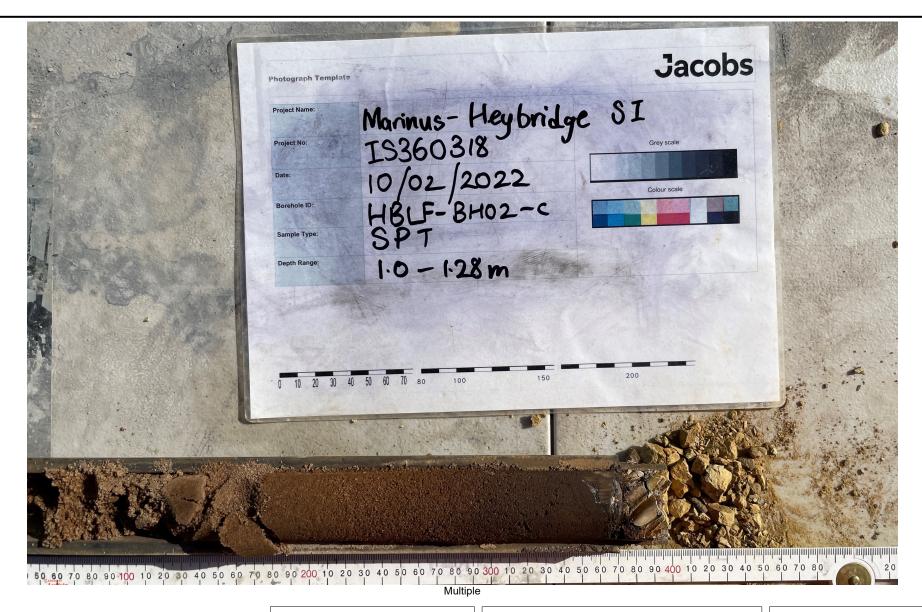
Contractor: Tasmanian Drilling 414287 2 m Elevation: 5 11 m Started: 10/02/2022 Easting: AHD Plant: Hanjin D&B 8-D Northing: 5452577.0 m Datum: Finished: 11/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Defect 8 additional observations Ξ Graphi Log Strenat Depth ((type, inclination, planarity, roughness, coating, Spacing ROCK TYPE: Colour, Grain size, Structure R (mm) General (texture, fabric, mineral composition, hardness Is(50) (MPa) thickness, other) alteration, cementation, major defect type) UN RE SN (Fe -11 BP, 20°, PR, RF, SN, (Fe), x2 JT, 60°, UN, RF, SN, (Fe), x6 SM, 20°, fine to medium grained, brown staining; thinly to medium bedded; moderately 100 weathered; high strength 16.00m: colour changing to red brown 16.10m: colour changing to pale grey with yellow brown and red brown staining angular gravel 16.5 MW QUARTZWACKE: fine grained, pale grey with yellow brown FZ, disturbed by drilling and red brown staining; thinly to medium bedded; moderately weathered; high strength - 1 1 74 JT, 30°, UN, RF, SN, (Fe) BP, 40°, PR, RF, SN, (Fe), x2 Б 17.0 -12 JT, 40°, PR, RF, VNR, (Sand), x2 FZ, disturbed by drilling d=1.30 JT, 30°, UN, RF, SN, (Fe), x2 17.5 JT, 40°, PR, RF, SN, (Fe), x2 001 BP, 45°, PR, RF, SN, (Fe), x7 17.75m: colour becoming pale grey with yellow brown and red brown staining Þ FZ, disturbed by drilling 18.0 JT, 30°, UN, RF, CN, x2 -13 JT, 30°, PR, RF, SN, (Fe) JT, 40°, IR, RF, SN, (Fe) BP, 30°, PR, RF, SN, (Fe), x6 a=2.20 18.5 18.45m: colour changing to dark grey with red brown staining BP, 40°, PR, RF, CN, disturbed by drilling CS, medium grained gravel 18.78m: colour changing to red brown with yellow MW 100 19.0 -14 19.10m: colour becoming grey yellow brown with minor JT, 20°, UN, RF, SN, (Fe) JT, 45°, UN, RF, SN, (Fe) BP, 45°, PR, RF, CN, x2 19.35m: increased vellow brown staining 19.5 BP, 45°, PR, RF, CN, multiple JT, 60°, IR, RF, SN, (Fe), x3 40 20.0 MW-HW -15 00 JT, 40°, PR, RF, SN, (Fe), x5 FZ, disturbed by drilling 20.5 FZ, disturbed by drilling 20.60m: colour changing to red brown with yellow brown staining 16 HW 20.75m: colour changing to dark brown with yellow BP, 30°, PR, RF, SN, (Fe), multiple BPs 21.0 JT, 45°, PR, RF, SN, (Fe)
JT, 50°, PR, RF, SN, (Fe)
JT, 30°, UN, RF, Filled, (calcite)
BP, 45°, PR, RF, SN, (Fe)
BP, 45°, PR, RF, SN, (Fe) 21.00m; colour becoming pale grev with orange brown -16 21.20m: colour becoming pale grey with red brown staining with minor yellow brown staining 21.5 BP, 40°, PR, RF, SN, (Fe), disturbed by drilling 00 43 BP, 40°, PR, RF, SN, (Fe), x3 MW 22.0 -17 JT, 50°, UN, RF, SN, (Fe) FZ, disturbed due to drilling 22.5 JT, 70°, PR, RF, SN, (Fe) BP, 30°, PR, RF, CN, multiple Б Extremely weathered QUARTZWACKE: Recovered as XW Clayey SÍLT: low to medium plasticity, pale grey mottled red brown; with fine to coarse grained sand; with fine grained, BP, 30°, PR, RF, SN, (Fe) 23.0 sub-angular to angular gravel
QUARTZWACKE: fine grained, pale grey with red brown -18 JT, 40°, ST, RF, SN, (Fe) staining with minor yellow brown staining; thinly to medium bedded; moderately weathered; medium to high strength 23.5 BP, 45°, PR, RF, SN, (Fe) JT, 45°, UN, RF, SN, (Fe) JT, 45°, UN, RF, SN, (Fe) 23.64m: colour becoming grey yellow brown with red Extremely Weathered QUARTZWACKE: Recovered as Gravelly CLAY: low plasticity, yellow brown mottled dark brown, medium grained, sub-angular to sub-rounded gravel JT, 85°, PR, RF, SN, (Fe) DRILLING WEATHERING ROCK STRENGTH (Is50 MPa DEFECT ABBREVIATIONS TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured) MLC NMLC Coring Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH) NQ NQ Coring HQ HQ Coring PQ PQ Coring dding Parting FZ Fracture Zone
tt VN Vein
am FL Foliation
shed Seam VO Vold
shed Zone DB Drilling Break
aar Zone HB Handling Break residual soil
extremely weathered
highly weathered
distinctly weathered
moderately weathered
slightly weathered CU Curved IR Irregular PR Planar GROUNDWATER SYMBOLS 3.0-10 = Water level (static)

Engineering Log - Cored Borehole

HBLF-BH02-C

Project:Heybridge Converter StationPage:5 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:1S360318-1

Contractor: Tasmanian Drilling Easting: 414287 2 m Elevation: 5 11 m Started: 10/02/2022 AHD Plant: Hanjin D&B 8-D Northing: 5452577.0 m Datum: Finished: 11/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated Strength Is(50) (MPa) Groundwater/ Water Loss (% Defect descriptions and **Description of Strata** Weathering Depth (m) Defect additional observations Ξ Graphic Log Strenat (type, inclination, planarity, roughness, coating, Spacing R ROCK TYPE : Colour, Grain size, Structure (mm) General (texture, fabric, mineral composition, hardness Is(50) (MPa) thickness, other) alteration, cementation, major defect type) 600 200 200 200 200 -19 GRAVEL: medium grained, sub-angular to angular, pale grey brown
QUARTZWACKE: fine grained, brown with minor black BP. 30°. PR. RF. SN. (Fe) 90 Б JT, 30°, UN, RF, SN, (Fe), x3 нw streaking; thinly to medium bedded; highly weathered; 24.5 medium strength Extremely Weathered QUARTZWACKE: Recovered as Gravelly SILT: low plasticity, pale grey brown, fine grained, sub-angular to angular gravel; with fine to coarse grained 25.0 sand CORELOSS -20 QUARTZWACKE: fine grained, orange grey brown; very CS, fine grained gravel, subthinly bedded; highly weathered; medium strength 25.5 25.34m: becoming pale grey with orange yellow angular to angular JT, 30°, PR, RF, SN, (Fe), x5 staining BP, 40°, PR, RF, CN, disturbed by drilling CORFLOSS 30 26.0 99 -21 QUARTZWACKE: fine grained, pale grey with orange yellow staining; thinly bedded; moderately to highly BP, 40°, PR, RF, SN, (Fe) BP, 40°, PR, RF, Filled, (Calcite) MW-HW weathered; medium to high strength BP, 40°, PR, RF, SN, (Fe) 26.25m: colour becoming red brown with dark grey 26.5 CS, fine to medium grained, sub-__staining CORELOSS angular to angular gravel BP, 30°, PR, RF, SN, (Fe), x5 JT, 45°, UN, RF, SN, (Fe) JT, 30°, IR, RF, CN 0 87 MUDSTONE: fine grained, pale grey with yellow and red staining; thinly bedded; moderately weathered; high SW HQ3 strength
26.79m: colour becoming dark grey with minor yellow 27.0 JT, 30°, UN, RF, CN, disturbed -22 staining by driling and multiple BPs JT, 40°, IR, RF, CN, multiple BPs BP, 30°, PR, RF, CN, x8 100 MW 27.5 CORFLOSS MUDSTONE: fine grained, pale brown grey with yellow and a=0.37 red staining; thinly bedded; moderately weathered, medium 28.0 strength -23 BP, 40°, PR, RF, CN, disturbed 80 by drilling BP, 30°, PR, RF, CN, x2 FZ BP, 30°, PR, RF, CN, disturbed 28.5 by drilling FZ 100 d=0.35BP, 40°, PR, RF, SN, (Fe) 20 29.0 CORFLOSS -24 Extremely weathered QUARTZWACKE: Recovered as FZ, disturbed by drilling GRAVEL: fine to coarse grained, angular to sub-angular, CS, fine to medium grained, sub-angular to angular gravel pale grey brown; with coarse grained sand
QUARTZWACKE: fine grained, orange brown; thickly 48 82 29.5 MW JT, 45°, UN, RF, Filled, fine grained, sub-angular to sub-rounded gravel, black; with fine bedded; moderately weathered; very high strength a=1.00 to coarse grained sand Exploratory hole terminated at 30.00 m -25 Target depth 30.5 31.0 -26 31.5 DRILLING WEATHERING ROCK STRENGTH (Is50 MPa DEFECT ABBREVIATIONS TCR % core run recovered RQD % core run > 100mm long (sound rock fraction only measured) MLC NMLC Coring Very Low (VL) Low (L) Medium (M) High (H) Very High (VH) Extremely High (EH) NQ NQ Coring HQ HQ Coring PQ PQ Coring GROUNDWATER SYMBOLS 3.0-10 = Water level (static)



Client:	Tası	manian Networks	Title:	ЦВ	HBLF-BH02-C		
Project:	Project N	Marinus - Heybridge SI	Title.	ПБ	DLT-DHUZ-C		
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	1/9	





Client:	Tası	manian Networks	Title	LIDI E DUOS O		
Project:	Project M	larinus - Heybridge SI	Title: HBLF-BH02-		LF-B1102-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	2/9



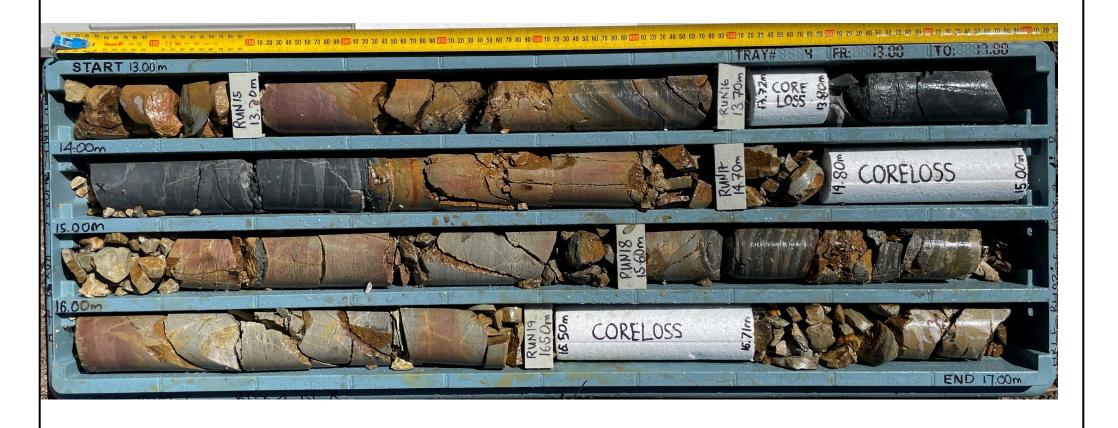


Client:	Ta	asmanian Networks		Title: HBLF-BH02-C			
Project:	Projec	Project Marinus - Heybridge SI		DEI -DI 102-C			
Drawn:	MW	Checked:				Drawing Number:	3/9





Client:	Tası	manian Networks	Title: HRI		RI E RHO2 C	
Project:	Project M	larinus - Heybridge SI	Title: HBLF-BH02-C			
Drawn:	MW	Checked:	Scale: NTS Draw Numl		Drawing Number:	4/9





Client:	Ta	asmanian Networks	Title: HBLF-BH02-C			
Project:	ct: Project Marinus - Heybridge SI		nue.	HBLF-BNUZ-C		
Drawn:	MW Checked: Scale:		NTS	Drawing Number:	5/9	





Client:	nt: Tasmanian Networks			Title	HBLF-BH02-C		
Project:	Project M	Marinus - Heybridge SI	Title: HBLF-BH0		DLT-DI 102-C		
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	6/9





Client:	Tası	manian Networks		Title:	HBLF-BH02-C		
Project:	Project Marinus - Heybridge SI			nue.	110	DLF-DI 102-C	
Drawn:	MW	Checked: Scale: NTS Dr. Nt		Drawing Number:	7/9		





Client:	T	asmanian Networks	Title:	BLF-BH02-C	103 C		
Project:	Projec	t Marinus - Heybridge SI	Title.	TIDEL -DI 102-0			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	8/9	





Client:	Tası	manian Networks	Title: HBLF-BH02-C				
Project:	Project M	Marinus - Heybridge SI	Title.	. 11021-01102-0			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	9/9	

Appendix B3. Test Pit Logs and Photos

IS360318-S018-CG-RPT-0006 49

Engineering Log - Excavation

HB-TP01-C

Project: Heybridge Converter Station Page: 1 of 1 Client: Location: Heybridge Converter Station Site, Heybridge TAS Project No: IS360318 -1

414073.3 m Elevation: 7.29 m 28/01/2022 Contractor: Treloar Transport Started: Easting: AHD Plant: Kobelco SK135 13.5t Excavator Northing: 5452518.8 m Datum: Finished: 28/01/2022

	Plant: Kobelco SK135 13.5t E				•								
<u> </u>	ged By							ientation: N/A					
EX	(CAVA	TION	INFOR	MATI	ON	MAT	TERIAL SUBSTAN	NCE			<u> </u>	1	
Method	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Description :: Plasticity or Particle C Secondary and Minor C	haracteristics,	M. doi:	Consistency Relative Density	5 DCP 10 (blows/	
					_		sand; with low plastici FILL: Gravelly SAND:	.: fine to coarse grained ity silt fine to coarse grained, I, low plasticity silt; with	pale grey, fine to		MD	-	FILL 0.10 : dosage = 63 nSv/hr
			В	7-	- - - 0.5			arse grained, yellow br		ilt,			0.30 : concrete fragments encountered 0.50 : PP = 350 kPa, k = 0.261 W mK, R = 383.142 Ccm/W, in-situ AEOLIAN DEPOSITS
Ш				_	-		with fine grained, ang	ular to sub-angular gra	vel		и р		Moisture Content : 11.6%, dosage = 110 nSv/hr 0.70 : abandonded pipe encountered
			В		- 1.0 -	* * * . *	decreasing Silty GRAVEL: fine to	ging to pale grey brown medium grained, angu icity silt; with fine to coa	ar to sub-angular, p	pale			1.00: PP > 600kPa, k = 0.7448 W/mK, R = 134.261 Ccm/W, in- situ
				6 -	- - -	× · × · > × · × · > × · × · >	Edward W. W.	LOUADTZWA	and an Ormal				Residual Material Moisture Content = 12.5%, dosage = 115 nSv/hr, 1.4 CPS
		-		_	- 1.5 -		SAND: fine to coarse QUARTZWACKE gra Exploratory hole term	QUARTZWACKE: reco grained, grey brown, flavels; with low plasticity inated at 1.60 m	kes of angular		VD		EXTREMELY WEATHERED MATERIAL
				-	- - -		Refusal						
					- 2.0 -								
				5 -	- - - 2.5								
				_	-								
					- 3.0 -								
				4 -	-								
					- 3.5 -								
метно	DD & SUPPO	RT P	ENETRATION	GROI	INDWATE	R	SAMPLES & FI	ELD TESTS	MOISTURE		DENSITY (N-value)	CONSISTENCY (SU) (N-value)
N N E E BH E B E	Natural/Existi zutting Excavator Backhoe Buc Buldozer Ripper	ng ra	No resistance nging to refusal	= V (sta	Vater leve	ı	D Disturbed Sample H B Bulk Sample H	IP Hand Penetrometer IV Hand Vane Shear P: Peak Su R: Residual Su)	D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit	MD M	/ery Loose oose Medium Dense Dense /ery Dense	0 - 4 - 10 - 30 -	4 VS Very Soft < 12 kPa {0-2}



HB-TP01-C Depth Range: 0.00 - 1.60 m



HB-TP01-C Depth Range: 0.00 - 1.60 m



Client:	Tasmanian Networks							
Project:	Project Marinus - Heybridge SI							
Drawn:	MW	Checked:	AC					

Title:		HB-TP01-C	
Scale:	NTS	Drawing Number:	1/1

Engineering Log - Excavation

HB-TP02-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:1 s360318 -1

414027.6 m 6.73 m 28/01/2022 Contractor: Treloar Transport Easting: Elevation: Started: AHD Plant: Kobelco SK135 13.5t Excavator Northing: 5452590.4 m Datum: Finished: 28/01/2022 Logged By: MW GDA2020 Inclination: -90° Orientation: N/A Checked Bv: AC Grid: **EXCAVATION INFORMATION** MATERIAL SUBSTANCE Consistency Relative Density DCP (blows/ 100mm) Samples & SPT Data Penetration **Material Description** Graphic Log Depth (m Method Ξ Field Test Data R & Other Observations SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components FILL: Sandy GRAVEL: fine to medium grained, sub-angular to \angular, dark grey, fine to coarse grained sand FILL: Sandy GRAVEL: fine to coarse grained, sub-angular to angular, yellow brown, fine to coarse grained; with low plasticity clay, 0.10 : dosage = 68 nSv/hr with sub-angular to angular cobbles В D-VD 0.50 : PP > 600kPa, k = 0.0981 W/ mK, R = 1019.7 Ccm/W, in-situ RESIDUAL SOIL Moisture Content = 12%, dosage 0.5 Silty CLAY: low plasticity, orange brown; with fine to medium grained sand = 69 nSv/hr 0.70: abandonded electrical cable encountered, PP > 600 kPa, k = 2.3335 W/mK, R = 42.85 Ccm/W, in-situ moisture content = В 1.0 1.00 : dosage = 77 nSv/hr Not Observed MD Silty SAND: fine to medium grained, orange brown, low plasticity silt; with medium grained, sub-angular to sub-rounded grave 1.70 : PID = 0.5 PPM (hydrocarbon odour) В 2.00 : PID = 0.6 PPM (hydrocarbon 2.0 odour), dosage = 75 nSv/hr Extremely Weathered QUARTZWACKE: recovered as Gravelly SILT: low plasticity, pale grey, mottled white, fine to medium grained gravel sized angular flakes of QUARTZWACKE EXTREMELY WEATHERED MATERIAL D 2.5 2.50 : PID = 4.1 PPM M <Wp 3.00 : PID = 0.2 PPM, dosage = 85 Exploratory hole terminated at 3.00 m nSv/hr METHOD & SUPPORT PENETRATION GROUNDWATER SAMPLES & FIELD TESTS MOISTURE DENSITY (N-value) CONSISTENCY (SU) {N-value} N Natural/Existing cutting E Excavator BH Backhoe Bucket B Buldozer R Ripper D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit 12 kPa (0-2) 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30} Loose Medium Dense Dense Very Dense = Water level (static) = Water inflow



HB-TP02-C Depth Range: 0.00 - 3.00 m



HB-TP02-C Depth Range: 0.00 - 3.00 m



Client:	Tasmanian Networks					
Project:	Project Marinus - Heybridge SI					
Drawn:	MW	Checked:	AC			

Title:		HB-TP02-C	
Scale:	NTS	Drawing Number:	1/1

Engineering Log - Excavation

HB-TP03-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:IS360318 -1

 Contractor:
 Treloar Transport
 Easting:
 414152.6 m
 Elevation:
 8.04 m
 Started:
 31/01/2022

 Plant:
 Kobelco SK135 13.5t Excavator
 Northing:
 5452492.6 m
 Datum:
 AHD
 Finished:
 31/01/2022

 Logged By:
 AV
 Checked By:
 AC
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

LOG	ged By	v: /	AV .	Check	ea B	v: AC	Grid:	GDA2020	Inclination:							NI/A	
\	/C ^\ /^						TERIAL SUBSTANCE			-90°				Orie	entation:	N/A	
Method	Penetration PANS	Groundwater C	Samples & OALI NO SPT Data	RL (m)	Depth (m)	Graphic Log	SOIL TYPE:	Material Description Plasticity or Particle Cladescondary and Minor Co	naracteristics,		Moisture	Consistency Relative Density	DCP (blows/	(D0mm)		Field Test [Other Obser	
1				8 -	_			: fine to coarse grained, grained sand; with ang		r	D	R	9 10	20 15	FILL 0.10 : PID CPS	= 0 PPM, c	osage = 0.8
				_	- - - 0.5 -		FILL: GRAVEL: angula fine to coarse grained	ar to sub-angular, coars sand	e grained, grey; wi	th		MD- D			mK, R = 13 moisture c	359.7 Ccm/	%, PID = 0
			D	7-	- - - 1.0		1.40m: light brown s	and clay cobble presen	t 20mm - 60mm						mK, R = 5 moisture c	7.57 Ccm/W ontent = 7.5	%, PID = 0
					-							MD			PPM, dosa	age = 1.2 Cl	2 S
ш				_	- 1.5 -		Sandy SILT: low plastic	city, light brown mottled	white		М				RESIDUA	L SOIL	
			D	6 -	- 2.0 - -		fine to coarse grained					St					
				_		X X X X X X X X X X X X X X X	Sandy SILT: low plastic with coarse grained, a	city, grey brown, fine to ngular to sub-angular g	coarse grained sai ravel	nd;		VSt					
		-		5 -	- 3.0	*	Gravelly SAND: coarse grained, rounded to su		medium to coarse			D- VD					
				5-	- - - 3.5		Target depth										
					-												
N I E I BH I B I	OD & SUPPC Natural/Existi cutting Excavator Backhoe Buc Buldozer Ripper	ing r	No resistance anging to refusal	▼ = V (sta	Vater level stic)		B Bulk Sample HV	LD TESTS P Hand Penetrometer V Hand Vane Shear P Peak Su R: Residual Su)	MOISTURE D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit	VL L MD D VD	Very I	e im Dense e	I-value)	0 - 4 4 - 10 10 - 3 30 - 5 50 - 1	VS V6 0 S S6 80 F Fi 50 St S1 100 VSt V6	rm	V) {N-value} < 12 kPa {0-2} 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30}



HB-TP03-C Depth Range: 0.00 - 3.00 m



HB-TP03-C Depth Range: 0.00 - 3.00 m



Client:		Tasmanian Networks						
Project:	Pro	oject Marinus - Heyb	ridge SI					
Drawn:	AV	Checked:	AC					

Title:		HB-TP03-C	
Scale:	NTS	Drawing Number:	1/1

Engineering Log - Excavation

HB-TP04-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:IS360318 -1

 Contractor:
 Treloar Transport
 Easting:
 414200.9 m
 Elevation:
 10.20 m
 Started:
 31/01/2022

 Plant:
 Kobelco SK135 13.5t Excavator
 Northing:
 5452441.7 m
 Datum:
 AHD
 Finished:
 31/01/2022

 Logged By:
 AV
 Checked By:
 AC
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Plan Log	it: ged B		Kobelco Sł AV			xcava y: AC	or Northing: 5452441.7 m Datum: AHI Grid: GDA2020 Inclination: -90				shed: 31/01/2022 entation: N/A
EX	CAVA	TIOI	N INFORI	MATI	NC	MAT	ERIAL SUBSTANCE			1	
Method	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log	Material Description SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components	Moisture	Consistency Relative Density	bCP (blows/ 100mm)	Field Test Data & Other Observations
				10 -	-		FILL: Sandy GRAVEL: medium to coarse grained, pale grey, fine to coarse grained sand	D			FILL 0.10 : PID = 0 PPM, dosage = 47 nSv/hr
				_	- 0.5				MD		0.50 : PP = 100 kPa, k=0.3500 W/ mK, R=285.010 Ccm/W, in-situ moisture content = 0.6%
				- 9-	- 1.0 -		0.90m: colour change to light brown aggregate/cobble size decrease				1.00 : PP >600 kPa, k = 0.0213 W m*K, R = 4892.9 Ccm/W, in-situ moisture content = 6.9%, dosage 75 nSv/hr
		pə/	D		-						
Ц		Not Observed	D	-	- 1.5 -		Gravelly SAND: fine to medium grained, orange brown, fine to medium grained gravel; with low plasticity silt	M	MD- D		RESIDUAL SOIL
				8 -	- 2.0	× × × (× × × (× × × × × ×	Sandy SILT: low plasticity, orange brown, fine to coarse grained; with coarse grained, sub-angular to angular gravel				2.00 : dosage = 65 nSv/hr
					- - 2.5	× × × × × × × × ×	2.30m: softer, moist/damp, weathered rock, siltstone, coarse sand with weathered material Sandy CLAY: low plasticity, dark brown; medium to coarse grained sand; with angular to sub-angular gravel of QUARTZWACKE		St- VSt		
			D	-	-						
↓				_	- 3.0 -		Exploratory hole terminated at 3.00 m Target depth				3.00 : desage = 63 nSv/hr
				7 -							
				_	- 3.5 -						
N N cu E E: BH B:	D & SUPP(latural/Exist utting xcavator lackhoe Buo uldozer lipper	ting	PENETRATION No resistance anging to refusal	= V (sta	INDWATE Vater leve	4	SAMPLES & FIELD TESTS	Very Loos Med Den:	ium Dense	0 - 4 4 - 10	80 F Firm 25 - 50 (4-8) 50 St Stiff 50 - 100 (8-15)



HB-TP04-C Depth Range: 0.00 - 3.00 m



HB-TP04-C Depth Range: 0.00 - 3.00 m



Client:	Tasmanian Networks						
Project:	Proje	ect Marinus - Heybridge S	SI				
Drawn:	AV	Checked:	AC				

Title:		HB-TP04-C	
Scale:	NTS	Drawing Number:	1/1

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Engineering Log - Excavation

HB-TP05-C

Project: Heybridge Converter Station Page: 1 of 1

Client: Location: Heybridge Converter Station Site, Heybridge TAS Project No: IS360318 -1 413982.1 m 8.20 m 28/01/2022 Contractor: Treloar Transport Easting: Elevation: Started: AHD Plant: Kobelco SK135 13.5t Excavator Northing: 5452515.4 m Datum: Finished: 28/01/2022 Logged By: MW Checked By: AC GDA2020 Inclination: -90° Orientation: N/A Grid: **EXCAVATION INFORMATION** MATERIAL SUBSTANCE Consistency Relative Density DCP (blows/ 100mm) Penetratior Samples & SPT Data Depth (m) **Material Description** Graphic Log Method RL (m) Field Test Data & Other Observations SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components FILL: Gravelly CLAY: low plasticity, dark grey, fine to medium grained 0.10 : PID = 0 PPM, dosage = 63 gravel; with fine to coarse grained sand FILL: Sandy GRAVEL: fine to coarse grained, sub-angular to angular, pale grey yellow, fine to coarse grained sand; with low plasticity silt, with cobbles nSv/hr В D-VD 0.50 : PP = 350 kPa, k = 0.1218 W/ m*K, R = 826.652 Ccm/W, in-situ 0.5 Moisture content = 9.4%, PID = 0 PPM, dosage = 92 nSv/hr FILL: Silty SAND: fine to coarse grained, black, low plasticity silt, with fine to medium grained, sub-angular to angular gravel В MD Extremely Weathered QUARTZWACKE: recovered as Clayey SILT: EXTREMELY WEATHERED fine to medium grained, pale grey; with fine to medium grained flakes of gravel sized QUARTZWACKE MATERIAL Н 1.00 : PP >600kPa, PID = 0 PPM, dosage = 77 nSv/hr 1.0 Exploratory hole terminated at 1.10 m Refusal 2.0 2.5

METHOD & SUPPORT PENETRATION GROUNDWATER SAMPLES & FIELD TESTS MOISTURE DENSITY (N-value) CONSISTENCY (SU) {N-value} N Natural/Existing cutting E Excavator BH Backhoe Bucket B Buldozer R Ripper < 12 kPa {0-2} 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30} D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit Loose Medium Dense Dense Very Dense = Water level (static)

3.5

= Water inflow



HB-TP05-C Depth Range: 0.00 - 1.10 m



HB-TP05-C Depth Range: 0.00 - 1.10 m



Client:	Tasmanian Networks						
Project:		Project Marinus - Heybri	dge SI				
Drawn:	MW	Checked:	AC				

Title:		HB-TP05-C	
Scale:	NTS	Drawing Number:	1/1

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METHOD & SUPPORT

N Natural/Existing cutting E Excavator BH Backhoe Bucket B Buldozer R Ripper PENETRATION

GROUNDWATER

= Water level (static)

Engineering Log - Excavation

HB-TP06-C

Project: Heybridge Converter Station Page: 1 of 1

Client: Location: Heybridge Converter Station Site, Heybridge TAS Project No: IS360318 -1 414106.5 m 28/01/2022 Contractor: Treloar Transport Easting: Elevation: 11 14 m Started: AHD Plant: Kobelco SK135 13.5t Excavator Northing: 5452387.3 m Datum: Finished: 28/01/2022 Logged By: MW GDA2020 Inclination: -90° Orientation: N/A Checked Bv: AC Grid: **EXCAVATION INFORMATION** MATERIAL SUBSTANCE Consistency Relative Density DCP (blows/ 100mm) Samples & SPT Data Penetration **Material Description** Graphic Log Depth (m Moisture Method Ξ Field Test Data R & Other Observations SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components FILL: Silty Sandy GRAVEL: fine to medium grained, dark grey, low MD plasticity, fine to coarse sand
FILL: Sandy Gravelly CLAY: low plasticity, yellow brown, fine to
coarse grained sand, fine to coarse grained, sub-angular to angular
gravel; with sub-angular to angular cobbles, with boulders up to
250mm (sub-angular to angular) 0.10 : PID =0 PPM, dosage = 70 nSv/hr 11 В 0.50 : PP >600 kPa, k = 0.0589 W/ mK, R = 1697.0 Ccm/W, in-situ moisture content = 2.3%, PID =0 0.5 PPM, dosage = 68 nSv/hr FILL: Silty SAND: fine to medium grained, dark grey, low plasticity silt 1.0 М MD 1.00 : PP = 200 kPa, k = 0.6287 D W/mK, R = 159.061 Ccm/W, in-situ moisture content = 10.5%, PID =0 10 PPM, dosage = 80 nSv/hr 1.20m: with fine to coarse, sub-angular to angular gravel; with boulders up to 250mm

Sandy SILT: low plasticity, pale grey mottled yellow brown; fine to RESIDUAL SOIL coarse grained sand 1.30 : dosage = 70nSv/hr 1.5 1.50 : PP = 350 kPa 1.70m: colour becoming yellow brown mottled pale grey red brown, sand content increasing 1.80 : PP = 300 kPa В St 2.00 : PID =0 PPM, dosage = 70 2.0 nSv/hr M <Wp 2.5 2.50m: colour changing pale grey, mottled yellow 2.60m: increasing sand content D St-VSt 3.00 : PID =0 PPM, dosage = 110 Exploratory hole terminated at 3.00 m nSv/hr 3.5

MOISTURE

D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit DENSITY (N-value)

Loose Medium Dense Dense Very Dense CONSISTENCY (SU) {N-value}

12 kPa (0-2) 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30}

SAMPLES & FIELD TESTS



HB-TP06-C Depth Range: 0.00 - 3.00 m



HB-TP06-C Depth Range: 0.00 - 3.00 m



Client:	Tasmanian Networks						
Project:	Project Marinus - Heybridge SI						
Drawn:	MW	Checked:	AC				

Title:		HB-TP06-C	
Scale:	NTS	Drawing Number:	1/1

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Engineering Log - Excavation

HB-TP07-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:IS360318 -1

 Contractor:
 Treloar Transport
 Easting:
 414154.1 m
 Elevation:
 13.59 m
 Started:
 28/01/2022

 Plant:
 Kobelco SK135 13.51 Excavator
 Northing:
 5452362.9 m
 Datum:
 AHD
 Finished:
 28/01/2022

 Logged By:
 MW
 Checked By:
 AC
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Logged By: MW Checked E EXCAVATION INFORMATION					ed B	y: AC	AC Grid: GDA2020 Inclination: -90° Orientation: N/A				
Method		Groundwater C		RL (m)	Depth (m)	Graphic Log	ERIAL SUBSTANCE Material Description SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components	Moisture	Consistency Relative Density	bCP (blows/ 100mm)	Field Test Data & Other Observations
				-	-		FILL: Silty Sandy GRAVEL: fine to medium grained, dark grey, low \plasticity, fine to coarse grained sand FILL: Clayey GRAVEL: fine to coarse, grained sub-angular, yellow brown, low plasticity clay; with fine to medium grained sand			w = = 0	FILL 0.10 : PID =0 PPM, dosage = 45 nSv/hr
			В	13 -	- - 0.5		0.35m: colour becoming yellow brown mottled red FILL: Gravelly Sandy CLAY: low to medium plasticity, grey brown, fine to coarse grained sand, fine to medium grained gravel	M <wp< td=""><td>н</td><td></td><td>0.50 : PP >600kPa, k = 0.2740 W/ mK, R = 364.921 Ccm/W, in-situ Moisture content = 2.0%, PID =0 PPM, dosage = 52 nSv/hr</td></wp<>	н		0.50 : PP >600kPa, k = 0.2740 W/ mK, R = 364.921 Ccm/W, in-situ Moisture content = 2.0%, PID =0 PPM, dosage = 52 nSv/hr
					-		Silty SAND: fine grained, dark grey, low plasticity silt				AEOLIAN DEPOSITS 1.00 : PP = 300 kPa, k = 1.0899 W/
			В	-	- 1.0 -				L		mK, R = 91.75 Ccm/W, in-situ moisture content = 3.7%, PID =0 PPM, dosage = 80 nSv/hr
В		Not Observed		12 -	- - 1.5 -		Gravelly SAND: fine to medium grained, orange brown with minor yellow mottling; with low plasticity clay; trace silt	_			RESIDUAL SOIL
			В	-	- - - 2.0			М			2.00 : PID =0 PPM, dosage = 47 nSv/hr
				_					MD		
			D	_ 11 -	- 2.5 -		2.40m: colour becoming orange brown with minor white and black mottling, increaing clay content				
—				- - -	- - 3.0 -		Exploratory hole terminated at 3.00 m Target depth				3.00 : PID =0 PPM, dosage = 43 nSv/hr
					- - - 3.5						
				10 -	-						
N N E E BH E B E	DD & SUPPC latural/Existi utting xcavator Sackhoe Buc suldozer Ripper	ng ra	PENETRATION No resistance anging to refusal	▼ = W (sta	NDWATE /ater level stic)	ı	SAMPLES & FIELD TESTS D Disturbed Sample HP Hand Penetrometer B Bulk Sample HV Hand Vane Shear W = Moist L U Undisturbed Sample (P: Peak Su R: Residual Su) U Undisturbed Sample W Water Sample W Water Sample	Very Loos Medi Dens	um Dense	0 - 4 4 - 10	0 S Soft 12 - 25 {2-4} 80 F Firm 25 - 50 {4-8} 50 St Stiff 50 - 100 {8-15}



HB-TP07-C Depth Range: 0.00 - 3.00 m



HB-TP07-C Depth Range: 0.00 - 3.00 m



Client:	Tasmanian Networks					
Project:	Pr	roject Marinus - Heyb	ridge SI			
Drawn:	MW	Checked:	AC			

Title:		НВ-ТР07-С			
Scale:	NTS	Drawing Number:	1/1		

N Natural/Existing cutting E Excavator BH Backhoe Bucket B Buldozer R Ripper

= Water level (static)

Engineering Log - Excavation

HB-TP08-C

< 12 kPa {0-2} 12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30} > 200 kPa {>30}

Project: Heybridge Converter Station Page: 1 of 1

Client: Location: Heybridge Converter Station Site, Heybridge TAS Project No: IS360318 -1 413932.1 m 7.75 m 31/01/2022 Contractor: Treloar Transport Easting: Elevation: Started: AHD Plant: Kobelco SK135 13.5t Excavator Northing: 5452687.3 m Datum: Finished: 31/01/2022 Checked By: AC GDA2020 Inclination: -90° Orientation: N/A Grid: Logged By: AV **EXCAVATION INFORMATION** MATERIAL SUBSTANCE Consistency Relative Density DCP (blows/ 100mm) Penetratior Samples & SPT Data Depth (m) **Material Description** Graphic Log Moisture Method RL (m) Field Test Data & Other Observations SOIL TYPE: Plasticity or Particle Characteristics, Colour, Secondary and Minor Components Sandy GRAVEL: medium grained, grey, fine to coarse grained sand D-M MD Silty CLAY:high plasticity, orange brown mottled white; trace fine to RESIDUAL SOIL × medium grained sand 0.50 : PP = 120 kPa, k = 1.3582 W/ mK ,R = 73.63 Ccm/W, in-situ moisture content = 40.4%, PID =0 PPM, dosage = 1.0 CPS 0.5 В 1.00 : PP = 180 kPa, k = 0.8075 W/ mK, R = 123.841 Ccm/W, in-situ moisture content = 39%, PID =0 1.0 PPM, dosage = 1.0 CPS VSt-H М 6 2.00 : PID =0 PPM, dosage = 0.9 2.0 Clayey SILT: high plasticity, red-brown; trace fine to medium grained sand 2.5 3.00 : PID =0 PPM, dosage = 0.8 CPS Exploratory hole terminated at 3.00 m 3.5 METHOD & SUPPORT PENETRATION GROUNDWATER SAMPLES & FIELD TESTS MOISTURE DENSITY (N-value) CONSISTENCY (SU) {N-value}

D = Dry M = Moist W = Wet Wp = Plastic Limit WI = Liquid Limit

Loose Medium Dense Dense Very Dense