



Client:	Tas	smanian Networks		Title:	L			
Project:	Project l	Marinus - Heybridge SI	nus - Heybridge SI		НВ-ВН06-С			
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	3/6	



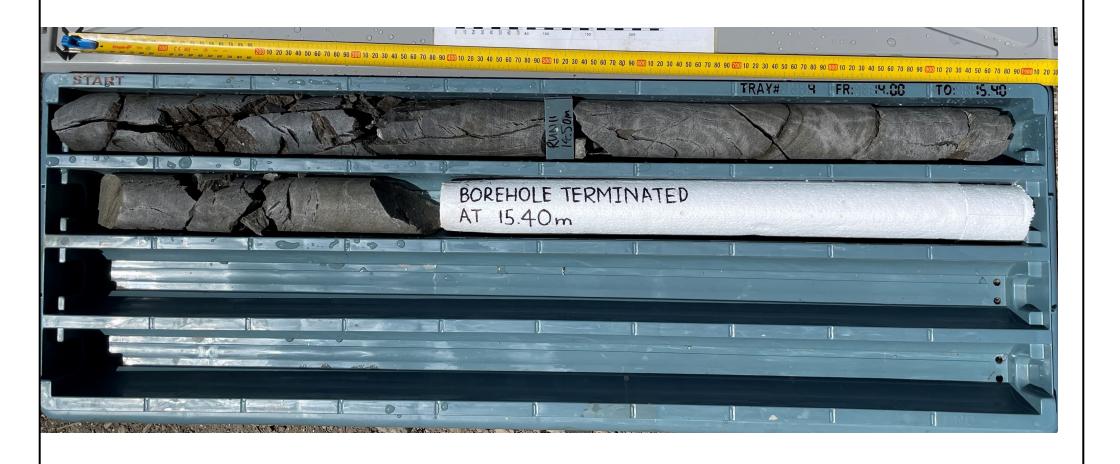


Client:	Tası	manian Networks	Title:	Ц	B-BH06-C	
Project:	Project N	Marinus - Heybridge SI	Title.	П	Б-БПОО-С	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	4/6





Client:	Tas	smanian Networks		Title:	L		
Project:	Project	Marinus - Heybridge SI	nue.	HB-BH06-C			
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	5/6





Client:	Tas	manian Networks	Title:		HB-BH06-C	
Project:	Project N	Marinus - Heybridge SI	nue.	'	IB-BI 100-C	
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 Bv:
 MW
 Checked Bv:
 AC.
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Plan Logg	t: ged B		Hanjin D&I MW		ed B	y: AC	Northing: Grid:	5452650.9 m GDA2020	Datum: Inclination:	-90°				Finisl Orien	tation:	19/02/2022 1/A
			N INFOR			1	ERIAL SUBSTAN	ICE								
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	bCP (blows/			ield Test Data her Observations
			D	5 -	- - - 0.5 -		SAND: fine to medium rootlets 0.10m: colour becon 0.50m: reduced silt of	ning pale yellow browr							MARINE DE	POSITS
4			SPT N=5 2,2,3	_ 4-	- 1.0 - 1.5						М	L				
H		•	D	3-	- 2.0 2.5		grained content	ing fine to coarse grair								
			SPT N=27 3,10,17		- 3.0		Gravelly SAND: fine to grained, sub-angular to				W	MD D				
				_	- 3.5 - - - - 4.0	***** ***** ***** ****	Cont	tinued as cored hole fr	om 3.50m					_		
				1 -	- 4.5 - - - - 5.0	****** ****** ***** *****										
				0 -	- 0.0	× × × × × × × × × × × × × × × × × × ×										
				-1 -	ŀ	× × × × × × × × × × × × × × × × × × ×										
				-2 -	-	××××× ××××× ××××× ××××× ××××× ××××× ××××										
N Na cu E Ex BH Ba	D & SUPPo atural/Exist atting ccavator ackhoe Bu uldozer ipper	ting r	PENETRATION  No resistance anging to refusal	▼ = V (sta	INDWATE Vater leve atic) Vater inflo	4	B Bulk Sample H\	LD TESTS  Hand Penetrometer  Hand Vane Shear  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	-value)	0 - 4 4 - 10 10 - 30 30 - 50 50 - 100	VS Very S Soft F Firm St Stiff	12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} Stiff 100 - 200 {15-30

### **Engineering Log - Cored Borehole**

HBLF-BH01-C

Project:Heybridge Converter StationPage:2 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:13360318-1

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

	ıt:		Han	jin D&B	8-D		Northing:	5452650.9 m		Dat	um:	,	AHD			Finished:	09/02/2022	
Log	ged E	Зу:	MW		Checked By:	AC	Grid:	GDA2020		Inc	inati	on: -	90°			Orientation:	N/A	
DRI	LLIN	IG		MATE	RIAL SUBS	TANCE						ROC	ΚM	ASS [	DEFE	CTS		
Method	Groundwater/ Water Loss (%)	RL (m)	Depth (m)	Graphic Log	(texture,	TYPE : Colo	tion of Strata our, Grain size, S eral composition, ation, major defe	hardness	Weathering	Estim Strei Is(50)	igth MPa) xial	Point Load Strength Index Is(50) (MPa)	RQD (%)	Def Spac (mi	cing m)	additional (type, inclina roughnes	acriptions and observations ation, planarity, ss, coating, ess, other)	General
						Starting c	oring from 3.50	m										
		5 -	- - - 0.5															
			-															
			1.0  															
		4 -	- - 1.5 -															
		-	- - - 2.0															
		3 -	- - - 2.5															
			- - -															
			- 3.0 - -															
1		2 -	- - 3.5 -		rounded, pale g	rey (Quartz	ained, sub-angul wacke and Qua	rtz)										
		-	- - 4.0 -	× × × × × × × × × × × × × × × × × × ×	staining; mediu externely high s	m bedded; s strength	ned, grey with m slightly weathere grey with very m	ed; high to	SW				0 100			JT, 35°, PR, RF JT, 60°, UN, RF JT, 30°, PR, RF		
		1 -	- - - 4.5	× × × × × × × × × × × × × × × × × × ×	streaking	zeceg s	, c,						83			JT, 30°, PR, RF JT, 30°, UN, RF		
		_	- - - 5.0	* * * * * * * * * * * * * * * * * * *							ı			-				
			- 5.0	* * * * * * * * * * * * * * * * * * *									49			FZ FZ JT, 10°, UN, RF		
	20	0 -	- 5.5 -	× × × × × × × × × × × × × × × × × × ×									7 [			JT, 10°, UN, RF BP, 50°, PR, RF	F, CN, x13 F, CN	
		-	- - 6.0 -	* * * * * * * * * * * * * * * * * * *					FR				$\parallel$			JT, 80°, UN, RF	, UN	
		-1 -	- - - 6.5 -	· · · · · · · · · · · · · · · · · · ·									40			JT, 5°, UN, RF, BP, 45°, PR, RF JT, 80°, PR, RF	F, CN, x7	
		-	- - - 7.0	× × × × × × × × × × × × × × × × × × ×								a=6.90				JT, 30°, UN, RF JT, 30°, UN, RF		
		-2 -	- - - - 7.5	× × × × × × × × × × × × × × × × × × ×									47			BP, 40°, PR, RI		
			-	××××× ××××× ×××××									$\parallel$				F, CN, disturbed	
ш				RILLING			WEATHERING	ROCK ST	RENGTH	(Is50 MP	)				::	DEFECT ABBREVIATIONS		
ILC NN NQ C HQ C PQ C	oring oring		RQI (sou		n > 100mm long ion only measured)	XW extre HW highl DW distin MW mode	ual soil mely weathered y weathered city weathered erately weathered tly weathered	0.03-0.1 0.1-0.3 0.3-1.0 1.0-3.0 3.0-10 > 10	Very Low Low (L) Medium High (H) Very Higl Extremel	M) (VH)	n	TYPE BP Beddir JT Joint SM Seam CS Crush CZ Crush SZ Shear	ed Seam	FZ Fractu VN Vein FL Foliatio VO Void DB Drillin	on	CN Clean C CT Coating IF SN Stain P VR Veneer S	U Curved VR V R Irregular RF R R Planar S Sm T Stepped POL	GHNESS 'ery Roug lough nooth Polished lickenside

### **Engineering Log - Cored Borehole**

HBLF-BH01-C

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

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

Plan	ıt:		Han	ijin D&E	8 8-D		Northing:	5452650.9 m		Datum:		AHD		Finished:	09/02/2022	
Log	ged E	By:	MW	′ (	Checked By:	AC	Grid:	GDA2020		Inclinat	ion: -	90°		Orientation:	N/A	
DRI	LLIN	G		MATI	ERIAL SUBST	TANCE					ROC	K M	ASS DEFI	ECTS		
Method	Groundwater/ Water Loss (%)	RL (m)	Depth (m)	Graphic Log	(texture, fa	YPE : Color abric, miner	on of Strata ur, Grain size, Sl al composition, I tion, major defec	hardness	Weathering	Estimated Strength Is(50) (MPa)  - Axial - Diametral	Point Load Strength Index Is(50) (MPa)	RQD (%)	Defect Spacing (mm)	additional (type, inclina roughne	scriptions and observations ation, planarity, ss, coating, sss, other)	General
	20	-3 -	- 8.5 - 9.0 - 9.5 - 10.0	X X X X X X X X X X X X X X X X X X X	QUARTZWACKE staining; medium externely high sti	n bedded; sl	ed, grey with mi ightly weathered	nor yellow 1; high to			a=5.00	100 100		BP, 40°, PR, RI JT, 5°, PR, RF, JT, 20°, PR, RF JT, 20°, PR, RF JT, 5°, PR, RF, JT, 5°, PR, RF, JT, 5°, PR, RF, JT, 5°, PR, RF, JT, 45°, PR, RF, JT, 45°, PR, RF, JT, 45°, PR, RF, JT, 20°, UN, RF, BP, 30°, PR, RI BP, 30°, PR, RI PR, 80°, PR, RF,	F, CN, x4 F, CN F, CN F, CN CN F, CN F, CN F, CN, x5 CN CN CN CN CN F, CN F, CN	
		-5 -	- - - 10.5 -	× × × × × × × × × × × × × × × × × × ×	10.54m: minor	yellow stair	ning		FR			0 100	-	BP, 30°, PR, RI JT, 20°, UN, RF JT, 45°, IR, RF, JT, 30°, UN, RF BP, 40°, PR, RI by drilling FZ, disturbed b	F, Filled, (sand) CN F, VNR, (clay) F, CN, disturbed	
HQ3		-6 -	- 11.0 - 11.5 - 12.0	× × × × × × × × × × × × × × × × × × ×							2=42.00	0 000	-	BP, 30°, UN, RI  BP, 30°, PR, RI  JT, 30°, UN, RR  JT, 60°, PR, RF  BP, 40°, PR, RI  BP, 40°, PR, RI  FZ, disturbed b  JT, 45°, PR, RF  JT, 30°, UN, RF  JT, 20°, UN, RF  JT, 20°, UN, RF	F, VNR, (clay) F, SN, (Fe), x6 F, CN F, CN, x4 F, CN y drilling F, CN	
	40	-7 <del>-</del>	- 12.5 - 13.0 - 13.5	****** ***** ***** ***** ***** *****	12.96m: minor	yellow stair	ning		sw		a=12.00	0 26	-	JT, 20°, PR, RF BP, 45°, PR, RI BP, 40°, PR, RF JT, 30°, PR, RF JT, 30°, PR, RF and gravel) JT, 30°, PR, RF BP, 30°, PR, RI FZ, distribed b JT, 60°, PR, RF	F, CN F, CN F, CN F, CN F, Filled, (sand F, CN, x4 y drilling F, SN, (Fe)	
		-	10.0	****** ****** ***** *****	13.70m: reduci		•					100		JT, 20°, IR, RF, JT, 30°, PR, RF JT, 25°, PR, RF BP, 40°, PR, RF by drilling JT, 70°, PR, RF, BP, 30°, PR, RF, JT, 15°, IR, RF, JT, 10°, UN, RF,	F, CN F, CN F, SN, disturbed F, SN, (Fe) F, CN, x4 CN, x3	
		-9 <del>-</del>	- 14.5 - 15.0	***** ***** ***** *****	14.70m: minor	yellow stair	ning		FR					BP, 30°, PR, RI JT, 45°, UN, RF JT, 60°, UN, RF	F, CN F, CN	
		-10 - -	- - - 15.5 -	×××× ×××× ×××× ×××× ×××× ×××× ××××	staining	ised yellow	oale grey with yo	vith minor	sw			28		JT, 60°, IR, RF,  BP, 35°, PR, RI by drilling  JT, 90°, UN, RF BP, 40°, PR, RI JT, 10°, UN, RF JT, 30°, IR, RF,	F, CN, disturbed F, SN, (Fe) F, CN F, SN, (Fe) SN, (Fe)	
NMLC NM NQ NQ C NQ PQ C	oring	GF er level	TCF RQ (soi ROUNDW (static)	RILLING  R % core run  D % core ru  und rock fract	in > 100mm long tion only measured)	RS residu XW extrem HW highly DW distinc MW moder	WEATHERING al soil lely weathered weathered tity weathered ately weathered ately weathered veathered	ROCK S1 0.03-0.1 0.1-0.3 0.3-1.0 1.0-3.0 3.0-10 > 10	Very Low Low (L) Medium High (H) Very Hig	(M)	TYPE BP Beddi JT Joint SM Seam CS Crush CZ Crush SZ Shear	n ned Seam ned Zone	g FZ Fracture Zone VN Vein FL Foliation VO Void DB Drilling Break HB Handling Brea	CN Clean C CT Coating II SN Stain F VR Veneer S FILLED Filled U	S  LANARITY ROUGHN U Curved W Keyr R I Regular R Rough R Planar S Smooth T Steepped POL Polis N Undulated SL Slicker	Rough 1 shed

### **Engineering Log - Cored Borehole**

HBLF-BH01-C

Project:Heybridge Converter StationPage:4 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:13360318-1

414163.8 m 5.43 m 08/02/2022 Contractor: Tasmanian Drilling Easting: Elevation: Started: AHD Plant: Hanjin D&B 8-D Northing: 5452650.9 m Datum: Finished: 09/02/2022

Log	ged E	By:	MW	(	Checked By: AC Grid: GDA2020	Inclination: -90° Orientation: N/A
DRI	LLIN	G		MATE	ERIAL SUBSTANCE	ROCK MASS DEFECTS
Method	Groundwater/ Water Loss (%)	RL (m)	Depth (m)	Graphic Log	Description of Strata  ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, major defect type)	Estimated Strength Is(50) (MPa)   Point Load Strength Index Is(50) (MPa)   Poi
		-11 -	- - - 16.5	***** ****** ****** ******	QUARTZWACKE: fine grained, grey with minor yellow staining; medium bedded; slightly weathered; high to externely high strength	BP, 40°, PR, RF, CN  SM, sand and sub-angular to  angular gravel  JT, 10°, UN, RF, SN, (Fe)  JT, 30°, UN, RF, SN, (Fe), x2
		-12 =	- 17.0 - 17.5	****** ****** ****** ****** ****** ******	sw 17.56m: quartz/calcite deposit	d=0.60  d=0.60
		-13 -	- 18.0 - 18.5 - 18.5	****** ****** ****** ****** ******		BP, 40°, PR, RF, SN, (Fe) JT, 80°, UN, RF, CN BP, 40°, PR, RF, SN, (Fe) JT, 45°, PR, RF, SN, (Fe) JT, 35°, IR, RF, SN, (Fe) JT, 5°, UN, RF, SN, (Fe) JT, 60°, UN, RF, SN, (Fe) JT, 20°, PR, RF, SN, (Fe) JT, 20°, PR, RF, SN, (Fe) JT, 30°, UN, RF, SN, (Fe) JT, 30°, UN, RF, SN, (Fe)
		-14 -	- 19.0 	××××× ××××× ××××× ××××× ××××× ××××× ×××××	CORELOSS QUARTZWACKE: fine grained, pale grey with minor yellow staining and dark brown streaking; thinly to medium bedded; slightly weathered; very high strength	JT, 35°, PR, RF, SN, (Fe) JT, 50°, PR, RF, CN JT, 30°, UN, RF, CN JT, 50°, UN, RF, Filled, (sand) JT, 10°, IR, RF, CN BP, 30°, PR, RF, CN JT, 40°, IR, RF, Filled, sand, subangular to sub-rounded gravel JT, 10°, IR, RF, CN JT, 70°, PR, RF, CN JT, 70°, PR, RF, CN JT, 20°, UN, RF, CN BP, 30°, UN, RF, CN, x4
НОЗ	40	-15 -	- 20.0 20.5	* * * * * * * * * * * * * * * * * * *	20.20m: very minor yellow staining	JT, 10°, UN, RF, SN, (Fe) disturbed by drilling  BP, 30°, UN, RF, CN, x11, 30, CN 60°, IR, RF, CN
		-16 -	- 21.0 - 21.5	******* ******* ******* ******* ******	20.85m: highly bedded, colour becoming dark grey	BP, 40°, PR, RF, CN JT, 45°, PR, RF, CN BP, 60°, PR, RF, CN  JT, 50°, PR, RF, CN JT, 0°, PR, RF, CN BP, 30°, PR, RF, CN, x4 JT, 90°, IR, RF, CN, x4
		-17 -	- 22.0 - 22.5	*****	CORELOSS  QUARTZWACKE: fine grained, pale grey and white; thinly to medium bedded; fresh; medium to high strength  22.35m: calcite/carbonate seam colour becoming dark grey with minor white streaking  MUDSTONE: fine grained, dark grey and white streaking, thinly to medium bedded; medium strength	JT, 5°, PR, RF, CN JT, 40°, PR, RF, CN, disturbed by drilling JT, 20°, IR, RF, CN  JT, 20°, IR, RF, CN  FZ, disturbed by drilling  JT, 45°, IR, RF, CN  BP, 30°, PR, RF, CN  BP, 30°, PR, RF, CN  BP, 30°, PR, RF, CN
		-18 -	- 23.0 	×	22.90m: colour becoming black CORELOSS  Gravelly CLAY: low plasticity, fine to medium grained, sub-angular to sub-rounded gravel, black MUDSTONE: fine grained, dark grey; laminated to very thinly bedded; fresh; medium to high strength 23.30m: colour becoming grey  CORELOSS	FZ, disturbed by drilling
MLC NI Q NQ C Q HQ C Q PQ C	oring oring = Wate	GF	TCF RQE (sou ROUNDW.		WEATHERING   ROCK STRENGT	w (VL) TYPE BP Bedding Parling FZ Fracture Zone CN Clean CU Curved VR Very Rough (M) JT Joint VN Vein CT Coating IR Irregular RF Rough ) SM Seam FL Foliation SN Stain PR Planar S Smooth

### **Engineering Log - Cored Borehole**

HBLF-BH01-C

Project:Heybridge Converter StationPage:5 of 5Client:Location:Heybridge Landside Landfall Site, Heybridge TASProject No:15360318 -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
 Grid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Pla:		_		jin D&B			Northing:	5452650.9 m		Datum:		AHD		Finished:	09/02/2022	
<u> </u>	ged E	_	MW		Checked By:		Grid:	GDA2020		Inclination		90°		Orientation:	N/A	
DR	ILLIN	G		MATE	ERIAL SUBS <sup>-</sup>	TANCE					ROC	K M	ASS DEFI	ECTS		
Method	Groundwater/ Water Loss (%)	RL (m)	Depth (m)	Graphic Log	(texture, f	YPE : Colour abric, mineral	n of Strata , Grain size, S composition, on, major defe	hardness	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, ss, other)	General
		-19 -	- 24.5 		MUDSTONE: fir thinly bedded; fr 24.30m: colou	esh; medium	to high strengt	ated to very th				0 0 100 86		FZ, disturbed b  BP, 30°, PR, RI  BP, 30°, PR, RI  SM, Calcite BP, 30°, PR, RI	F, CN F, CN	
		-20 -	- 25.0 - - - - - 25.5 -						FR			100		FZ, disturbed b  JT, 45°, PR, RF  BP, 30°, PR, RI  BP, 30°, PR, RI  JT, 10°, IR, RF,  JT, 70°, UN, RF	y drilling F, CN F, CN F, CN, x7 CN	
		-21 -	- 26.0 - 26.0 	×	CORELOSS MUDSTONE: fir bedded; fresh; h	igh strength		to medium				0 0		☐ JT, 15°, UN, RF BP, 20°, PR, RI JT, 35°, PR, RF JT, 35°, IR, RF,	F, CN F, CN F, CN CN, x3	
HQ3	40	-22 -	- 27.0 - 27.0 27.5		26.70m: CaCC 27.35m: CaCC						a=0.64 a=4.00			BP, 50°, PR, RI BP, 50°, PR, RI by drilling FZ, disturbed b BP, 50°, PR, RI	F, CN, disturbed	
		-23 -	- 28.0 - 28.0 						FR			13		JT, 30°, IR, RF,  JT, 80°, IR, RF,  BP, 30°, PR, RI  JT, 80°, IR, RF,	CN F, CN CN	
		-24 -	- 29.0 - 29.0 29.5 29.5									17		by drilling  BP, 40°, PR, RI  BP, 40°, PR, RI  CN  CS, sand, fine angular to angular to angular	y drilling F, CN, disturbed F, CN, x4 F, CN, x9, 30-40, grained, sub- llar gravel	
		-25 <b>-</b>	- 30.5		Exploratory hole Target depth	terminated a	t 30.00 m							CS, sand, fine angular to angu JT, 30°, UN, RF CS, clay, fine to sand and fine g angular to angu	ular gravel F, CN o coarse grained grained, sub-	
		-26 <b>-</b> -	- - 31.5 - -													
NMLC N NQ NQ 0 HQ HQ Q PQ PQ 0	Coring Coring = Wate		TCR RQE (sou	RILLING  R % core run  D % core rui  Ind rock fract  ATER SYMB	n > 100mm long ion only measured)	RS residual XW extremel HW highly w DW distinctly MW moderate	y weathered	0.03-0.1 0.1-0.3 0.3-1.0 1.0-3.0 3.0-10	Very Lov Low (L) Medium High (H) Very Hig	(M)	TYPE BP Beddin JT Joint SM Seam CS Crush CZ Crush SZ Shear	ed Seam ed Zone	FZ Fracture Zone VN Vein FL Foliation VO Void DB Drilling Break HB Handling Brea	CN Clean C CT Coating II SN Stain F VR Veneer S FILLED Filled U	PLANARITY ROUGI SU Curved VR Ver R Irregular RF Rou RP Planar S Smort IT Stepped POL Po	HNESS y Rough ugh oth olished kensided

# **Engineering Log - Excavation**

HBLF-BH02-C

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

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

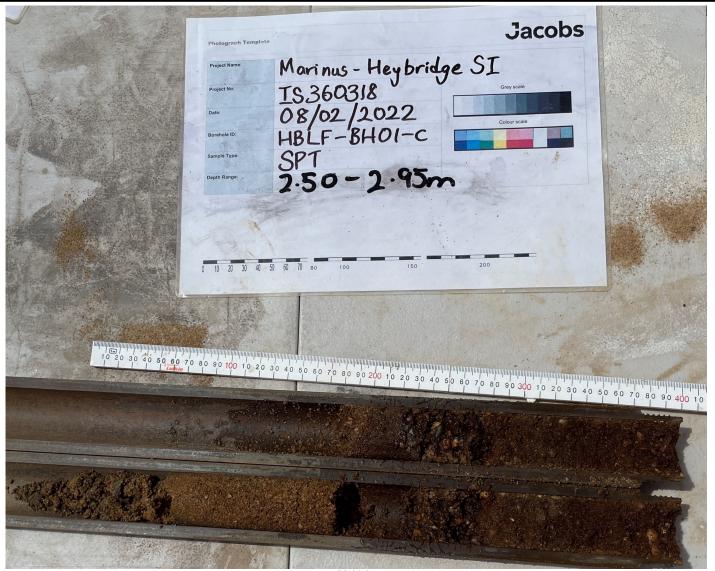
 Plant:
 Hanjin D&B 8-D
 Northing:
 5452577.0 m
 Datum:
 AHD
 Finished:
 11/02/2022

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

Plant:		Hanjin D&E				Northing:	5452577.0 m	Datum:	AHD				nished		022
Logged	Ву:	MW	Check	ed B	y: AC	Grid:	GDA2020	Inclination:	-90°			0	rientati	on: N/A	
EXCAV	/ATIO	N INFORI	MATIO	NC	MAT	ERIAL SUBSTAN	NCE				1				
Method	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Description  :: Plasticity or Particle Cl Secondary and Minor Co	naracteristics,		Moisture	Consistency Relative Density	bCP blows/		Field Tes & Other Obs	at Data servations
1			5 -	-	× × ×	Silty GRAVEL: fine to brown, low plasticity s	medium grained, sub-a	ngular to angular, r	ed	D-M	MD		MAR	INE DEPOSIT	S
					****×		vellow brown; trace silt								
	rved		_	- 0.5 -											-
¥ H	Not Observed			_						М	L				
	Š	SPT N=R	4 -	- 1.0 -											-
		3, 23/20mm		-							D- VD				
<b>+</b>			-	- 1.5 -	<u>(1900)</u>	Con	ntinued as cored hole fro	m 1.50m			VD		$\parallel$		
				-											
			3 -	- 2.0	× × × × × ×										-
				-	× × × × × ×										
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METHOD & SUF  N Natural/E: cutting E Excavator	xisting	No resistance ranging to refusal	GROU	INDWATE	n.	SAMPLES & FIE  D Disturbed Sample H  R Rulk Sample H	IP Hand Penetrometer	MOISTURE  D = Dry M = Moist	VL	Very I	NSITY (N	0	-4 VS -10 S	CONSISTENC  Very Soft Soft	Y (SU) {N-value} < 12 kPa {0-2}
E Excavator BH Backhoe I B Buldozer R Ripper	Bucket	VE E	- (sta			SPT SPT Sample (F U Undisturbed Sample E Enviro Sample	IV Hand Vane Shear P: Peak Su R: Residual Su)	W = Woist W = Wet Wp = Plastic Limit Wl = Liquid Limit	MD D VD	Loose Medit Dense Very I	ım Dense e	1	- 10 S 0 - 30 F 0 - 50 St 0 - 100 VSt	Firm Stiff Very Stiff	12 - 25 {2-4} 25 - 50 {4-8} 50 - 100 {8-15} 100 - 200 {15-30}
		H VH	= V	Vater inflo	w	W Water Sample							H	Hard	> 200 kPa (>30)
								<u> </u>							



Client:	Tası	manian Networks	Title:	ЦΒ	BLF-BH01-C		
Project:	Project N	Narinus - Heybridge SI	Title.	ПБ	DLT-DHUI-C		
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	1/9	



Multiple

Client:	Tası	manian Networks	Title:	ЦВ	SLF-BH01-C	
Project:	Project N	Narinus - Heybridge SI	Title.	ПБ	SET-DHUI-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	2/9





Client:	Та	asmanian Networks	Title:	ш	BLF-BH01-C	
Project:	Project	: Marinus - Heybridge SI	riue.	П	DLT-DNU I-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	3/9





Client:	Tas	smanian Networks	Title:	Ш	BLF-BH01-C	
Project:	Project I	Marinus - Heybridge SI	riue.	П	DLT-DHUI-C	
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	4/9





Client:	Tası	manian Networks	Title:	υο	UDI E DUO1 C		
Project:	Project M	larinus - Heybridge SI	Title: HBLF-BH01-C				
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	5/9	





Client:	Tası	manian Networks	Titl	0.	ЦΒ	LF-BH01-C	
Project:	Project M	larinus - Heybridge SI	110	e.	ПБ	LF-DHUI-C	
Drawn:	MW	Checked:	Sca	ale:	NTS	Drawing Number:	6/9





Client:	Tasmanian Networks			Title	HBLF-BH01-C		
Project:	Project	ct Marinus - Heybridge SI		H	DEF-DI IU I-C		
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	7/9





Client:			Title:	ЦД	HBLF-BH01-C		
Project:	oject: Project Marinus - Heybridge SI		Title.	HBLF-BNUI-C			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	8/9	





Client:	Tas	smanian Networks	Title: HBLF-BH01-			C	
Project:	Project I	Marinus - Heybridge SI		Title.	e: HBLF-BH01-C		
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, HW 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 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 vO Void
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

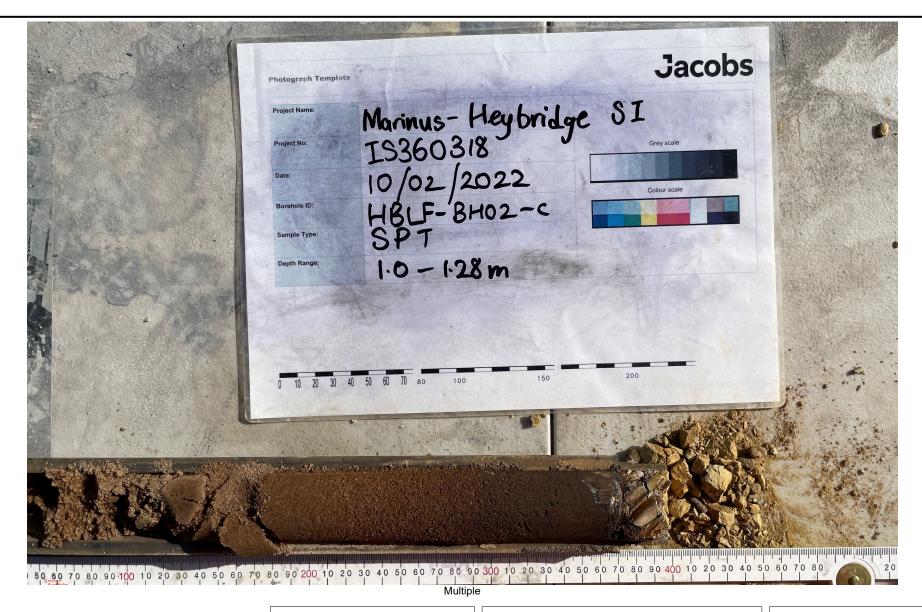
Contractor: Tasmanian Drilling 414287 2 m Elevation: 5 11 m Started: 10/02/2022 Easting: AHD Plant: Hanjin D&B 8-D Northing: 5452577.0 m Datum: Finished: 11/02/2022 GDA2020 Orientation: N/A Logged By: MW Checked By: AC Grid: Inclination: -90° **DRILLING** MATERIAL SUBSTANCE **ROCK MASS DEFECTS** Estimated 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 QUARTZWACKE: fine grained, pale grey with orange yellow staining; thinly bedded; moderately to highly -21 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, substaining
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:	HBLF-BH02-C			
Project:	Project M	Marinus - Heybridge SI	Title.	ПО	LF-DHUZ-C		
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	1/9	





Client:	Tası	manian Networks	Title:		HBLF-BH02-C		
Project:	oject: Project Marinus - Heybridge SI			Title.	HDLF-DHUZ-C		
Drawn:	MW	Checked:		Scale:	NTS	Drawing Number:	2/9



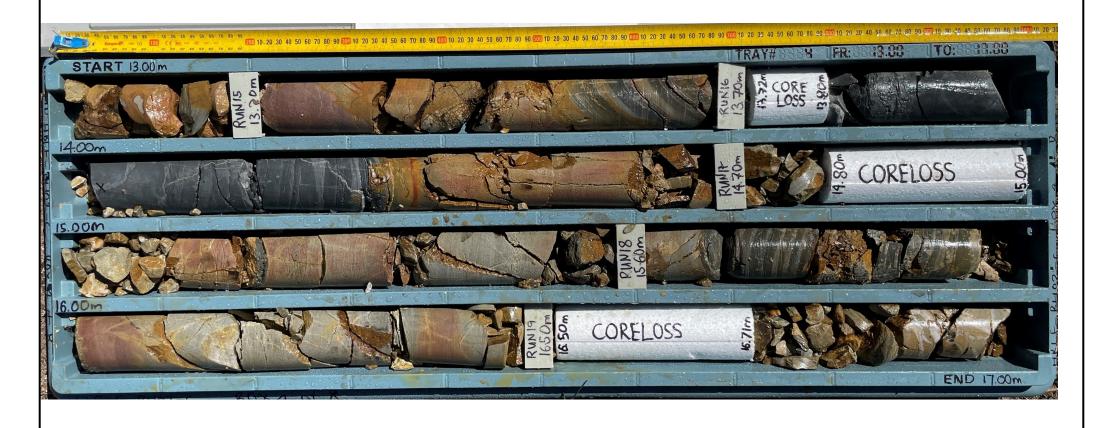


Client:	lient: Tasmanian Networks		Title:	HBLF-BH02-C		
Project:	ect: Project Marinus - Heybridge SI		nue.			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	3/9





Client:	Ta	asmanian Networks	Title:	Ц	HBLF-BH02-C		
Project:	roject: Project Marinus - Heybridge SI		Title.	ΠDLΓ-DΠUΖ-C			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	4/9	





Client:	T	asmanian Networks	Title:	Ц	HBLF-BH02-C		
Project:	ct: Project Marinus - Heybridge SI		Title.	FIBER -BH02-G			
Drawn:	MW	Checked:	Scale:	NTS	Drawing Number:	5/9	





Client:	T	asmanian Networks		Title:	HBLF-BH02-C			
Project:	Project Marinus - Heybridge SI			nue.	TIBLE -BITUZ-C			
Drawn:	MW Checked:			Scale:	NTS	Drawing Number:	6/9	





Client:	T	asmanian Networks	Title:	LIDI E DUMO O				
Project:	Project Marinus - Heybridge SI			nue.	HBLF-BH02-C			
Drawn:	MW Checked:			Scale:	NTS	Drawing Number:	7/9	





Client:	T	asmanian Networks	Title:	LIDI E DUAS O			
Project:	Projec	t Marinus - Heybridge SI		Title.	HBLF-BH02-C		
Drawn:	MW Checked:			Scale:	NTS	Drawing Number:	8/9





Client:	Tas	manian Networks	Title:	HBLF-BH02-C				
Project:	Project Marinus - Heybridge SI			Title.	HDLF-DHUZ-C			
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

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 Easting: Started: Kobelco SK135 13.5t Excavator AHD Plant: Northina: 5452518.8 m Datum: Finished: 28/01/2022

Plar	nt:	ı	Kobelco Sł	K135 1	13.5t E	Excavat	or <b>Northing</b> :	5452518.8 m	Datum:	AHD	)		F	inish	ed: 28/01/2022	
Log	ged By	:	MW	Check	red B	y: AC	Grid:	GDA2020	Inclination:	-90°		Orientation: N/A			tation: N/A	
EX	CAVA	ΓΙΟΙ	N INFORI	MATI	ON	MAT	ERIAL SUBSTA	NCE								
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 Test Data & Other Observations	
				7-	-		sand; with low plastic FILL: Gravelly SAND:	.: fine to coarse grained ity silt : fine to coarse grained, I, low plasticity silt; with	pale grey, fine to			MD		0 0	ILL .10 : dosage = 63 nSv/hr .30 : concrete fragments	
			В		- 0.5			parse grained, yellow br Jular to sub-angular gra		silt,				O n	ncountered .50 : PP = 350 kPa, k = 0.261 nK, R = 383.142 Ccm/W, in-si NEOLIAN DEPOSITS Moisture Content : 11.6%, dos	itu
Э				_			G COme and a series of the ser		available to		М	D		0	: 110 nSv/hr .70 : abandonded pipe ncountered	age
			В		- 1.0 -	* * * * * * * * * * *	decreasing Silty GRAVEL: fine to	ging to pale grey brown medium grained, angu icity silt; with fine to coa	lar to sub-angular, p	pale				V s	.00 : PP > 600kPa, k = 0.744i V/mK, R = 134.261 Ccm/W, ir itu Residual Material	
		<b>-</b>		6 -	- - 1.5	× × , × × ,	SAND: fine to coarse	d QUARTZWACKE: rec grained, grey brown, fla vels; with low plasticity	akes of angular			VD		E	Moisture Content = 12.5%, losage = 115 nSv/hr, 1.4 CPS EXTREMELY WEATHERED MATERIAL	3 
				5 -	- 2.0 - 2.5		Exploratory hole term Refusal	inated at 1.60 m								
				4 -	- 3.0											
				_	- 3.5 - -											
N N	DD & SUPPO		PENETRATION  No resistance	GROU	INDWATE	R	SAMPLES & FI		MOISTURE			ENSITY (N			CONSISTENCY (SU) {N-value}	
E E BH B B B	utting Excavator Backhoe Buck Buldozer Ripper		No resistance ranging to refusal	(sta	Vater level atic) Vater inflo		B Bulk Sample H	rlP Hand Penetrometer rlV Hand Vane Shear P: Peak Su R: Residual Su)	D = Dry M = Moist W = Wet Wet Wp = Plastic Limit WI = Liquid Limit	VL L MD D VD	Very I Loose Medic Dense Very I	e im Dense e		0 - 4 4 - 10 10 - 30 30 - 50 50 - 100	VS Very Soft < 12 kPa ( S Soft 12 -25 [2] F Firm 25 -50 [4-5] St Stiff 50 -100 [6 VSt Very Stiff 100 - 200 H Hard > 200 kPa	-4} -8} 8-15} {15-30}



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



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



Client:		Tasmanian Netwo	rks
Project:	Р	roject Marinus - Heyb	ridge 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:	Proje	ect Marinus - Heybridge S	
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

Plar	nt: ֈged By:	Kobelco Sł AV	<135 10 <b>Check</b> e			or <b>Northing:</b> <b>Grid:</b>	5452492.6 m GDA2020	Datum: Inclination:	-90°				ished: 31/01/2022 entation: N/A	
EX	CAVAT	ION INFORI	MATIC	)N	MAT	ERIAL SUBSTAN	NCE							
Method	Penetration	Levels Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Descriptio	Characteristics,		Moisture	Consistency Relative Density	6 DCP 10 (blows/ 100mm)	Field Test Data & Other Observations	
			8 -			cobbles	e grained sand; with ar ar to sub-angular, coal	ngular to sub-angular		D			FILL 0.10 : PID = 0 PPM, dosage = CPS	0.8
			-	- 0.5							MD- D		0.50 : PP > 600 kPa, k = 0.073 mK, R = 1359.7 Ccm/W, in-situ moisture content = 6.6 %, PID : PPM, dosage = 1.0 CPS	
		D	7 -	- 1.0		1.40m: light brown s	sand clay cobble prese	nt 20mm - 60mm			MD		1.00 : PP > 600 kPa, k = 1.737/mK, R = 57.57 Ccm/W, in-situ moisture content = 7.5%, PID = PPM, dosage = 1.2 CPS	_
ш			-	- 1.5		Sandy SILT: low plasti			g;	М			RESIDUAL SOIL	
		D	6 -	- 2.0		fine to coarse grained	sand				St			-
				- 2.5		Sandy SILT: low plasti with coarse grained, a		gravel	nd;		VSt			-
		_	5 -	3.0		grained, rounded to su  Exploratory hole termi	ub-rounded gravel	,	-		D- VD			
			-	- 3 F		Target depth								
			-	- 3.5										-
N N E E BH E B E	DD & SUPPOR: Natural/Existing cutting Excavator Backhoe Bucke Buldozer Ripper	No resistance ranging to refusal	= Wa (stati	NDWATER ater level ic) ater inflow		B Bulk Sample H'	ELD TESTS  IP Hand Penetrometer IV 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 L	m Dense	0 - 4 4 - 1 10 - 30 - 50 -	0 S Soft 12 - 25 {2- 30 F Firm 25 - 50 {4- 50 St Stiff 50 - 100 {8	(0-2) -4} -8} 8-15} {15-30}



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



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



Client:		Tasmanian Netwo	rks	
Project:	Pr	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
 Gid:
 GDA2020
 Inclination:
 -90°
 Orientation:
 N/A

Plan Log	it: ged B		Kobelco Sł AV			xcava y: AC	or <b>Northing:</b> 5452441.7 m <b>Datum:</b> AH <b>Grid:</b> GDA2020 <b>Inclination:</b> -90				ished: 31/01/2022 ientation: N/A
EX	CAVA	TIOI	N INFORI	MATI	ON	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	5 DCP 10 (blows/ 2 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
		ed	D		-						
J		Not Observed	D	_	- 1.5 -		Gravelly SAND: fine to medium grained, orange brown, fine to medium grained gravel; with low plasticity silt	M	MD-		RESIDUAL SOIL
				8 -	- - 2.0 -	× × ×	Sandy SILT: low plasticity, orange brown, fine to coarse grained; with coarse grained, sub-angular to angular gravel		D		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		- -						
<b>!</b>				7 -	- 3.0		Exploratory hole terminated at 3.00 m Target depth				3.00 : dosage = 63 nSv/hr
				_	- 3.5						
					-						
N N cu E E: BH B:	D & SUPP( latural/Exist utting xeavator ackhoe Bud uldozer tipper	ting	PENETRATION  No resistance anging to refusal	= V (sta	Vater leve atic)	4	SAMPLES & FIELD TESTS	Very Loo: Med Den	lium Dense	0 - 4 4 - 10 - 30 -	10 S Soft 12 - 25 {2-4} - 30 F Firm 25 - 50 {4-8}



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



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



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

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

#### **Engineering Log - Excavation**

HB-TP05-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:15360318-1

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 3.5 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) = Water inflow



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



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



Client:		Tasmanian Network	(S	
Project:		Project Marinus - Heybri	dge SI	
Drawn:	MW	Checked:	AC	

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

This figure was created for Jacobs' client. Jacobs accepts no responsibility for any reliance on this information by third parties.

#### **Engineering Log - Excavation**

HB-TP06-C

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

 Contractor:
 Treloar Transport
 Easting:
 414106.5 m
 Elevation:
 11.14 m
 Started:
 28/01/2022

 Plant:
 Kobelco SK135 13.5t Excavator
 Northing:
 5452387.3 m
 Datum:
 AHD
 Finished:
 28/01/2022

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

Pla			Kobelco SI				•	5452387.3 m	Datum:	AHD					shed: 28/01/2022
_	gged By					y: AC	Grid:	GDA2020	Inclination:	-90°				Orie	entation: N/A
E	KCAVA	TIOI	NINFOR	MATIC	NC	MAT	ERIAL SUBSTAN	ICE							1
Method	Penetration	Groundwater Levels	Samples & SPT Data	RL (m)	Depth (m)	Graphic Log		Material Description  Plasticity or Particle Cocondary and Minor Co	haracteristics,		Moisture	Consistency Relative Density	DCP (blows/		Field Test Data & Other Observations
1							plasticity, fine to coars	VEL: fine to medium gr e sand		)W	М	MD			FILL 0.10 : PID =0 PPM, dosage = 70
			В	11 =	- - 0.5		coarse grained sand, i gravel; with sub-angul 250mm (sub-angular t	CLAY: low plasticity, yel fine to coarse grained, a ar to angular cobbles, v o angular)	sub-angular to angu vith boulders up to		M <wp< td=""><td>н</td><td></td><td></td><td>0.50 : PP &gt;600 kPa, k = 0.0589 W/ mK, R = 1697.0 Ccm/W, in-situ moisture content = 2.3%, PID =0 PPM, dosage = 68 nSv/hr</td></wp<>	н			0.50 : PP >600 kPa, k = 0.0589 W/ mK, R = 1697.0 Ccm/W, in-situ moisture content = 2.3%, PID =0 PPM, dosage = 68 nSv/hr
			D	10 -	- 1.0		1.20m: with fine to c boulders up to 250m	oarse, sub-angular to a nm	ngular gravel; with		М	MD			1.00 : PP = 200 kPa, k = 0.6287 W/mK, R = 159.061 Ccm/W, in-situ moisture content = 10.5%, PID =0 PPM, dosage = 80 nSv/hr
ш				_	- 1.5 -		coarse grained sand	city, pale grey mottled y		o					RESIDUAL SOIL 1.30 : dosage = 70nSv/hr 1.50 : PP = 350 kPa
			В	9 -	- 2.0		1.70m: colour becon brown, sand content	ning yellow brown mottl t increasing	ed pale grey red		M <wp< td=""><td>St</td><td></td><td></td><td>1.80 : PP = 300 kPa 2.00 : PID =0 PPM, dosage = 70 nSv/hr</td></wp<>	St			1.80 : PP = 300 kPa 2.00 : PID =0 PPM, dosage = 70 nSv/hr
				_	- 2.5		2.50m: colour chang 2.60m: increasing sa	iing pale grey, mottled y and content	rellow						
		-	D		- 3.0	× × × × × × × × × × × ×	Exploratory hole termi	nated at 3 00 m				St- VSt			3.00 : PID =0 PPM, dosage = 110
				8 -	-		Target depth	2							
				_	- 3.5										
	OD & SUPPO		PENETRATION	GROU	INDWATE	R	SAMPLES & FIE	LD TESTS	MOISTURE		DE	NSITY (N	l-value)		CONSISTENCY (SU) {N-value}
E I BH I B I	Natural/Exist cutting Excavator Backhoe Bud Buldozer Ripper	r	No resistance anging to refusal	→ (sta	Vater leve atic) Vater inflo		B Bulk Sample H\	P Hand Penetrometer V Hand Vane Shear : 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 D	m Dense		0 - 4 4 - 10 10 - 3 30 - 5 50 - 1	80 F Firm 25 - 50 (4-8) 50 St Stiff 50 - 100 (8-15)
									1						



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



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



Client:		Tasmanian Netwo	orks
Project:	Pr	roject Marinus - Heyb	oridge SI
Drawn:	MW	Checked:	AC

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

#### **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 13.5t Excavator
 Northing:
 5452362.9 m
 Datum:
 AHD
 Finished:
 28/01/2022

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

Pla	nt: gged By		Kobelco SI MW			±xcavaı <b>y</b> : AC	<del>-</del>						
E	KCAVA	TIOI	N INFOR	MATION M.			FERIAL SUBSTANCE						
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			Consistency Relative Density	bCP to (blows/ 2 100mm)	Field Test Data & Other Observations	
				_	-		FILL: Silty Sandy GRAVEL: fine to medium gr plasticity, fine to coarse grained sand FILL: Clayey GRAVEL: fine to coarse, grained brown, low plasticity clay; with fine to medium	I sub-angular, yellow				FILL 0.10 : PID =0 PPM, dosage = 45 nSv/hr	
			В	13 -	13 -	- - 0.5 -		0.35m: colour becoming yellow brown mottle FILL: Gravelly Sandy CLAY: low to medium pl fine to coarse grained sand, fine to medium g	asticity, grey brown,	M <wp< td=""><td>н</td><td></td><td>0.50 : PP &gt;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
					- - - 1.0		Silty SAND: fine grained, dark grey, low plasti	city silt				AEOLIAN DEPOSITS  1.00 : PP = 300 kPa, k = 1.0899 W/ mK, R = 91.75 Ccm/W, in-situ	
	В		1  	- 1.0					L		moisture content = 3.7%, PID =0 PPM, dosage = 80 nSv/hr		
ш	E Superved	Not Observed	Not Observed	12 -	- - 1.5 -		Gravelly SAND: fine to medium grained, orangellow mottling; with low plasticity clay; trace s					RESIDUAL SOIL	
		В	В	- - - -	- - 2.0 -				М			2.00 : PID =0 PPM, dosage = 47 nSv/hr	
			D 11 -				2.40m: colour becoming orange brown with black mottling, increaing clay content	minor white and		MD		_	
					- - 3.0 -		Exploratory hole terminated at 3.00 m Target depth					3.00 : PID =0 PPM, dosage = 43 nSv/hr	
				10 -	- - - 3.5 -							_	
METH	OD & SUPPO	DRT I	PENETRATION	GROU	- - NDWATE	R I	SAMPLES & FIELD TESTS	MOISTURE	DE	NSITY (N	l-value)	CONSISTENCY (SU) (N-value)	
N E BH B	Natural/Exist cutting Excavator Excavator Budozer Ruldozer Ripper	ing	No resistance anging to refusal	= V (sta		4	D Disturbed Sample HP Hand Penetrometer B Buik Sample HV Hand Vane Shear SPT SPT Sample (P: Peak Su R: Residual Su) U Indisturbed Sample E Enviro Sample W Water Sample	D = Dry M = Moist W = Wet Mp = Plastic Limit D WI = Liquid Limit VD	Very L	oose m Dense	0 - 4 4 - 10 10 - 3 30 - 5 50 - 1	VS Very Soft < 12 kPa (0-2) S Soft 12 - 25 [2-4] 0 F Firm 25 - 50 (4-8) 0 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:	Project Marinus - Heybridge SI					
Drawn:	MW	Checked:	AC			

Title:		HB-TP07-C	
Scale:	NTS	Drawing Number:	1/1

#### **Engineering Log - Excavation**

HB-TP08-C

Project:Heybridge Converter StationPage:1 of 1Client:Location:Heybridge Converter Station Site, Heybridge TASProject No:15360318-1

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} 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) = Water inflow