12 Attachment C – Borehole Logs



CL	.IEN	Т	Т	wynam	Propert	y Group)		COMMENCED	10.01.2013	COMPLETE	10.0	1.2013			REF	BH401	1
PR	OJE	СТ	S	tage 2 C	ontami	nation A	sses	sment	LOGGED	GT	CHECKED	AN				Sheet 1 of		•
SI	ΓΕ		N	lundami	a Relea	se Land	s		GEOLOGY	Sandstone	VEGETATIO	N Gras	sses			PROJECT NO.	P0802193	
-	JIPME				Hydraulic A				EASTING	NA	RL SURFAC							
EXC				ION DA	0.1mØ X 1	.0m depth		N/ A	NORTHING TERIAL DA	NA NA	ASPECT	Sou	th East	٥,٨		SLOPE G & TESTI	1-2%	
МЕТНОВ	SUPPORT	WATER	MOISTURE	DEPTH (M)	M PENETRATION H RESISTANCE	GRAPHIC LOG	CLASSIFICATION	DESCRII Soil type, texture, structure, reparticle characteristics, orga	PTION OF STR	ATA asticity, rocks, oxidation, and minor components,	CONSISTENCY	DENSITY INDEX	TYPE	DEPTH(M)		RESULI		5
v	Nil	N	D	_ _ _ _ 0.2		× × × × × × × × × × × × × × × × × × ×	ML	SILT - Light grey	y/brown, fine	grained sand.			Е	0.05	2193/40)1/ 0.05		-
V	Nil	N	D	0.3			SP	SAND -	Light brown/	grey.			Е	0.25	2193/40	01/ 0.25		=
V	Nil	N	D				SP	SAND - Orange	e, fine to med	ium grained.								- - 0.5
v	Nil	N	м	_			sc	CLAYEY:	SAND - Oran	ge/red.								- - - -
				1.0				Borehole termina	ted at 1.0m o	n clayey sand.			E	1.0	2193/40	01/1.0		1.0
																		- - - 1.5 - - - - - - - - - - - - - - - - - - -
				 - - -														-
N E H E C V	Na Na K E BH Ba HA Ha E E CC Co V-E	atural existing ickhoe ind au icavate icrete Bit igsten	expose buck ger or expore	sure SF avation SC set RE Nil	JPPORT I Shoring C Shotcrete B Rock Boll No suppo	ts <u>▼</u> Wate ort ▼ Wate ► Wate	e observeneasure er level er outflo er inflow	ved D Dry L Lo ed M Moist M Mo W Wet H Hig Wp Plastic limit R Re w WI Liquid limit	w VS oderate S gh F fusal St VSt H F	SISTENCY	Dense A Aug B Bul Dense U Un D Dis Se M Mo Ux Tut E Env	ger sample k sample disturbed turbed s sture co le sample fronmen	e d sample sample ontent le (x mm) tal sampl (JAR)	PF VS DC FC e W PI	Standard Vane she P Dynam penetro Field der S Water sa D Photo lo	ic cone meter sity	CLASSIFICATI SYMBOLS ANI SOIL DESCRIF Y USCS N Agricultur	D PTION
					Е	XCAVATIO	ON LO	G TO BE READ IN CONJU		ASSOCIATES PTY LTD	ORT NOTES	AND A	ABBRE	/IATIC	ONS		_	

С	LIEI	T	Т	wynam	Prope	rty Group		COMMENCED	10.01.2013	COMPLETED	10.01.201	13		REF BH402
-		ECT	S	tage 2 (Contam	nination Ass	essment	LOGGED	GT	CHECKED	AN			Sheet 1 of 1
_	ITE		N	lundam	_	ase Lands		GEOLOGY	Sandstone	VEGETATION				PROJECT NO. P0802193
-	CAVA		DIME	NSIONS	Hydraulio	Auger 1.0m depth		EASTING NORTHING	NA NA	RL SURFACE ASPECT	NA East			SLOPE 1-2%
۲				ION DA		1.om depui	M	ATERIAL DA		AGI EGI	Last	SA	AMPLIN	G & TESTING
COLLEGE	SIIPPORT	WATER	MOISTURE	DEPTH(M)	FENETRATION RESISTANCE	GRAPHIC LOG	DESCRI Soil type, texture, structure, particle characteristics, org	PTION OF STR	ATA sticity, rocks, oxidation, and minor components,	CONSISTENCY	DENSITY INDEX	DEPTH (M)		RESULTS AND DDITIONAL OBSERVATIONS
V	Ni	I N	D	- - 0.12		× × × × × × × × × × × × × × × ×	SILT - Light b	rown/grey, mi	nor gravels.			E 0.05	2193/40)2/ 0.05
V	' Ni	I N	D			X X X X X X X X X X X X X X X X X X X	SILTY SAND - Or fine	ange/gold ten	ding to orange, I.			E 0.25	2193/40	- -)2/ 0.25 - -
V	· Ni	I N	D	- 0.5 - - - - 0.8		sc	CLAYEY SAND - C sand, tendir	orange/brown, ng to orange/re	medium grained ed >0.8m.			E 0.5	2193/40	
							Borehole termina	ated at 1.0m o	n clayey sand.					
				1.5										
	N X BH I HA I E CC C	Natural Existin Backho Hand a Excava Concret 7-Bit	expose g exca e buck uger tor e Core	sure S vation S set R N	UPPORT H Shoring C Shotcre B Rock B il No supp	ete X Not meas olts \(\psi\) Water lev	served D Dry L Lo sured M Moist M M vel W Wet H H Hi Wp Plastic limit R R R tfflow WI Liquid limit R R	ow VS loderate S ligh F lefusal St VSt H	SISTENCY	se A Auge B Bulk Dense U Undi D Distr se M Mois Ux Tube	NG & TEST er sample sample sturbed sample ture content e sample (x r onmental sa	pi S nple V e D mm) F mple V	Standard S Vane sho CP Dynam penetro D Field der VS Water sa	ic cone Y USCS ometer nsity N Agricultural
\vdash	s s	pade				ΕΧΟΔΙΛΑΤΙΟΝΙΙ	LOG TO BE READ IN CONJU	INCTION WITE	ACCOMPANYING DED	ORT NOTES	•			
-			<u> </u>			LACAVATION	TOO TO BE IVEND IN CONSC		ASSOCIATES PTY LTD	OIL NOIES				oring Log

CI	IEN	Т	Т	wynam	Prop	perty	y Group)		COMMENCED	10.01.2013	i	COMPLET	ΓED	10.01.20)13			REF	•	BH40	3
PF	ROJI	ECT	S	tage 2 (Conta	amir	nation A	sses	ssment	LOGGED	GT		CHECKE	D	AN				Sheet			•
SI	TE		M	lundam	ia Re	eleas	se Land	s		GEOLOGY	Sandstone		VEGETAT	ГЮИ	Grasses				PROJECT	T NO.	P0802193	
-	UIPME					aulic A				EASTING	NA		RL SURF		NA							
EX				ISIONS	_	Ø X 1.	0m depth		5.0	NORTHING	NA .		ASPECT		North Ea	ast			SLOPE		-2%	
\vdash	T = X	LA	VAI	ION DA				z	IVI P	ATERIAL DA	AIA				_	П	SA	MPLIN	G & TE	SIIN	G	
METHOD	SUPPORT	WATER	MOISTURE	DEPTH (M)	L PENETRATION	H RESISTANCE	GRAPHIC LOG	CLASSIFICATION	Soil type, texture, structure, n particle characteristics, orga	PTION OF STR mottling, colour, pl anics, secondary a ontamination, odou	asticity, rocks	s, oxidation, mponents,	CONSISTENCY	DENCITY INDEX		TYPE	ОЕРТН (М)	A		SULTS AL OB	S AND SERVATION	15
V	Nil	N	D	0.1			× × × × × × × × ×	ML	SILT - Light br	rown/grey, mi	nor grave	els.				Е	0.05	2193/40	3/ 0.05			-
v	Nil	N	D					SM	SILTY SAND - Ora fine	ange/gold ter grained sand	nding to o	range,				E	0.25	2193/40	3/ 0.25			
v	0.5								SAND - Orar me	nge, minor cla dium grainec		t,				E	0.5	2193/40	3/0.5			0.5
				1.5					Borehole term													1.5
	N N K E BH B HA H E E CC Cc V V- TC Tu	atural Existing ackhor and au xcaval oncrete Bit ngster	expos g exca e buck iger tor e Core	ure S vation S et R N	UPPOF H Sho C Sho B Roc il No s	ring tcrete k Bolts	s 🅎 Wat	e obser measur er level er outflo	ved D Dry L Lo ed M Moist M M W Wet H Hig Wp Plastic limit R Re ow WI Liquid limit	ow VS oderate S gh F efusal St VSt H	SISTENCY Very Soft Soft Firm Stiff Very Stiff Hard Friable	DENSITY VL Very Loo L Loose MD Medium D D Dense VD Very Dens	se A B Dense U D se M U	Auger: Bulk sa Undisti Disturb Moistu Tube s	urbed san ped samp re conter ample (x amental s	mple ble nt mm)	pp S VS DC FE W	Standard Vane she CP Dynam penetro Field der S Water sa	ic cone meter sity	n test	CLASSIFICAT SYMBOLS AN SOIL DESCR Y USCS N Agricult	ND LIPTION
H	S Sp	ade				F	XCA\/ATI	חות ב	G TO BE READ IN CONJU	INCTION WITH	I ACCOME	PANYING RED	ORT NOT	FS AN	ND ARR	RF\/	/JATIC	ONS				
4.0			_					J. 1 LU	O TO DE READ IN COMO	MARTENS &			SIXI 1401			v	" \ I I C					

G	CLIE	NT	•	T	wynan	ı Pr	ope	erty	/ Grou	р			COMMENCED	10.01.2013		COMPLET	TED .	10.01.20	13			REF	:	BH40)4
F	PRO	JE	СТ	St	age 2	Cor	nta	mir	nation	Asse	essn	nent	LOGGED	GT		CHECKE	D ,	AN				Sheet			
ļ	SITE			М	undan	nia I	Rel	eas	se Lan	ds			GEOLOGY	Sandstone		VEGETA	LION	Grasses				PROJEC	T NO.	P0802193	
Н	QUIP						ydrau						EASTING	NA		RL SURF		NA							
F					SIONS	_		X 1.0	0m depth				NORTHING	NA A T A		ASPECT	ı	North Ea		04175		SLOPE		1-2%	
H		XC	;A\	/AT	ION DA					7-2	Т	M.A	TERIAL D	ATA			Ι			SAMPL	.IN	G & TE	STIN	IG .	
	METHOD	SUPPORT	WATER	MOISTURE	DEPTH (M)		■ PENETRATION ■ DESISTANCE	R NEOIS I ANGE	GRAPHIC LOG	CLASSIFICATION		Soil type, texture, structure, n particle characteristics, orga	PTION OF STR nottling, colour, pl anics, secondary entamination, odo	asticity, rocks and minor cor	s, oxidation, mponents,	CONSISTENCY	DENSITY INDEX		TYPE	DEPTH (M)	Α			S AND SSERVATIO	ONS
	V N	Nil	N	D	0.08				× × × × ×	× × ML		SILT - Light br	own/grey, m	inor grave	ls.				E C	0.05 2193	3/40	4/ 0.05			-
	V 11	Vil	N	D						* * * * * * * * * * * * * * * * * * *		SILTY SAND - Ora fine	ange/gold ter grained san		range,				E (0.25 2193	3/40	4/ 0.25			- - - - -
	V	- SS										SAND - Orar me	nge, minor cla dium grained		i,				E	0.5 219:	3/40	4/0.5			0.8
H		+			1.0	***						Borehole term	ninated at 1.0	m on sand											1.0
l					_							Borenole term	iiiiateu at 1.0	III OII Sain	u.										-
l					_																				-
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l					_																				-
l					1.5																				1.5
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l					-																				-
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					-																				-
																									-
l	2.0																								2.0
l																									-
l																									
l					_																				-
					2.25																				-
H	EQUIPMENT/METHOD SUPPORT WATER MOISTURE											MOISTURE PENET	TRATION CON	SISTENCY	DENSITY	SAN	MPLING	3 & TEST	TING					CLASSIFIC	2.25 ATION
	EQUIPMENT / METHOD SUPPORT WATER MOISTURE N Natural exposure SH Shoring N None observed D Dry												w VS oderate S gh F fusal St VSt H	Very Soft Soft Firm Stiff Very Stiff Hard Friable	VL Very Loose L Loose MD Medium D D Dense VD Very Dens	Dense UDse MUx	Auger s Bulk san Undistu Disturbe Moisture Tube sa	sample mple urbed sam ed sample conten ample (x mental sa	nple le t mm)	S Stand VS Vane DCP Dyr pen FD Field WS Wate	lard she nam etro den er sa	c cone meter sity	n test	SYMBOLS SOIL DESC	AND RIPTION
L								E	XCAVAT	ION L	.OG T	O BE READ IN CONJU	INCTION WITH	H ACCOMP	ANYING REP	ORT NOT	ES AN	ID ABB	REVI	ATIONS					
9.)									MARTENS &	ASSOCIAT	ES PTY LTD				C ~	ain	_	orir	. ~	1 00	

С	LIE	ΝT	Т	wynam	Pro	pe	rty Group)		COMMENCED	10.01.2013		COMPLETE	D 10	.01.2013			REF	BH40)5
-		IEC1	_				nination A		ssment	LOGGED	GT		CHECKED	AN	ı			Sheet 1		
_	ITE		N	lundam	_		ase Lanc	s		GEOLOGY	Sandstone		VEGETATIO	_	asses			PROJECT I	NO. P0802193	
_	QUIPN		DIME	NSIONS			Auger 1.0m depth			EASTING NORTHING	NA NA		ASPECT		uth East			SLOPE	1-2%	
L	Е	XCA	VAT	ION DA					M.A	TERIAL DA	TA					SA	MPLIN	G & TES	TING	
COLFAM	SIPPORT	WATER	MOISTURE	DEPTH(M)	1	RESISTANCE	GRAPHIC LOG	CLASSIFICATION	Soil type, texture, structure, r particle characteristics, org	PTION OF STR mottling, colour, pla anics, secondary a ontamination, odou	sticity, rocks, and minor con	oxidation, nponents,	CONSISTENCY	DENSITY INDEX	TYPE	DEPTH (M)	А		ULTS AND L OBSERVATIO	DNS
\	/ N	I N	D	0.1			* * * * * * * * * * * *	ML	SILT - Light bi	rown/grey, mi	nor gravel	S.			E	0.05	2193/40	05/ 0.05		_
\	/ N	i N	D	_ _ _ _ _ _ 0.35			* * * * * * * * * * * * * * * * * * *	SM	SILTY SAND - On fine	ange/gold ten grained sand	ding to or	ange,								- - - -
١	/ N	I N	D	- 0.5 - - - - - 0.75				sc	CLAYEY S	AND - Orang	e/brown.				E	0.5	2193/40	05/ 0.5		- 0.5 - -
\	/ N	I N	М	- - - 1.0				CL	SANDY CLAY -	Grey with min mottles.	or red/ora	nge								- - - 1.0
				1.5					Borehole termina											
	N X BH I HA I E CC (Natura Existin Backho Hand a Excava Concret /-Bit rungste	l expos ig exca ie buck uger itor te Core	sure S avation S ket R N	UPP(H SI C SI B Ro III No	noring notcre ock B	ete X Not	e obse measu er leve	erved D Dry L Loured M Moist M M. el W Wet H Hilling Wp Plastic limit R Refilow WI Liquid limit	ow VS oderate S gh F efusal St VSt H	SISTENCY Very Soft Soft Firm Stiff Very Stiff Hard Friable	DENSITY VL Very Loos L Loose MD Medium De D Dense VD Very Dense	e A Au B Bu ense U Ur D Di: M Mc Ux Tu	ger sar lk samp disturb sturbed bisture of be sam	ole ed sample sample	pp S VS D(FI e W	Standard S Vane sho CP Dynam penetro D Field der S Water sa	nic cone ometer nsity	Y USCS	AND RIPTION
\blacksquare							EXCAVATI	ON LO	OG TO BE READ IN CONJU				ORT NOTES	AND	ABBRE	/IATI0	ONS			
į										MARTENS & A	ASSOCIATI	ES PTY LTD		1	_			- win	~ 1 ~~	

С	CLIENT Twynam Property Group PROJECT Stage 2 Contamination Assessment)		COMMENCED	10.01.2013	ı	COMPLET	ΓED	10.01.20	013			RE	F	BH40)6
Р	ROJ	ECT	S	tage 2 C	Con	tami	ination A	sses	ssment	LOGGED	GT		CHECKE	D	AN				Sheet			
s	ΙΤΕ		M	lundam	ia R	Relea	se Land	ls		GEOLOGY	Sandstone		VEGETAT	гюи	Grasses	3			PROJE	CT NO.	P0802193	
EC	UIPM	ENT			Hyd	Iraulic /	Auger			EASTING	NA		RL SURF	ACE	NA							
EX				NSIONS		nØ X 0	0.45m depth			NORTHING	NA		ASPECT		South				SLOPE		1-2%	
L	<u> E</u>	(CA	VAT	ION DA				T = T	M.A	ATERIAL D	ATA		1				SA	MPLIN	G & T	ESTI	NG	
METHOD	SUPPORT	WATER	MOISTURE	DEPTH (M)	L DENETDATION	# PENETRATION # RESISTANCE	GRAPHIC LOG	CLASSIFICATION	Soil type, texture, structure, r particle characteristics, org	PTION OF STR mottling, colour, pl anics, secondary entamination, odor	asticity, rock and minor co	s, oxidation, mponents,	CONSISTENCY	DENSITY INDEX	DENSIT	TYPE	DEPTH (M)	A			TS AND BSERVATIO	ons
V	Nil	N	D	0.1			× × × × × × × × × × × × × × ×	ML	SILT - Light bi	rown/grey, mi	nor grave	els.				Е	0.05	2193/40	06/ 0.05			-
v	Nil	N	D	- - -			× × × × × × × × × × × × × × × × × × ×	SM	SILTY SAND - Ora	ange/gold ter		range,				Ш	0.25	2193/40	06/ 0.25			- - -
				-			* * * * * * * * * * * * * * *	*								E	0.4	2193/40	06/0.4			-
				0.45			******		Borehole termina moderately	ated at 0.45m												0.5
				_																		-
				-																		-
				-																		-
				-																		-
				1.0																		1.0
				-																		-
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				_																		-
				1.5																		1 <u>.5</u>
				_																		-
				-																		-
				_																		
																						-
	2.0																					2.0
																						-
	EQUIPMENT / METHOD SUPPORT WATER MOISTURE												L									- 2.25
	N I X BH E HA I E E CC C V V TC T	Natural Existin Eackho Iand a Excava oncret Bit ungste	expos g exca e buck uger tor e Core	ovation Solution RI	C Sh B Ro	ORT noring notcrete ock Bo o suppo	lts	e obser measur ter level ter outfl	rved D Dry L Lo red M Moist M M I W Wet H Hi wp Plastic limit R Re low WI Liquid limit	ow VS oderate S gh F efusal St VSt H	SISTENCY Very Soft Soft Firm Stiff Very Stiff Hard Friable	DENSITY VL Very Loo L Loose MD Medium D D Dense VD Very Dens	Dense UDse MI	Auger: Bulk sa Undisti Disturb Moistu Tube s	urbed sa ped samp re content sample (x nmental s	mple ple nt (mm)	pp S VS DO FE W	D Pocket pr Standard S Vane shi CP Dynam penetro D Field der (S Water sa ID Photo lo	penetrati ear lic cone ometer nsity ample	ion test	CLASSIFICA SYMBOLS A SOIL DESC Y USCS N Agricu	AND RIPTION
H	S S	ade				-	EXCAVATI	ON LC	OG TO BE READ IN CONJU	INCTION WITH	I ACCOMF	PANYING REP	ORT NOT	ES AN	ND ABE	BREV	/IATIC	ONS				
- -			<u> </u>							MARTENS &						_			!			

С	LIE	NT		Гwynam	Prop	erty Grou)		COMMENCED	10.01.2013	COMPLETED	10.01.2	2013			REF	BH407
Р	ROJ	EC	T	Stage 2	Conta	mination A	Asse	ssment	LOGGED	GT	CHECKED	AN				Sheet 1 o	
-	TE		ſ	lundan		lease Land	ls		GEOLOGY	Sandstone	VEGETATION	+	es			PROJECT NO.	P0802193
-	UIPN		DIME	NSIONS		X 1.0m depth			EASTING NORTHING	NA NA	RL SURFACE ASPECT	NA West				SLOPE	1-2%
F				TION DA	_	X 1.011 deptil		M.A	ATERIAL DA		Adi Edi	west		SAN		G & TESTI	
METHOD	Tababas	WATED	MOISTURE	DEPTH (M)	L PENETRATION	GRAPHIC LOG	CLASSIFICATION	DESCRII Soil type, texture, structure, r particle characteristics, org:	PTION OF STR	ATA sticity, rocks, oxidation, and minor components,	CONSISTENCY	DENSITY INDEX	TYPE	DEPTH (M)	Al		TS AND DBSERVATIONS
v	N	i N	I D	_ _ _ _ 0.2	333333333333333333333333333333333333333	× × × × × × × × × × × × × × × × × × ×	> > > ML >	SILT - Light ç	grey, minor sa	and, floury.			Е	0.05	2193/40	7/ 0.05	-
V	N	I N	I D	0.35			CL	SANDY CLAY -	Grey/brown, r	ninor gravels.			Е	0.25	2193/40	7/ 0.25	-
v	N	1 1	I D				CL	SANDY CLAY - extremely weati	Yellow/orang hered sandsto	e, tending to one >0.75m.			E	0.5	2193/40	7/0.5	- 0.6 - - - - - - - - -
	EQUI	PME	NT/M		SUPPOR:	T WATER			ered sandsto	on extremely ne.	SAMPI	NG & TE	STING				1.8 1.8 2.0 CLASSIFICATION
	N X BH HA E CC (Natura Existi Backh Hand Excav Concre /-Bit ungst	al expo ng exc oe buo auger ator ete Co	sure s avation s ket F	SH Shori SC Shoto RB Rock Iil No su	ng N Nor crete X Not Bolts ∇ Wa	ne obse measu ter leve ter outf	rved D Dry L Lo red M Moist M M I W Wet H Hig Wp Plastic limit R Re low WI Liquid limit	ow VS oderate S gh F efusal St VSt H	Very Soft Soft L Loose VL Very Loo Firm MD Medium IS MD Dense Stiff D Dense Very Stiff Very Stiff VD Very Dense Very Dense Hard -riable	se A Aug B Bulk Dense U Und D Dist se M Mois Ux Tube	er sample sample isturbed sam turbed sam ture conte sample (onmental	ample nple ent (x mm)	S S VS DCP FD I	Standard Vane she Dynami penetro Field dens Water sa	c cone meter sity	SYMBOLS AND SOIL DESCRIPTION Y USCS N Agricultural
\Box						EXCAVAT	ON LO	OG TO BE READ IN CONJU			ORT NOTES	AND AB	BREV	IATION	NS		
			-						MARTENS & A	ASSOCIATES PTY LTD		I			:	orina	1

CLIENT Twynam Property Group PROJECT Stage 2 Contamination Ass									COMMENCED	10.01.2013	COMPLETED	10.0	1.2013			REF	BH	1408
PR	OJE	СТ	S	tage 2 C	ontami	nation A	sses	sment	LOGGED	GT	CHECKED	AN				Sheet 1		
SIT	Έ		M	lundami	ia Relea	se Land	s		GEOLOGY	Sandstone	VEGETATIO	N Gras	ses			PROJECT	NO. P0802	193
_	IIPMEI				Hydraulic A				EASTING	NA	RL SURFACI							
EXC				NSIONS	0.1mØ X 1	.0m depth		5.0	NORTHING	NA	ASPECT	North	h			SLOPE	1-2%	
МЕТНОБ	SUPPORT	WATER	MOISTURE	DEPTH (M)	M PENETRATION H RESISTANCE	GRAPHIC LOG	CLASSIFICATION	DESCRII Soil type, texture, structure, reparticle characteristics, orga	PTION OF STR mottling, colour, pla anics, secondary a ontamination, odou	ATA asticity, rocks, oxidation, and minor components,	CONSISTENCY	DENSITY INDEX	TYPE	DEPTH(M)			SULTS AND	
V	Nil	N	D	_ _ _ 0.15		× × × × × × × × × × × × × × × × ×	ML	SILT - Grey/ligh m	t brown, fine ginor gravels.	grained sand,			Е	0.05	2193/40	8/ 0.05		-
V	Nil	N	D		388888888888888888888888888888888888888		SP	SAND - Yellow/gc (1-1	old, minor san 10mm, ≈10%				Е	0.25	2193/40	8/ 0.25		- - - -
٧	Nil	N	м	0.5			sc	CLAYEY SAND/E SANDSTONE										0 <u>.5</u> - - - - -
v	Nil	N	D	-			CL	SANDY CLAY/EX SANDSTONE -										
				1.0				SANDSTONE -	- Red/grey/ye	llow, gravers.								1.0
				-				Borehole termina	ated at 1.0m o	on sandy clay.								- - -
				-														-
				-														- -
				1.5														1 <u>.5</u>
				-														-
				_														- - -
				-														-
				2.0														- - 2.0
				-														-
				_ _ _ 2.25														- - 2.25
N B H E C V	H Ba A Ha Ex C Col	atural existing ackhoe and au acavate ncrete Bit agsten	expos exca buck ger or Core	ETHOD SU sure SH avation SC set RE Nil	JPPORT I Shoring C Shotcrete 3 Rock Bol I No suppo	ts <u>▼</u> Wat ort <u></u> Wat <u></u> Wat	e observ measure er level er outflo er inflow	red D Dry L Lo dd M Moist M Mc W Wet H Hig Wp Plastic limit R Re w WI Liquid limit	oderate S gh F sfusal St VSt H F	SISTENCY	Dense A Aug B Bul Dense U Un D Dis Se M Mo Ux Tub E Env	ger sample k sample disturbed turbed sa sture con le sample ironment	d sample ample ntent e (x mm) al sampl (JAR)	PF VS DC FC e W PI	Standard S Vane she CP Dynam penetro D Field den S Water sa ID Photo lo	ic cone meter sity	test SYME SOIL Y N	SIFICATION BOLS AND DESCRIPTION USCS Agricultural
\vdash					E	-AUAVATI	JIN LO	G TO BE READ IN CONJU		ASSOCIATES PTY LTD	OKINUIES	AND A	VORKE!	v IA I I	JINO			

CLIENT Twynam Property Group PROJECT Stage 2 Contamination Asse)		COMMENCED	10.01.2013	COMPLET	ED	10.01.2013			REF	BH409
PR	OJE	СТ	_						ssment	LOGGED	GT	CHECKED	1	AN			Sheet 1 of	1
SIT			M	undami		-	se Land	s		GEOLOGY	Sandstone	VEGETAT	-	Grasses			PROJECT NO.	P0802193
	IPME AVAT		OIMEN	ISIONS	Hydrai		.0m depth			EASTING NORTHING	NA NA	RL SURFA ASPECT	_	NA West			SLOPE 1	-2%
				ION DA					M.A	TERIAL DA					SA		IG & TESTIN	
МЕТНОВ	SUPPORT	WATER	MOISTURE	DEPTH (M)	PENETRATION	KESISI ANCE	GRAPHIC LOG	CLASSIFICATION	Soil type, texture, structure, r particle characteristics, orga	PTION OF STR mottling, colour, pla anics, secondary a ontamination, odou	asticity, rocks, oxidation, and minor components,	CONSISTENCY	DENSITY INDEX	TYPE	DEPTH (M)	A	RESULTS ADDITIONAL OB	
V	Nil	N	D	_ _ 0.15			× × × × × × × × × × × × × × ×	ML		wn, fine grain (1-20mm, ≈1				Е	0.05	2193/40	09/ 0.05	-
V	Nil	N	D	_ _ 0.3				SM	SILTY SAND	O - Light brow	n/orange.			E	0.25	2193/40	09/ 0.25	-
V	Nil	N	D	- 0.5 - - - - - -				SP	SAND - Yellow/gc (1-	old, minor san 10mm, ≈10%				E	0.5	2193/40	09/ 0.5	- - 0 <u>.5</u> - - -
V	Nil	N	М	1.0				sc	CLAYEY SAND/E SANDSTONE									- - - - 1.0
				- - -					Borehole termina	ted at 1.0m o	n clayey sand.							- - - -
				_ _ _ _ 1.5														_ _ _ _ 1.5
				- - -														- - -
				- - -														- - -
																		- 2 <u>.0</u> - -
F	QUIP	MENT	/ MF		JPPOR	F	WATER		MOISTURE PENE	TRATION CON	SISTENCY DENSITY	SVV	PI INC	& TESTIN	G			2.25 CLASSIFICATION
N B H E C V	Na E: H Ba A Ha Ex C Co V-E C Tur	atural existing ackhoe and au acavate ncrete Bit agsten	expos exca buck ger or Core	ure SF vation SC et RE Nil	Short Short Shock No si	ing crete Bolt	N Non x Not ts ∇ Wat	e obse measu er leve er outf	rved D Dry L Lo red M Moist M M I W Wet H Hig	ow VS oderate S gh F efusal St VSt H	DENSITY	oose A A B E n Dense U L D E ense M M Ux T	Auger s Bulk sar Indistu Disturbe Toisture Tube sa	ample	PF S V: D D I) FI	Standard S Vane sho CP Dynam penetro D Field der S Water sa	nic cone ometer nsity	CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION Y USCS N Agricultural
	Spa					Е	XCAVATION	ON LO	OG TO BE READ IN CONJU	JNCTION WITH	I ACCOMPANYING RE	PORT NOTE	S AN	-				
)							MARTENS &	ASSOCIATES PTY LTE		T				orina	