	P	G	Pebb	ole	Geo	Bor	eł	าด	ble	е		00	þ				BH10	<b>09</b>	
	12	3 Ma	in Street						Ea	sting	05		<u> </u>	Northin	g (	Scale	015		
	Th	eshir	re CD			Project Name	)		43	1090.	.05			Project	No. 5	Start Date	End Date		
c	AB lient	12 3	CD			A123 Rounda	about I	mprov	emer Co	nt ontrac	tor			ABC12	3 2	2019-05-02 Consultant	2019-05-13		
N	ation	al Ro	ads				-		Th •	ie Soi	l Con	tractor	s	The Soil Engineers					
lı Ba	nst/ .ckfill	Vater evels	2	Samp	les and Te	sts	Core	TCR	ING SCR	RQD	Frac	Level	Depth (thickness)		;	Strata		_	
Ш		~_	0.00	Ref PID	<0.1	1ppm	Run	(%)	(%)	(%)	FI	(m)	(m)	Legend		Description		_	
			0.00 0.00 0.00 - 0.30	D 1 ES 2 B 3								60.53	0.30)		sand.	avelly sandy CLAY. Sar	nd is fine to coarse. Gravel	Ł	
			0.30 0.30	PID D 4 ES 5	<0.1	1ppm							(0.70)		is angular to subroun	ided fine to coarse of sa	ndstone and mudstone.	0.5	
	H		0.30 - 1.00 0.50	B 7 PID		2.4												E	
			0.50	ES 6 PID	<0.1	1ppm						59.63	1.00		Soft brown mottled g cobble content. Sand	rey slightly sandy slightly is fine to coarse. Grave	y gravelly CLAY with low I is angular to subrounded	-	
			1.00 1.00 1.00	D 8 ES 9		41									subrounded of sands	stone.		- 1.5	
			1.20 1.20 - 1.65 1.20 - 1.70	SPT D 10 B 11	N=6 (1,	,1,1,2,1,2)							(1.20)		_			E	
			2.00	PID		3.8												2.0	
			2.00	ES 13 PID		4.4						58.63	2.20		Firm grey slightly sar Sand is fine to coarse	ndy slightly gravelly CLA e. Gravel is angular to s	Y with low cobble content. ubrounded fine to coarse	Ē	
			2.20 2.20 2.20 - 2.65	ES 16 U 14											of sandstone and mu sandstone.	idstone. Cobbles are sul	bangular to subrounded of	2.5	
	Н														from 2.20m to 3.00m	gravel is fine to medium	1	-	
	H		3.00 3.00 3.00	PID D 17 ES 18	<0.1	1ppm									-			- 3.0	
	FI		3.20 3.20 - 3.65 3.20 - 3.70	SPT D 19 B 20	N=29 (5	,7,6,6,9,8)												3.5	
	FII														_			E	
	H		4.00	D 21											-			4.0	
			4.20 - 4.65	U 22											-			E	
															-			4.5	
															-			-	
			5.00	SPT	N=24 (4	,7,6,6,5,7)							(5.80)		-			- 5.0	
			5.20 - 5.65 5.20 - 5.70	D 24 B 25											-			5.5	
	Ы														-			E	
	Н		6.00	D 26											-			6.0	
	FI		6.20 - 6.65	U 27											-			E	
	H														-			6.5	
															_			+	
			7.00	D 28 SPT	N=36 (7,	5,8,8,11,9)												- 7.0	
			7.20 - 7.65 7.20 - 7.70	D 29 B 30										<u> </u>				7.5	
																		E	
╢	╟╟		8.00	D 31								52.83	8.00		Soft grey brown sligh	tly gravelly sandy CLAY	. Sand is fine to coarse.	8.0	
			8.20 8.20 - 8.70	SPT B 32	N=18 (4	,3,5,4,3,6)									Gravel is subangular mudstone.	to subrounded fine to co	parse of sandstone and	E	
	$\left  + \right $												(1.00)		-			8.5	
$\ $																		Ē	
			9.00 9.00 - 9.70	D 33 B 34								51.83	9.00		Firm dark grey slightl organic material. Sar	ly sandy CLAY with occa nd is fine to coarse.	asional specks of black	9.0	
													(0.70)					9.5	
╟			9.70	SPT	60/165mm (13,1	2/30,17,21,22/15)						51.13	9.70		Very dense brown sa	andy slightly clayey angu	lar to subrounded fine to	$\pm$	
μ			9.70 - 10.20	B 36									(0.70)			Continued on next n	age		
R	ema	ks			0					L		N	L			Method, Plant, Logg	ger, Stability, Dimension	IS	
fo Lic	PAS matic cence	128 su n. 3. 1 (OGL).	urvey underta 9mm vane us . Based on a re	iken. 2. ed to ca al datase	Gas alarm used rry out hand van et, but modificatior	to monitor boreho e tests. Contains d ns have been made	ole loca lata sup by the P	tion du plied by ebble (	ring ro y Natu Seo tea	otary d ral Env am for c	rilling. /ironm demo p	No ele ent Res urposes	vated ga earch C	as levels de ouncil unde	etected during borehole er the Open Government	0.00 - 1.20m IP Insu Stable	lated Hand Tools	CR	
		,			-							-				L = 0.50m $W = 0.50$	m		
																1.20 - 13.00m CP Dan	do 3000 mec SM8G	CR	
																31.30 - 42.70m RC Soil	mec SM8G	CR	

P	3	P <u>ebb</u>	l <u>e (</u>	Geo	Borehole Log											BH10	09
123 I	Mai	n Street			Hole Type Easting								Northi	ng 7 45	Ground Level (m)	Scale	of 5
Thes	hire	e 2			Project Nan	ne		43	1690	.05			Projec	ect No. Start Date End Date			
AB12	2 30	CD			A123 Roun	dabout li	mprov	/emei	nt				ABC12	23	2019-05-02	2019-05-13	
ent itional	Roa	ads						The Soil Cor			tractor	s			Consultant The Soil Engineers		
st/ Ja	els	S	Sample	es and Te	sts		Cor	ing		Frac	Level	Depth			Strata		
kfill S	Lev	Depth (m)	Type/ Ref	Re	sults	Core Run	TCR (%)	SCR (%)	RQD (%)	FI	(m)	(m)	Legend		Description		
		10.00	D 37 SPT	N=22 (13	3 11 6 7 5 4)									coarse GRAVEL Sand is fine to c	of sandstone and mudston oarse. Cobbles are angular	e with low cobble content. to subrounded of sandstone	a E
		10.20 - 10.70 10.40	B 38 D 39		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						50.43	10.40		and mudstone. Reddish brown s is subangular to	slightly gravelly slightly silty silty subrounded fine to medium	fine to coarse SAND. Grave of sandstone and	, , ,
														mudstone.			F
		11.00	D 40									(1.30)	•••				F
													· · ·				E
																	F
		11.70 11.70 - 12.15	SPT D 41	N=31 (9	9,8,7,9,7,8)						49.13	11.70	• .	Extremely weak	brown mottled white mediur	m grained SANDSTONE.	+
		11.70 - 12.20 12.00	B 42 D 43												abaliguar obaroc graver and		E
												(1.30)					F
												(	•••				E
													· · ·				F
		13.00	SPT	50/60mm	(25/45,50/60)					NI	47.83	13.00		Extremely weak	white stained light brown m	edium grained	÷
		13.00 - 13.11	C 45								47.65	13.18		SANDSTONE. F	Recovered as non intact core to coarse gravel sized fragm	e (fine to coarse sand and nents).	Æ
						13.00 14.00	94	53	0	25		(0.48)		Medium strong t grained micaced	hinly laminated white staine ous SANDSTONE. Discontin	d light brown medium uities: 1) 10-20 degrees	Ē
											47.17	13.66		from 13.18m to	y to closely spaced undulati 13.35m with extremely close	ng rough.	F
		14.00 - 15.00	C 46							-				of extremely we	ak light grey mudstone	) degrees undulating rough	F
		14.20 14.26	CS 46 1							15				from 13.51m to	13.55m recovered as non in	tact core (angular fine to	E
		14.30 - 14.36	CS 40.1			14.00	90	65	11			(1.70)		from 13.63m to	zed fragments) 16.66m recovered as non in	tact core (angular fine to	E
						13.00								Coarse gravel size Medium strong t	zed fragments) hinly laminated white and pu	urple stained light brown	ΓE
		15.00 - 16.00	C 47							NI NR				<ul> <li>medium grained degrees very closed</li> </ul>	micaceous SANDSTONE. I sely to closely spaced plana	Discontinuities: 1) 0-10 ar rough locally with reddish	١Ē
										NI 25				reddish brown.	2) 80 degrees widely space	d undulating rough stained	E
						15.00	75	50	10	21	45.47	15.36		from 13.90m to coarse gravel size	13.94m recovered as non in zed fragments)	tact core (angular fine to	E
		15.64 - 15.74	CS 47.1			16.00				21				from 13.94m to 1 from 14 22m to 1	14.00m assumed zone of co	re loss	F
		16 00 - 16 50	C 48							NR			ŀ	• from 14.56m to	14.61m extremely weak light	t grey mudstone	E
		10.00				16.00	100	92	0					from 14.79m to gravel sized frag	14.90m recovered as non in ments)	tact core (angular coarse	F
		16 50 - 18 00	C 49			16.50						(2.02)		• from 14.90m to	15.00m assumed zone of co	re loss tact core (sandy angular	E.
		10.00 - 10.00	0 49							14				fine to coarse gr	avel sized fragments)		jĘ.
		16.92 - 17.02	CS 49.1										· . ·	<ul> <li>rare reddish bro siltstone. Discon</li> </ul>	wn inclusions (2mm x 5mm - ntinuities: 1) 0-10 degrees ve	to 10mm x 12mm) of erv closely to closely spaced	ιE
						16.50	77	53	7					from 15 75m to	n with localised brown stainii 16 00m assumed zone of co	ng. Ire loss	F
						18.00			<i>'</i>	NI	43.45	17.38		from 16.80m to	16.85m recovered as non in	tact core (sandy subangular	٢Ē
										NR	43.11	(0.34)		from 17.03m to	17.10m recovered as non in	tact core (sandy subangular	r  =
		18.00 - 19.00	C 50							15	42.91	(0.20) 17.92		from 17.26m to	17.38m recovered as non in	tact core (very sandy	E
		10.00 - 19.00	0.00							4	42.67	(0.24) 18.16		Assumed zone of	of core loss. Weak SANDST	ONE. (Driller's description)	-11-
						18.00	80	15	15	NI			· . ·	Weak yellowish reddish brown in	white medium grained SANI nclusions (from 1mm x 1mm	DSTONE with abundant to 10mm x 10mm).	Ē
						19.00	00		15					Discontinuities: undulating rough	<ol> <li>0-10 degrees very closely with brown staining.</li> </ol>	to closely spaced	F
		40.00 40.50	0.54							NR			· . ·	Strong grey med     at 18 00m 1 No	dium grained SANDSTONE.	ar rough with reddish brown	Æ
		19.00 - 19.50	0.51			19.00	00					(2.24)		staining	also minuty 5 degrees plan		]F
						19.50	90			NI			· · ·	• SANDSTONE. F	Recovered as non intact core	e (fine to coarse sand and	E.
		19.50 - 20.00	C 52			19.50	100	00	~					content).	19 00m assumed zono of op	re loss	E
						20.00	100	30	20	0 NI							_F.
															Continued on next p	page	
arks	5 8 su	rvey underta	ken. 2. G	as alarm used	I to monitor bore	hole loca	tion du	ring ro	otary d	Irilling.	No ele	vated ga	as levels o	letected during bore	hole 0.00 - 1.20m IP Inc.	ger, Stability, Dimension	IS
ation. ce (O	3. 19 GL).	omm vane use Based on a rea	ed to carr al dataset,	y out hand van , but modificatio	e tests. Contains ns have been mad	data sup le by the P	plied by ebble (	y Natu Geo tea	am for	vironm demo p	ent Res urposes	search C s.	ouncil und	er the Open Governm	nent Stable $L = 0.50m$		
															W = 0.5	0m	
															1.20 - 13.00m CP Dat	ndo 3000	

P	G	Pebb	ole	Geo	Bor	eł	าด	blo	е		0	С					BH109	)
123	3 Ma	in Street			Hole Type Easting							9	Northin	g	Ground Level (	m) Scale	Sheet 3 of 5	
An Th	ytow	'n			IP+CP+RC			43	1690	.05			667747.	.45 (	60.83	1:50		
AB	12 3	CD			A123 Rounda	e about l	mprov	eme	nt				Project ABC123	<b>No.</b> 3	Start Date 2019-05-02	End Da 2019-0	<b>ite</b> )5-13	
Client	al Ro	ads						Co Th	ontrac	tor	tractor	·s	Consultant The Soil Engineers					
Inst/	ي ب ه	5	Sampl	les and Te	sts		Cor	ing		Frac	Level	Depth	Strata					
Backfill	Wate	Depth (m)	Type/	Res	aults	Core	TCR	SCR	RQD	FI	(m)	(thickness)	Legend		Description			
		20.00 - 20.20	Ref C 53			Run 20.00	(%)	(%)	(%)		(,	(,	Logona	from 19.45m to 19.50	Om assumed zo	ne of core loss		
		20.20 - 21.20	C 54			20.20								from 19.50m to 19.55	5m intact core			
										5	40.43	20.40 (0.20) 20.60		from 19.82m to 19.92 Extremely weak redo	2m intact core dish brown medi	um grained SANDST	ONE. 2	20.5
						20.20	97	57	49	0		(0.47)		from 20.45m to 20.5	3m 1 No discont	tinuity 45 degrees pla	nar rough	
											39.76	21.07		from 20.60m to 20.70	0m recovered a	s non intact core (san	Idy gravelly	21.0
		21.20 - 22.40	C 55							1				Clay) Extremely weak light	t grey stained re	ddish brown MUDST		
														Recovered as non in	itact core (grave	lly clay).	2	21.5
						21.20 22.40	98	0	0	NI		(1.33)					E	
																	- 2	22.0
		22.40 24.20	0.56								38.43	22.40						
		22.40 - 24.20	0.00							20	00.40	22.40		Weak thinly laminate MUDSTONE. Discor	ed greenish grey ntinuities: 1) 0-5	stained dark reddish degrees very closely	to closely	22.5
										-	(0.91)		from 22.46m to 22.50	0m recovered a:	s non intact core (sub	angular fine		
										NI	-			fo coarse gravel size from 22.56m to 22.59	ed fragments) 9m recovered a:	s non intact core (clay	yey 2	23.0
						22.40 24.20	97	31	14	13 NI	37.52	23.31		subangular fine to co from 22.64m to 22.70	oarse gravel size Om recovered a:	ed fragments) s non intact core (ver	y clayey	
										0	-	(0.53)		angular to subangula from 22.85m to 23.0	ar fine to coarse 7m recovered a:	gravel sized fragmer s non intact core (clay	vey angular	23.5
										NI	36.99	23.84		fine to coarse gravel Weak thinly laminate	sized fragments	s) stained dark reddish	brown	
								7				MUDSTONE. Recov gravel sized fragmen	rered as non intants).	act core (angular fine	to coarse	24.0		
		24.20 - 25.70						NI		(0.91)		from 23.51m to 23.6	1m intact core		E			
										17				Medium strong thinly	laminated gree	nish grey stained dar	k reddish	24.5
						24.20			10		36.08	24.75		closely spaced plana	ar smooth with re	eddish brown staining	J.	
						25.70	99	49	13	NI	35.55	(0.53)		from 23.84m to 24.10	Om discontinuitie	es set 1) medium spa	iced	25.0
											35.55	25.28		from 24.26m to 24.39 fine to coarse gravel	9m recovered as sized fragments	s non intact core (clay s)	/ey angular	
		05 70 07 00	0.50											from 24.52m to 24.56 coarse gravel sized f	6m recovered as fragments)	s non intact core (ang	jular fine to	25.5
		23.70 - 27.20	0.00											from 24.65m to 24.73 coarse gravel)	3m recovered as	s non intact core (ang	jular fine to	
										14		(4.00)		Medium strong thinly brown MUDSTONE.	laminated gree Recovered as r	nish grey stained dar non intact core (claye	k reddish y angular fine	26.0
						25.70	98	60	13			(1.89)		to coarse gravel size Strong thinly laminate	ed fragments). ed grey silty fine	grained micaceous	SANDSTONE	
						27.20								with closely to mediu medium strong thinly	Im spaced thick Iaminated grey	laminations to very th mudstone. Discontin	nin beds of uities: 1) 10	26.5
														brown staining.	to closely space	ed planar rough local		
		27.20 - 28.80	C 59							NI	33.66	27.17		coarse gravel sized f	4m recovered as fragments)	s non intact core (ang	jular fine to	27.0
										>25		(0.47)		from 25.60m to 25.60 from 25.70m to 25.78	6m 1 No discont 8m recovered a:	tinuity 70 degrees pla s non intact core (ang	nar rough	57 E
											33.19	27.64		gravel sized fragmen from 25.78m to 25.8	nts) 5m 1 No discont	tinuity 70 degrees pla	nar rough	.1.5
						27.20	99	49	13					from 25.85m to 25.92 clay infill	2m 2 No closely	spaced discontinuitie	es set 1) with	28.0
						28.80				17		(1.05)		from 26.75m to 26.87	7m 1 No discont	tinuity 80 degrees pla	nar rough	.0.0
														coarse gravel sized f	9m recovered as fragments)	s non intact core (ang	jular fine to	28.5
											32.14	28.69		coarse gravel sized f	7m recovered as fragments)	s non intact core (ang	Jular fine to	
		28.80 - 29.80	C 60							12		(0.00)		Weak thinly laminate degrees very closely	ed black bright C spaced planar	OAL. Discontinuities: rough stepped.	1) 0-10	29.0
						28.80				12		(0.69)		from 27.17m to 27.30 from 27.31m to 27.64	0m dull coal 4m 2 No discont	tinuities 80 dearees s	tepped rough	
						29.80	100	56	52	13	31.45	29.38		Weak to medium stro Discontinuities: 1) 0-	ong thinly lamina	ated black dull and br	ight COAL.	29.5
	29 80 - 31 30 C 61									NI 17		(0.82)		rough stepped.	6m strong black	carbonaceous mude	tone	-
	29.80 - 31.30 C 61					29.80 31.30	93	30	11	NR 13	-							30.0
Remai	ke												Continued of	nt Logger Stability	v Dimensions			
1. PAS formatio	<b>n.ə</b> 128 sı n. 3. 1	urvey underta 9mm vane us	Gas alarm used rry out hand van	to monitor boreho e tests. Contains d	ole loca ata sup	tion du plied b	ring ro y Natu	otary d Iral En	Irilling. vironm	No ele ent Res	vated g earch C	as levels de ouncil unde	etected during borehole r the Open Government	0.00 - 1.20m	IP Insulated Hand Too	y, onnensions ols (	CR	
Licence	(OGL).	Based on a re	al datase	et, but modification	ns have been made	by the P	ebble (	Geo tea	am for	demo p	ourposes	5. -			L = 0.50m			
																W = 0.50m		07
															1.20 - 13.00m 13.00 - 14.00m	CP Dando 3000 RC Soilmec SM8G	(	CR CR
															31.30 - 42.70m	KC Soilmec SM8G	C	υŔ

P	G	Pebb	ole	Geo	Borehole Loa											BH1		
123	3 Ma	in Street						Ea	sting	05		9	Northing         Ground Level (m)           667747 45         60 83			Ground Level (m)	Scale	of 5
Th	eshir	re			Project Name			40	1030	.05			Proje	ect	No. 5	Start Date	End Date	
Client	12 3				A123 Rounda	ibout Ir	nprov	eme Co	nt ontrac	tor			ABC <sup>2</sup>	123	3 2	2019-05-02 Consultant	2019-05-13	
Nation	al Ro	ads					-	Th	ne Soi	l Con	tractor	s	1		1	The Soil Engineers		
Inst/	/ater evels	5		les and Te	sts	Core	Cor	ing	ROD	Frac	Level	Depth (thickness			;	Strata		_
Баскіш	< J	Depth (m)	Ref	Re	sults	Run	(%)	(%)	(%)	FI	(m)	(m)	Legen	nd		Description		
											30.63	30.20			from 28.01m to 28.12 from 28.47m to 28.66	2m strong black carbonac 6m strong black carbonac	eous mudstone ceous mudstone	E
											30.31	(0.32) 30.52		_	from 28.60m to 28.69 coarse gravel sized f	Om recovered as non inta ragments)	ct core (angular fine to	30.5
										5	30.08	(0.23) 30.75	-		Medium strong thinly extremely closely spa	laminated grey silty mica	aceous MUDSTONE with ons of cream fine grained	Ē
										NI	29.78	(0.30) 31.05			sandstone. Discontin spaced undulating ro	uities: 1) 5-15 degrees ve ough.	ry closely to closely	31.0
		31.30 - 32.70	C 62							12		(0.41)			from 28.69m to 28.76 from 29.25m to 29.32	6m greyish brown (possib 2m 1 No discontinuity 70-	le seat earth) 90 degrees undulating	E
											29.37	31.46			rough Weak thinly laminate		Discontinuities: 1) 5-15	31.5
															degrees very closely	to closely spaced planar	smooth .	F
						31.30 32.70	95	75	49	9		(1.24)		• •	coarse gravel sized f	ragments)		32.0
													· · ·	•	Very weak thinly lam	minated black bright COAL. Recovered as non intact		
															Strong black carbona	coarse gravel and cobble aceous MUDSTONE.	sized fragments).	32.5
		32.70 - 34.20	C 63							10	28.13	32.70	· .		at 30.69m 1 No disco	ontinuity 0 degrees undula	ating smooth	╢╴
										NI	1			• •	to coarse gravel size	d fragments).		33.0
														•	Discontinuities: 1) 0-7 undulating smooth. (I	10 degrees very closely to Possible seat earth)	o closely spaced	F
						34.20	98	89	50			(4.00)	:	•••	from 31.14m to 31.30	Om medium strong		33.5
										10		(1.90)		•	with closely to mediu	ed cream fine grained mic m spaced thin beds with laminations. Discontinuit	extremely closely spaced	F
													: : .	• •	closely spaced undul	lating rough.	continuity 90 degrees	34.0
		34.20 - 35.10	C 64										· · ·	•	undulating rough	on grey and with Thous	continuity so degrees	
						34.20					26.23	34.60			degrees and 90 degr	ees undulating rough	ary closely spaced 70	34.5
						35.10	97	43	26				<u> </u>	_	from 31.74m to 31.83 from 31.86m to 32.10	3m discontinuities set 1) v Om discontinuities set 1) r	ery closely spaced	IF .
		35 10 - 36 60	C 65							NI		(1.05)			Medium strong thinly medium grained SAN	to medium bedded light	grey and grey fine to medium spaced very thin	35.0
		00.10 00.00										(1.03)		_	to thin beds of weak degrees closely to m	dark grey silty mudstone. edium spaced planar smo	Discontinuities: 1) 0-5 poth.	F
											05.40	25.05			from 32.90m to 33.00 coarse gravel sized f	Om recovered as non inta ragments)	ct core (angular fine to	35.5
						35.10	100	39	33	17	25.18	(0.40)			from 33.30m to 33.47 x 5mm to 10mm x 30	7m with occasional dark g 0mm) of mudstone	rey inclusions (from 5mm	F
						30.00				NI	24.78	36.05	-		from 34.50m to 34.60	Om with some orangish bi	own staining	36.0
													· .		Recovered as non infinite to coarse).	tact core (very gravelly si	Ity clay. Gravel is angular	E
		36.60 - 38.05	C 66							-					from 34.75m to 34.80	Om weak, intact core		36.5
										4					medium to coarse gra	Jm weak. Recovered as r avel sized fragments)	ion intact core (angular	E
													: · ·		from 34.98m to 35.20 fine to coarse gravel	Om recovered as non inta sized fragments)	ct core (clayey angular	37.0
						36.60 38.05	100	100	92						from 35.50m to 35.65 Weak grey silty MUD	5m black carbonaceous STONE with occasional (	plant remains.	Æ
											-				Discontinuities: 1) 0-7 undulating smooth.	10 degrees very closely to	closely spaced	37.5
													÷ `.		from 35.80m to 35.86 angular fine to coarse	6m recovered as non inta e gravel sized fragments)	ct core (very clayey	E
		38.05 - 39.50	C 67							5		(6.65)	· · ·		from 35.95m to 36.05 gravelly clay)	5m very weak. Recovered	as non intact core (very	38.0
													÷ .		Strong thinly to media SANDSTONE with or	um bedded light grey fine ccasional dark grey inclus	to coarse grained sions (from 5mm x 5mm	E
															to 20mm x 40mm) of closely to medium sp	mudstone. Discontinuitie baced planar rough.	s: 1) 0-10 degrees	38.5
						38.05 39.50	100	97	97				÷ °.		from 38.05m to 38.10 coarse gravel sized f	Om recovered as non inta ragments)	ct core (angular fine to	E
										2			· · ·					39.0
													· ·					E
		39.50 - 41.10	C 68			30.50					1		· · ·					39.5
						39.50 41.10	100	94	74	6			• • •					F
											1					Continued on next pa	ge	40.0
Reman 1. PAS	<b>ks</b> 128 s	urvey underta		Gas alarm used	to monitor boreho	le locat	ion du	ring ro	otary d	Irilling.	No ele	vated g	as levels	s de	etected during borehole	Method, Plant, Logg	er, Stability, Dimension	IS CP
formatic Licence	n. 3. 1 (OGL)	9mm vane us Based on a re	ed to car al datase	rry out hand van et, but modificatio	e tests. Contains dans have been made	ata supp by the P	olied by ebble G	/ Natu Seo tea	am for	vironm demo p	ent Res ourposes	search C 3.	ouncil ur	nde	r the Open Government	Stable $L = 0.50m$		0.0
																W = 0.50n	1	
																1.20 - 13.00m CP Dand	o 3000	CR
																31.30 - 42.70m RC Soilm	ec SM8G	CR
1																		

P	G	Pebb	ole	Geo	Bor	eł	าด		e		O			BH1 Sheet 5	<b>09</b> of 5		
12: An	3 Ma ytow	in Street m			Hole Type IP+CP+RC			<b>Ea</b> 43	sting	.05			Northin 667747	<b>ig</b> 7.45	Ground Level (m) 60.83	<b>Scale</b> 1:50	
Th AB	eshir 12 3	re CD			Project Name	e ebout li	mprov	ama	nt				Project	No.	Start Date	End Date	
Client							npiov	Co	ontrac	tor			ADOIZ	5	Consultant	2019-03-13	
Nation	al Ro	ads	Samn	les and Te	sts		Cor	Th ina	e Soi	Con	tractor	S			The Soil Engineers		
Backfill	Water _evels	Denth (m)	Type/		sulte	Core	TCR	SCR	RQD	FI	(m)	(thickness)	Legend		Description		_
	_	Depth (III)	Ref			Run	(%)	(%)	(%)		(,	(,	Legenu		Description		_
		41.10 - 42.70	C 69											from 40.95m to 41.0 gravel sized fragmer	0m recovered as non intact tts)	core (angular coarse	40.5
										2	1			•			41.5
						41.10				2				•			-
						42.70	100	100	100	6							42.0
											-						E
										2	18.13	42.70					42.5
															End of Borehole at 42.70	)m	43.0
																	E
																	43.5
																	_
																	44.0
																	Ē
																	44.5
																	45.0
																	_
																	45.5
																	E
																	46.0
																	46.5
																	- 47.0
																	47.0
																	47.5
																	E
																	48.0
																	48.5
																	Ē
																	49.0
																	E
																	49.5
																	F
																	50.0
Remain 1. PAS formation Licence	<b>ks</b> 128 su n. 3. 1 (OGL).	urvey underta 9mm vane us . Based on a re	iken. 2. ( ed to ca al datase	Gas alarm used rry out hand van et, but modificatior	to monitor boreho e tests. Contains d ns have been made	ole loca ata sup by the P	tion du plied by ebble G	ring ro / Natu Seo tea	otary d ral Env am for o	Irilling. vironm demo p	No ele ent Res ourposes	vated g search C s.	as levels de ouncil unde	etected during borehole er the Open Government	Method, Plant, Logger           0.00 - 1.20m         IP         Insulate           Stable         L = 0.50m	r, Stability, Dimension ad Hand Tools	S CR
															W = 0.50m	2000	
															1.20 - 13.00m         CP         Dando           13.00 - 14.00m         RC         Soilmed           31.30 - 42.70m         RC         Soilmed	3000 c SM8G c SM8G	CR CR CR

G	Pebb	ole (	Geo	Tria	al	Ρ	it								TF	<b>94</b> :
3 Ma	in Street			Hole Type			Ea	sting	96			Northing	Scale	. 10		
iycow ieshir זוס ז	re CD			Project Nam	e		43	2002.	.00			Project	No.	57.34   1:25     Start Date   End Date		
512 5				A123 Round	about I	mpro	/emer Co	nt ontrac	tor			ABC123	3	2019-04-02 Consultant	2019-04-02	
al Ro	ads	Sample	es and Te	sts		Cor	Th ina	e Soi	I Con	tractor	S Dopth			The Soil Engineers		
Wate	Depth (m)	Type/	Res	ults	Core	TCR	SCR	RQD	Tac	(m)	(thickness)	Legend		Description		
	0.05 - 0.10 0.05 - 0.10 0.30 - 0.40 0.30 - 0.40 0.60 - 0.70 0.60 - 0.70 0.60 - 0.70 1.10 - 1.20 1.70 - 1.80 1.70 - 1.80	Ref       D1       D2       ES3       B4       PID       D5       ES6       B7       PID       ES8       PID       ES10       D9	<0.1 <0.1	lppm lppm 1.8	Run	(%)	(%)	(%)		57.24 56.79 55.74	(1.05) (0.45) (1.05) 1.60		MADE GROUND: To to coarse sand with of angular to subrounded concrete. MADE GROUND: BI subrounded fine to c concrete, metal, woo fragments are fine to sandstone, brick and at 0.20m 1 No steel MADE GROUND: Dr subangular to roundd sandstone, mudston boulder content. San subangular to roundd fragments are suban 250mm x 100mm).	Description posoil of brown slightly g poccasional rootlets. Gra ad fine to coarse of brick ack and dark grey sand oarse gravel sized frag voarse. Cobble sized frag to coarse. Cobble sized frag y sandy silty subrounden the coarse. Cobbles are to coarse. Cobbles are to coarse. Cobbles are	gravelly slightly clayey fin vel sized fragments are k, sandstone and rare y clayey angular to ments of brick, sandston ible content. Sand sized ragments are subangula up to 1.50m long black very sandy clayey sized fragments of oal with medium cobble ble sized fragments are ble sized fragments are solder sized andstone (up to 700mm	e, r of and x
	2.60	D 12								54.74	(1.00)			End of Trial Pit at 2.	60m	
IT <b>ks</b> 128 su I. Conta ations h	Irvey undertak ains data supp ave been made	en. 2. AC plied by N e by the Pe	oW present dur latural Environ bbble Geo team :	ing excavation. 3 ment Research for demo purposes	. All side Council d	s simila	ar. 4. T	rial pit	termin	ated du ent Lic	e to col ence (C	lapse. 5. Phi GL). Based	otographs taken prior to d on a real dataset, but	Method, Plant, Log           0.00 - 2.60m         TP         JCI           Collapse of faces A and         L = 2.70m         W = 1.6	<b>ger, Stability, Dimens</b> B 3CX I C from 1.60m to 2.60m <i>0m</i>	sions

P	G	Pebb	ole	Geo	Bor	e	n	D	е		00	g		BH10 Sheet 1 of	<b>0</b>				
12	3 Ma	in Street			Hole Type			Ea	sting	J 01			Northin	g Ground Level (m) Scale					
Th	eshir	re CD			Project Nam	e		43		.91			Project	No. Start Date End Date					
Client	12 3				A123 Round	labout	mprov	/eme Co	nt ontrac	ctor			ABC12	2019-05-07 2019-05-09 Consultant					
Nation	al Ro	ads			- 4 -		0	Th	ne So	il Con	tractor	s	The Soil Engineers						
Inst/ Backfill	Vater evels	5	Type/	les and Te	sts	Core	TCR	' <b>ing</b> Iscr	RQD	Frac	Level	Depth (thickness)		Strata					
	2	Depth (m) 0.00	Ref	Res <0.7	sults	Run	(%)	(%)	(%)	-	(m)	(m)	Legend	Description					
		0.00	D1 ES2								59.05	(0.30) 0.30		occasional rootlets.	-				
$\vdash$	-	0.00 - 0.30 0.30 0.30	PID D 4	<0.1	1ppm							(0.50)		is angular to subangular fine to medium of sandstone and mudstone.	- 0.5 				
	_	0.30 0.30 - 0.80 0.50	ES 5 B 7 PID		5.5						58.55	0.80		Soft brown mottled grey slightly sandy slightly gravelly CLAY. Sand is	-				
$\vdash$		0.50 0.80	ES 6 PID	<0.1	1ppm							(0.70)		fine to coarse. Gravel is angular to subrounded fine to coarse of sandstone and mudstone.	- 1.0				
		0.80 0.80 - 1.20	ES 9 B 12											-	-				
		1.00 1.00 1.00	D 10 ES 11	<0.1	1ppm						57.85	1.50		Firm grevish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of sandstone	- 1.5 - -				
		1.20 1.20 - 1.65 1 20 - 1 70	SPT D 13 B 14	N=14 (1	,0,1,1,5,7)									and mudstone.	- - - 2.0				
		1.50	PID D 15		12.8								<u> </u>		-				
		1.50 2.00 2.20 - 2.65	ES 16 D 17 U 18												- - - 2.5				
															-				
		3.00	D 19									(3.15)			- — 3.0				
		3.20 3.20 - 3.65	SPT D 20	N=36 (5,	,7,11,8,9,8)							(0.1.0)		-	-				
		3.20 - 3.70	B 21												- 3.5 				
													[-]-		-				
		4.00	D 22										L	-	— 4.0 -				
		4.20 - 4.65	U 23										L		-				
											54.70	4.65		Stiff arey slightly sandy slightly gravelly CLAY with low cobble content	- 4.5 - -				
		5.00												Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of sandstone and mudstone. Cobbles are subangular of sandstone.	- - 				
		5.00	SPT	N=38 (5,	,7,8,8,9,13)									-	-				
		5.20 - 5.65 5.20 - 5.70	D 25 B 26										<u> </u>		- - — 5.5				
												(1.86)			-				
		6.00	D 27											-	- — 6.0				
															-				
	-	6.50	SPT	50/0mm	(25/5,50/0)						52.84	6.51		End of Borehole at 6.51m (Obstruction)	— 6.5				
															-				
														-	— 7.0 -				
															-				
															- 7.5 - -				
															-				
															- -				
															- - — 8.5				
															-				
															- — 9.0				
															-				
															— 9.5 -				
															-				
															- 10.0				
Rema 1. PAS Open G	r <b>ks</b> 128 su overnm	I Irvey undertak Ient Licence (O	ien. 2. Bo GL). Bas	orehole terminatied on a real data	ted due to an obs set, but modificatio	truction.	Contai	ns dat ade by	a supp the Pe	l plied b ebble G	/ Natura eo team	I Enviro for dem	nment Res	earch Council under the Method, Plant, Logger, Stability, Dimensions 0.00 - 1.20m IP Insulated Hand Tools Stable	EC				
														L = 0.50m					
														<b>1.20 - 6.51m</b> CP Dando 3000	EC				