

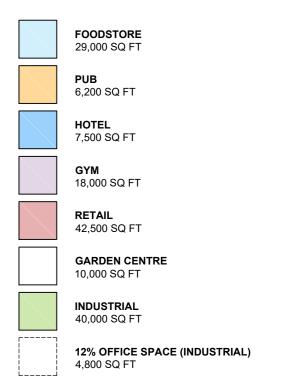
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NOTI

FLOOR AREAS



23.06.16 D.K. Covenant boundary redesign.
06.06.16 D.K. Additional retail units / Layout adjusted.
05.05.16 D.K. Boundaries and area schedule added.

Date Initial Notes

FOR INFORMATION

KIER PROPERTY

KIER PROPERT

RUSCOTE AVENUE, BANBURY

Drawing Title

PROPOSED MASTERPLAN

Checked	Paper Size	Scale	Date	
SB	A2	1:1000	24/05/16	3
		Drawing No.		Revision
1		0004		03
	SB	SB A2	SB A2 1:1000 Drawing No.	SB A2 1:1000 24/05/16

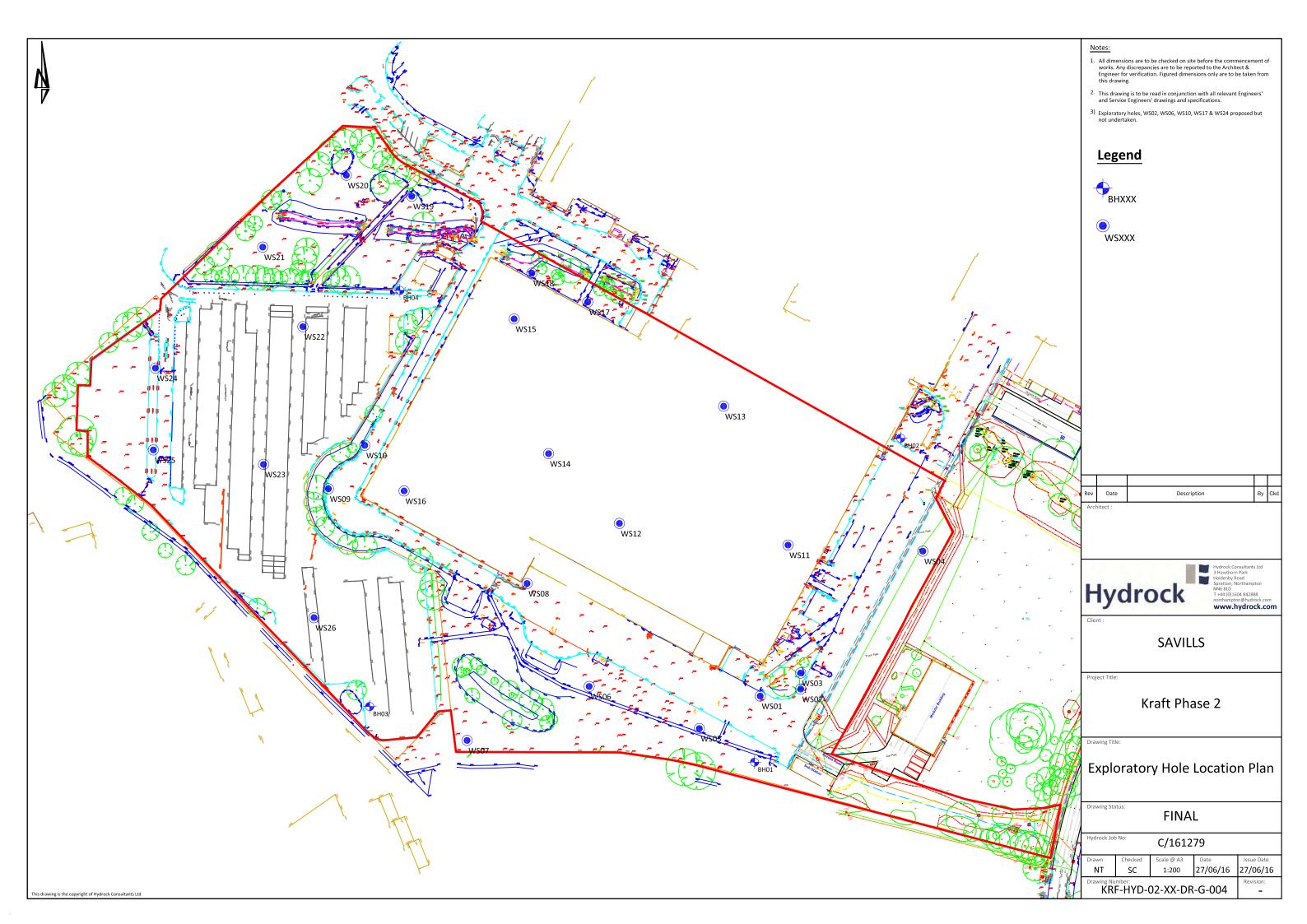
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Appendix B

Ground Investigation Plan & Exploratory Hole Plan



Hye	drock			ww	/W	.hyd	rock.	com	Dynamic Percussion with Rotary Core Follow-on Borehole No BH01 Sheet 1 of 2	
Project Na		Phase 2							Co-ords: 445186E, 241347N Hole Type:	
ocation:	Banbı	ıry						ject No: 161279	Ground Level: 95.83m OD Scale: 1:50	
lient:	db sy	nmetry							Date(s): 26/05/16 - 27/05/16 Hole Diamet	er:
ell Wate		1				Depth (m)	Level (m OD)	Legend	Stratum Description	
Series	0.10 0.40	ES ES		Results		0.25	95.58		Soft brown slightly sandy CLAY with rare gravel of fine to coarse, subangular to angular ash and flint. (MADE GROUND) Orangish locally grey brown sandy fine to coarse, flint, and rare concrete GRAVEL. (MADE GROUND) At 0.55m bgl: One piece of metal.	1
	1.20	SPT B		N=12 .2/2,3,3,4	4)				Stiff brownish orange gravelly CLAY. Gravel is fine to coarse, subangular to angular ironstone, flint and limestone. (MADE GROUND)	
	2.00-2.45	D	1	0 Blows L00% rec)		2.00	93.83		Soft fissured grey locally orange mottled sandy CLAY. Sand infilled fissures and orange root traces. (ALLUVIUM)	2
	2.90-3.00	В		27		3.00	93.33 92.83		Firm grey locally orange mottled slightly sandy CLAY with some local iron staining. (ALLUVIUM)	3
	3.00	SPT D	(4,8	N=37 5/8,10,10,	.9)	3.40	92.43		Very soft grey CLAY with a mild organic odour and rare orange root traces and decomposing wood fragments. (ALLUVIUM)	
	4.00	SPT	(5,	N=12 .4/4,3,3,2	:)				Medium dense orange very sandy fine to coarse, rounded to subangular flint GRAVEL. (RIVER TERRACE DEPOSITS) Between 3.40m bgl and 3.50m bgl: Sand lense. Between 4.0m bgl and 4.40m bgl: Coarse gravel.	4
	4.50-4.80	В				4.40	91.43		Stiff finely laminated grey CLAY with some silt sized selenite crystals and very rare mudstone lithorelicts. (CHARMOUTH MUDSTONE FORMATION)	5
	5.50	SPT	(3,5	N=26 3/3,5,8,10	9)					
	5.50-7.00	100	100	100	1					6
	7.00-8.50	100	100	100	0	6.80 7.00	89.03 88.83		Strong grey LIMESTONE with abundant shell fragments. (CHARMOUTH MUDSTONE FORMATION) Hard finely laminated grey CLAY with frequent shell fragments. (CHARMOUTH MUDSTONE FORMATION) At 7.20m bgl: One horizontal fracture.	8
	8.50-10.0 0	100	100	100	0					9
emarks:	5.50m bg 150/180n 50/100m	25, SPT nm, SPT m, SPT (at 7.1 at 12. @ 16.5	50m b .0m bg 50m, 5	gl, 50 gl, 50	0/65mm 0/110mn	n, SPT at 9 n, SPT at 1	.0m bgl, 5 13.5m bgl,	Continued on Next Sheet gl. Rotary coring to 19.50m bgl. 3) SPT at 0.0/190mm, SPTat 10.50m bgl, Use United Sample Use Undisturbed Sample Use Use Use Use Use Use Use Use Use Us	10
roundwat	Backfilled er: Groundw				1.97	7m bgl.			AB = Asbestos Bulk Sample Logged: NT Checket	d:

		rock			WW	/W	.hyd	rock.	com	Rotary C	Percussion w ore Follow-o	KHO	1 of 2
	ect Name							Pre	oject No.	Co-ords:	445186E, 241347N	DNP+F Scale	RC
Loca	ition:	Banbu	ry						161279	Ground Level:	95.83m OD	1:50)
Clier	nt:	db sym	nmetry							Date (s):	26/05/16 - 27/05/1	6 Hole Dian	
Well	Water Strikes	Depth (m)	otary C		RQD	FI	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	n	
		10.00-11. 50 11.50-13. 00	100	100	100	0 0	12.55	83.28		fragments. (CH. At 12.76m b At 12.92m b Hard finely lami fragments and f FORMATION)	STONE with abundant ARMOUTH MUDSTONE gl: Horizontal fracture. gl: Horizontal fracture nated grey CLAY with a fossils. (CHARMOUTH I	FORMATION)	12.0 —
		14.50-16. 00	100	100	100	0	15.15	80.68		Very weak thinlishell fragments	y laminated grey MUDS and rare limestone lith HARMOUTH MUDSTON	orelicts /	15.0 —
		16.00-17. 50	100	100	100	0							17.0
		17.50-19. 00	100	100	100	0				At 18 85m h	gl: Two to five centimetre	limestone hand	18.0
		19.00-20. 00	100	100	100		19.61	76.22		At 10.03III D	End of Borehole at 19.61		20.0
Rema	arks:	5.50m bgl 150/180m	25, SPT m, SPT n, SPT (with be	at 7. at 12 at 16.5 ntoni	50m b .0m bg 50m, 5 te.	gl, 50 gl, 50 0/85	0/65mm 0/110mn 5mm, SP	, SPT at 9 n, SPT at	9.0m bgl, 5 13.5m bgl,	0/190mm, SPTat 10 50/100mm, SPT at		B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample	ked: SC

Hyd	rock			ww	/W	.hyd	rock.	com	Dynamic Percussion with Rotary Core Follow-on	Borehole No BH02 Sheet 1 of 3	
Project Name	: Kraft P	hase 2							Co-ords: 445245E, 241478N	Hole Type: DNP+RC	:
Location:	Banbu	ry						ject No: 161279	Ground Level: 96.20m OD	Scale: 1:50	
Client:	db sym	nmetry						101273	Date(s): 31/05/16 - 01/06/16	Hole Diamete	er:
/ell Water Strikes	Sample	I				Depth	Level (m OD)	Legend	Stratum Description		
Strikes	Depth (m)	Туре	F	Results	3	(m) _{0.15}	96.05		Soft brown very sandy gravelly CLAY. Grave	l is fine to	
	0.10	ES				0.15	96.05		coarse, subangular to angular flint and brid		
	0.50	ES				0.80	95.40		Firm orangish brown sandy gravelly CLAY v		
						0.80	33.40		cobble content. Gravel is fine to coarse, an subangular flint, brick and concrete. (MAI		1.0
	1.20	SPT	(4,	N=12 ,6/4,3,2,3	3)	1.20	95.00		Brownish orange sandy very gravelly CLAY	with a low	
	1.20-1.65 1.30	D D			,				cobble content. Gravel is fine to coarse, su angular sandstone and ironstone. (MADE	-	
									Firm greenish grey slightly sandy CLAY with	some rootlets	
	2.00-2.45 2.00-2.45	D U	l .	0 Blows 45% rec)					and rare angular coal gravel. Mild organic (ALLUVIUM)	odour.	2.0
	2.60	В				2.70	93.50			·· .	
	3.00	SPT		N=23		2.90	93.30		Firm orange gravelly sandy CLAY. Gravel is subrounded to rounded flint. (RIVER TERR		3.0
	3.00-3.45	D	(4,	,6/6,6,5,6	5)				Medium dense orange gravelly SAND. Grav	el is fine to	
	3.20-3.70	В							coarse, subrounded to subangular quartz a TERRACE DEPOSITS)	and flint. (RIVER	
	4.00	SPT	(4	N=13 ,4/3,3,4,3	1)	4.00	92.20		Medium dense orange sandy fine to coars	e. subrounded	4.0
			(-,	,-, 3,3,-,3	''				to rounded flint GRAVEL. (RIVER TERRACE		
						4.55	91.65		Stiff grey thinly laminated CLAY with rare s	hell fragments	1
									and silt sized selenite crystals. (CHARMOL FORMATION)		5.0
	5.30-5.50 5.50	B SPT		-N=40				<u> </u>			
			(12,1	0/8,8,10,	,14)			E===			
											6.0
	5.50-7.00	100	100	100				F_=_=			
								E-E-E			
						7.00	89.20		Very weak thinly laminated grey MUDSTOI		7.0
									fine silt sized selenite crystals and shell fra (CHARMOUTH MUDSTONE FORMATION)	gments.	
	7.00-8.50	100	100	100	0				At 7.10m bgl: 4cm limestone band recover	ed as gravel.	
											8.
	8.50-10.0										9.
	0	100	100	100	0						
									Continued on Next Sheet		10.0
									Continued on Next Silect		
marks:	7.00m bgl, bgl, 50/120 50/155mm	50/190 0mm, S n, SPT a	Omm, SPT at it 17.5	SPT at 13.0m 50m bg	8.5 bgl,	0m bgl, , 50/180	51/215mr mm, SPT	m, SPT at 1 at 14.50m	0.0m bgl, 50/150mm, SPT at 11.50m bgl, 50/170mm, SPT at 16.0m bgl, 9/10mm, SPT at 20.0m bgl, 50/65mm.	k Sample turbed Sample disturbed Sample ndisturbed Sample (Thin Wall) wironmental Sample ater Sample hotolonization Detector (ppm) tandard Penetration Test	
	4) Backfille	d with	hanto	nnita					AB = A	sbestos Bulk Sample	

F	lyd	rock			ww	/W	.hyd	rock.	com	=	Percussion w ore Follow-o		BH	102 t 2 of 3	
Proj	ect Name	: Kraft P	hase 2							Co-ords:	445245E, 241478N		Hole	Type: P+RC	
Loca	tion:	Banbu	ry						ject No. 161279	Ground Level:	96.20m OD			ale: :50	
Clier	nt:	db sym	nmetry							Date (s):	31/05/16 - 01/06/1	6	Hole D	iamete Omm	er:
Well	Water Strikes	Ro Depth (m)	otary C		RQD	FI	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	n			
		10.00-11.	100	100	100	0	11.20	85.00			y laminated MUDSTON (CHARMOUTH MUDS				11.0
		11.50-13. 00	100	100	100	0									12.0
		13.00-14. 50	100	100	100	1	13.90 14.20	82.30 82.00		Strong grey LIMI fossils. (CHARM Weak thinly lam	gl: Horizontal fracture. ESTONE with abundan OUTH MUDSTONE FO inated grey MUDSTON s. (CHARMOUTH MUD	RMATION IE with ab)	/	14.0
		14.50-16. 00	100	100	100	0				FORMATION)	s. (CHANVICOTTIVIOL	STONE			15.0 —
		16.00-17. 50	100	100	100	0									17.0
		17.50-19. 00	100	100	100	0									18.0
		19.00-20. 00	100	100	100	0					Continued on Next Shee	et			19.0
Rema	nrks:	7.00m bgl, bgl, 50/120	50/190 Omm, S n, SPT a ed with	Omm, SPT at It 17.5 bento	SPT at 13.0m 50m bg	8.5 bgl,	0m bgl, 5 , 50/180	51/215mr mm, SPT a	n, SPT at 1 at 14.50m	0.0m bgl, 50/150m bgl, 50/170mm, SP		B = Bulk Sample D = Disturbed Sar U = Undisturbed: UT = Undisturbed: ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pt AB = Asbestos Bu	Sample Sample (Thin V al Sample e tion Detector (p enetration Test lk Sample		·

	lyd ect Name	rock :: Kraft P			ww	/W	.hydı	rock.	com	_	Percussion w Core Follow-o		Borehole No BH02 Sheet 3 of 3 Hole Type:	3
Loca	tion:	Banbu	ry						oject No. 161279	Ground Level:	96.20m OD		Scale: 1:50	
Clien	nt:	db sym	metry						101273	Date (s):	31/05/16 - 01/06/16	6	Hole Diamete	er:
Well	Water	Ro	otary C				Depth	Level	Legend		Stratum Descriptio	n	110111111	
vvcii	Strikes	Depth (m)	TCR	SCR	RQD	FI	(m) 20.14	(m OD)	Legend		Stratum Bescriptio			
											End of Borehole at 20.14			22.0 —
														27.0 —
														28.0
														29.0
Rema	rks:	7.00m bgl, bgl, 50/120	50/190 Omm, S on, SPT a od with	Omm, SPT at at 17.5 bento	SPT at 13.0m 0m bg	8.5 bgl	0m bgl, 5 , 50/180	51/215m mm, SPT	m, SPT at 1 at 14.50m	l0.0m bgl, 50/150n bgl, 50/170mm, SF		ES = Environmenta W = Water Sample	ample Sample (Thin Wall) al Sample e tion Detector (ppm) netration Test	d: sc

Н	lydi	rock			ww	/W	.hyd	rock.	com	_	Percussion w ore Follow-o		Borehole I	3
	ct Name									Co-ords:	445030E, 241369N		Sheet 1 of Hole Typ DNP+RO	e:
Locat	tion:	Banbu	ry						ject No:	Ground Level:	98.90m OD		Scale:	
Clien	t:	db sym	nmetry						161279	Date(s):	02/06/16 - 03/06/1	6	1:50 Hole Diame	
/ell	Water	Sample	and In	Situ T	esting		Depth	Level	Legend		Stratum Descriptio	n	110111111	
	Strikes	Depth (m)	Туре	R	Results		(m) 0.05	(m OD)		ASPHALT. (MAD				7
		0.50-0.80	В				0.50	98.40			dy fine to coarse, subar /EL. (MADE GROUND)	ngular to	angular	
		0.60	ES							Firm orange loca	ally grey mottled slight ravel is fine to coarse, s			
		1.00	ES							angular coal, rar	e sandstone and subro	-		1.
		1.20 1.20	D SPT		N=7	,				flint. (RIVER TEI	RRACE DEPOSITS)			
		(1,	1/1,1,2,3)										
	2.00-2.20 B 2.00-2.45 U													2.
					0 Blows .00% rec)									4
	3.00 SPT				.00% rec)		2.40	96.50		Orangeish brow	n clayey SAND with up	to 40mm	n thick	
										-	VER TERRACE DEPOSIT			
		3.00	SPT		N=7		2.90	96.00		Soft to firm orar	nge sandy CLAY, locally	iron stain	ied.	3
	3.70-4.00 B				1/2,1,2,2)				(RIVER TERRACE	DEPOSITS)			
	3.70-4.00 B 4.00-4.40 U			1	0 Blows 80% rec)									4
		4.70	D				4.60	94.30		Soft orange loca	lly grey mottled sandy	CLAY. (RI	IVER	
		4.70-5.40 5.00	B SPT		N=10					TERRACE DEPOS		· · · · · · · · · · · · · · · · · · ·		5
		0.00		(2,	2/2,2,3,3)								
							-							
							5.60 5.80	93.30 93.10			n orange sandy CLAY a	nd clayey	SAND.	7
										(RIVER TERRACE Orange slightly of	DEPOSITS) Clayey SAND. (RIVER TI	ERRACE D	DEPOSITS)	_/ 6.
							6.20	92.70		Orange slightly o	clayey sandy fine to me	edium sub	orounded	
										to rounded flint	GRAVEL. (RIVER TERR	ACE DEPO	OSITS)	
														7
		0.00-10.0	100	100	100									
		0					8.00	90.90		Caiff ann a think l	la main atta d CLAV (CLIA	MACHTH		8
									F_=_=	MUDSTONE FOR	laminated CLAY. (CHAF RMATION)	NIVIUU I H		
									E-E-E-		•			
									<u> </u>					
							9.00	89.90		Very weak grey	MUDSTONE with some	shell fra	gments	9
						0					d selenite crystals. (Ch	HARMOU'	TH	
										MUDSTONE FOR	(IVIALION)			
														10
1											Continued on Next Shee	et		100
emai	rks:	10.0m bgl,	50/180 Dmm, S	Omm, SPT at	SPT at 16.0m	11. bgl	50m bgl, , 50/140	50/180m mm, SPT a	nm, SPT at at 17.50m	13.0m bgl, 50/150r bgl, 50/85mm, SPT	20.0m bgl. 3) SPT at nm, SPT at 14.50m at 19.0m bgl,	ES = Environment W = Water Samp PID = Photoioniza SPT = Standard Po	Sample d Sample (Thin Wall) tal Sample le ation Detector (ppm) enetration Test	
												AB = Asbestos Bu		

H	lvd	rock			ww	/W	.hyd	rock.c	com	=	Percussion wi	n BHU3	
	ect Name									Co-ords:	445030E, 241369N	Sheet 2 of Hole Type	
								Pro	ject No.			DNP+RC Scale:	
Loca	ition:	Banbu	ry						61279	Ground Level:	98.90m OD	1:50	.
Clie	nt:	db sym	nmetry							Date (s):	02/06/16 - 03/06/16	Hole Diamet	ter:
Well	Water Strikes		otary C	1		FI	Depth (m)	Level (m OD)	Legend		Stratum Description	n	
	JUINES	Depth (m)	TCR	SCR	RQD	FI	(,	(05)					<u> </u>
													11.0
		10.00-11. 50	100	100	100	0							=
													11.0
													=
										From 11.50n	n bgl: Limestone lithorelict	s / concretions.	
		11.50-13.	400	400	400								12.0
		00	100	100	100	0							=
													12.0
													13.0
													=
		13.00-14. 50	100	100	100	0							
													14.0
													-
		14.50-16.	100	100	100	0							15.0
		00	100	100	100								
													-
							•						16.0 —
		16.00-17. 50	100	100	100	0							
													17.0 —
													=
													18.0
		17.50-19. 00	100	100	100	0							10.0
													-
							18.85 19.00	80.05 79.90		Strong grey LIM	ESTONE with abundant	shells and fossils.	19.0
										CHARMOUTH N	MUDSTONE FORMATION OSTONE with abundant	N)	1 =
		19.00-20. 00	100	100	100	0					MUDSTONE FORMATION		
											Cautin of the Co		20.0
											Continued on Next Sheet		
Rema	arks:	10.0m bgl,	50/180 Dmm, S	0mm, SPT at	SPT at 16.0m	11. bgl,	50m bgl, , 50/140	. 50/180m mm, SPT a	nm, SPT at at 17.50m	13.0m bgl, 50/150r bgl, 50/85mm, SPT	nm, SPT at 14.50m at 19.0m bgl,	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photolonization Detector (ppm) SFT = Standard Penetration Test AB = Asbestos Bulk Sample	
Grour	ndwater:	None enco	untere	-d								Logged: NT Checke	d. sc

	lyd ect Name	rock :: Kraft P			ww	/W	.hydı	rock.	com	_	Percussion wi Fore Follow-OI	KH	03 3 of 3 Type:
Loca	ition:	Banbu	ry						ject No.	Ground Level:	98.90m OD	Sca	le:
Clier	nt:	db sym	nmetrv	,				L.	161279	Date (s):	02/06/16 - 03/06/16	1:5 Hole Dia	ameter:
!!	Water		otary C				Depth	Level	Ι	.,		110	mm
Well	Strikes	Depth (m)	TCR	SCR	RQD	FI	(m)	(m OD)	Legend		Stratum Description	1	
													21.0 — 22.0 — 23.0 — 24.0 — 25.0 — 26.0 — 27.0 — 29
Rema	arks:	10.0m bgl,	50/18 0mm, S SPT at	Omm, SPT at : 20.0r	SPT at 16.0m	11. bgl,	50m bgl, . 50/140	50/180n mm, SPT	nm, SPT at at 17.50m	13.0m bgl, 50/150 bgl, 50/85mm, SPT	mm, SPT at 14.50m	B = Bulk Sample D = Disturbed Sample UT = Undisturbed Sample UT = Undisturbed Sample (Thin Wa ES = Environmental Sample (Thin Wa ES = Environmental Sample W = Water Sample PID = Photoionization Detector (pp SPI = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Ch	

H	lyd	rock			ww	/W	.hyd	rock	.com	_	Percussion w ore Follow-o	KHO	4 of 3
Proj	ect Name	: Kraft P	hase 2							Co-ords:	445043E, 241538N	DNP+F	RC
Loca	tion:	Banbu	ry						oject No: 0161279	Ground Level:	97.90m OD	Scale 1:50	
Clier	nt:	db sym	nmetry							Date(s):	06/06/16 - 08/06/10	6 Hole Diam	
Well	Water Strikes	Sample Depth (m)	and In Type		esting esults		Depth (m)	Level (m OD	100000		Stratum Descriptio	n	
		0.60	ES		courts		0.03	97.87		coarse, subangu	DE GROUND) n slightly clayey slightly ular to angular limestor EL. (MADE GROUND)		
		0.70 1.10 1.20 1.20	ES B SPT	(1,	N=7 1/1,2,2,2	<u>!</u>)	1.00	96.90		Greenish grey sl medium subrou	ightly gravelly CLAY. Gr nded flint with rare roo ed orange CLAY with ra	otlets. (ALLUVIUM)	1.0
		1.20 SPT N=: (1,1/1,2 1.90 D 2.00-2.40 B 2.00-2.45 U O Blo (100% 3.00 SPT N=1 (2,2/3,4 3.60-3.90 B				ı	1.80	96.10			nated grey locally orang MUDSTONE FORMATIO		2.0
						1)	3.00	94.90		Stiff thinly lamir MUDSTONE FOR	nated grey CLAY. (CHAR RMATION)	RMOUTH	3.0
	3.60-3.90 B				0 Blows 00% rec)		3.90	94.00		1	y laminated MUDSTON ARMOUTH MUDSTONE		4.0
	4.00-4.45 U		100	100	100	0							5.0
		5.50-7.00	100	100	100	0							6.0 —
	7		100	100	100	0				From 7.0m b	gl: Limestone lithorelicts ,	/ concretions.	8.0
		8.50-10.0 0	100	100	100	0							9.0
											Continued on Next Shee	et	10.0
Rema	irks:	5.50m bgl, 50/160mm	32. SP n, SPT a n, SPT a)m bgl,	T at 7. t 11.5 t 16.0 <u>50/45</u>	.00m k i0m bg im bgl,	ogl, 5 gl, 50 , 49/	50/280m 0/190mn /125mm,	m. SPT at n, SPT at , SPT at 1	at 8.50m bg 13.0m bgl, 17.50m bgl,	l, 50/160mm. SPT a 50/160mm, SPT at		B = Bulk Sample D = Disturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Chec	ked: sc

F	lyd	rock			ww	/W	.hyd	rock.	com	=	Percussion w ore Follow-o		E	ehole No BHO4 eet 2 of 3		_
Proj	ect Name	: Kraft P	hase 2							Co-ords:	445043E, 241538N			ole Type: ONP+RC		
Loca	tion:	Banbu	ry						ject No. 161279	Ground Level:	97.90m OD			Scale: 1:50		
Clie	nt:	db syn	nmetry					1		Date (s):	06/06/16 - 08/06/1	6		Diamete 10mm	er:	
Well	Water		otary C		1		Depth	Level	Legend		Stratum Descriptio	on				
Well	Strikes	10.00-11. 50 11.50-13. 00 13.00-14. 50 14.50-16. 00 17.50-19. 00 19.00-20.	100 100 100 77	100 100 100 777	100 100 100 77	0 0	(m) 11.30	(m OD)	Legend	limestone liti Weak grey thinl	Stratum Description 50m bgl and 11.00m bgl: horelicts / concretions. y laminated MUDSTON ARMOUTH MUDSTONI	Abundant	me sh	nell	11.0 - 12.0 - 13.0 - 15.0 - 16.0 -	
Rema	ırks:	5.50m bgl,	32. SP	T at 7	.00m b	gl, 5	50/280m	m. SPT at	8.50m bg				nple Sample I Sample (TI ral Sample		20.0 -	
Gra	ndwater:		n, SPT a Om bgl,	at 16.0 50/45	m bgl,	49/	¹ 25mm,	SPT at 17	7.50m bgl,		9.0m bgl, 50/65mm,	PID = Photoioniza SPT = Standard Po AB = Asbestos Bu	ition Detect enetration 1 lk Sample		1	_
JIOUI	iu water:	NOTICE CHICK	onitel 6	u.								Logged:	INI	CHECKE	••I oc	-

	lyd ect Name	rock :: Kraft P			ww	/W	.hydı	ock.	com	-	Percussion w Core Follow-o	n	BH04 Sheet 3 of 3 Hole Type: DNP+RC	3
Loca	tion:	Banbui	ry						oject No. 161279	Ground Level:	97.90m OD		Scale: 1:50	
Clier	nt:	db sym	nmetry						101273	Date (s):	06/06/16 - 08/06/1	.6	Hole Diamete	er:
Well	Water	Ro	otary C	oring			Depth	Level	Legend		Stratum Descriptio	n .	110111111	
Weii	Strikes	Depth (m)	TCR	SCR	RQD	FI	(m)	(m OD)	Legend	(CHARMOUTH I	MUDSTONE FORMATIO			_
							20.07	77.83		(CIANOCHI)	End of Borehole at 20.09			22.0
														25.0 —
														27.0 —
														28.0 — - - - - - - - -
														29.0 — - - - - - - - - - - - - - - - - - - -
Rema	rks:	5.50m bgl, 50/160mm	32. SP n, SPT a n, SPT a Om bgl,	T at 7. it 11.5 it 16.0 50/45	.00m b i0m bg im bgl,	gl, 5 l, 50 49/	50/280m 0/190mm 125mm,	m. SPT a n, SPT at SPT at 1	t 8.50m bg 13.0m bgl, 7.50m bgl,	l, 50/160mm. SPT a 50/160mm, SPT at		ES = Environmer W = Water Samp	Sample d Sample (Thin Wall) tital Sample tole sation Detector (ppm) Penetration Test ulk Sample	d: SC

Hyd	rock		www	ı.hydı	rock.c	com	Window	less Sample		
Project Name		hase 2					Co-ords:	445189E, 241374N	Sheet 1 of Hole Type	
Location:	Banbu	ry				ject No:	Ground Level:	95.75m OD	WLS Scale:	
Client:	db sym	nmetry			C1	161279	Date(s):	07/06/16	1:25 Hole Diamet	ter:
Vell Water	Sample	and In S	Situ Testing	Depth	Level	Langua		Street Doorwinding	110mm	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)	Legend	ASPHALT. (MAD	Stratum Description E GROUND)	1	
	0.40	ES		0.32	95.43			n slightly sandy fine to co stone and sandstone GR		
	1.00 1.20 1.20-1.65 1.20-1.90	ES SPT D B	N=4 (2,1/0,1,1,2)	1.10	94.65		Firm locally soft and a very mild	bgl: More clayey. grey CLAY with some re organic odour. Rare fine coal gravel. (ALLUVIUM)	subrounded	1.0
	2.00 2.00-2.45 2.00-3.00	SPT D B	N=6 (1,0/1,2,1,2)	2.00	93.75			Om bgl and 2.0m bgl: Sand blueish grey CLAY with . (ALLUVIUM)		2.0
	3.00 3.00-3.45	SPT D	N=14 (1,2/2,3,4,5)							3.
	4.00 4.00-4.45	SPT D	N=21 (2,3/4,5,5,7)	3.50	92.25			y laminated grey MUDS (CHARMOUTH MUDST		4.0
	5.00	SPT D	N=22 (2,3/4,6,6,6)					Continued on Next Sheet	: B = Bulk Sample	- 5.
Remarks:		een 1.0ı	m and 5.0m bg		aler and g	gas monito	ring pipe installed t	o 3.011 bgi. Nesponse	D = Disturbed Sample U = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SFT = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Checke	d:

H	lyd	rock		www	.hyd	rock.c	com	Window	rless Sampl	er	٧	vS01		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445189E, 241374N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	95.75m OD			Scale: 1:25 Diamet		
Clie	nt:	db sym	nmetry					Date(s):	07/06/16			10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	90.30			End of Borehole at 5.45	m			7.C	
Rema				1.20m bgl. 2) (m and 5.0m bg		ater and g	gas monito	ring pipe installed t	to 5.0m bgl. Response	B = Bulk Sample D = Disturbed Sar U = Undisturbed UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pc AB = Asbestos Bu	Sample Sample (Thal Sample Sample End of the sample Sample Sample	or (ppm)		
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	d:	SC

Hyd	rock		\A/\A/\A	, hvd	rock.c	nm	Window	less Sample	Borehole N WS03	_
Hydi	OCK		VV VV V	/.iiyu	IOCK.	JOIII		•	Sheet 1 of	2
Project Name	: Kraft P	hase 2					Co-ords:	445205E, 241383N	Hole Type WLS	2:
Location:	Banbu	ry				ject No: 161279	Ground Level:	95.63m OD	Scale: 1:25	
Client:	db sym	nmetry				101273	Date(s):	07/06/16	Hole Diame	ter:
Vell Water	Sample	and In S	itu Testing	Depth	Level	Legend		Stratum Description		
Strikes	Depth (m)	Туре	Results	(m)	(m OD)	Legenu				1
	0.20	ES		0.30	95.33		subangular to su (MADE GROUND		nt and brick.	
	0.50	56		0.30	33.33			ravelly CLAY. Gravel is fingular brick, sandstone of the contraction o		
	0.60	ES								
	0.80-1.50	В		0.80	94.83			blueish grey slightly gra subangular to angular : E GROUND)		1.0
	1.20	SPT	N=6 (1,1/1,1,2,2)							
	1.20-1.65	D	(2)2/2/2/2/2/							
	1.70-2.40	В		1.70	93.93			ey CLAY with some rem d organic odour and rar		
	2.00	SPT	N=11					ivel. (ALLUVIUM)		2.0
	2.00-2.45	D	(1,2/2,2,3,4)				At 2.10m bgl:	Soft.		
							7 K = 1.2 S S g	20,1.		
	2.60	D		2.50	93.13			ange slightly gravelly sa subangular to subround ITS)		
<u> </u>	3.00	SPT	N=25 (3,6/7,6,6,6)	3.00	92.63		Orange slightly o	layey gravelly SAND. Gr	avel is subrounded	3.0
	3.00-3.45	D	(3,077,0,0,0)					(RIVER TERRACE DEPC		
				3.80	91.83			soft CLAY with some sh	-	
	4.00	SPT	N=5 (2,1/0,1,1,3)				(CHAKIVIOUTH N	1UDSTONE FORMATION	N)	4.0
	4.00-4.45	D				===				
						EE				
				4.50	91.13		Vory stiff area C	AY with some shell frag	monts	_
*	4.60	D						AY WITH SOME SHEILTRAG IUDSTONE FORMATION		
1:	5.00	SPT	N=28							5.0
	5.00	D	N=28 (3,4/5,7,8,8)					Continued on Next Sheet		5.0
emarks:	1) Hand du	ug pit to	1.20m bgl. 2) m and 5.0m bg		rater and g	gas monito	ring pipe installed t	U S.oiii ugi. Nesponse	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SFT = Standard Penetration Test AB = Absensos Bulk Sample	ı
roundwater:	None enco	untered	l.						Logged: NT Checke	d:

	lyd ect Name	rock :: Kraft P		www	.hyd	rock.	com	Window Co-ords:	vless Sample 445205E, 241383N	er WS Sheet Hole	5 03 2 of 2 Type:
Loca	tion:	Banbu	ry				oject No: 161279	Ground Level:	95.63m OD	Sca 1::	ıle:
Clier	nt:	db sym	nmetry				101279	Date(s):	07/06/16	Hole Dia	ameter:
Well	Water Strikes	Sample Depth (m)	and In S	itu Testing	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	<u> </u>	111111
					5.45	90.18			End of Borehole at 5.45r	n	6.0
Rema	rks:		een 2.0r	m and 5.0m bg		ater and	gas monito	ring pipe installed t	to 5.0m bgl. Response	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Undisturbed Sample U = Undisturbed Sample U = Vndisturbed Sample U = Vare Sample PiD = Photoionization Detector (pp SPT = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Ch	all)

									Borehole N	lo.
Hyo	lrock		www	ı.hvd	rock.	com	Window	less Sample	er WS04	
,	ıı ocı								Sheet 1 of Hole Type	
Project Nan	ne: Kraft P	Phase 2					Co-ords:	445255E, 241432N	WLS	::
Location:	Banbu	ıry				ject No: 161279	Ground Level:	95.63m OD	Scale: 1:25	
Client:	db syn	nmetry					Date(s):	07/06/16	Hole Diame	ter:
Vell Water			tu Testing	Depth	Level	Legend		Stratum Description	1	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)		CONCRETE. (MA			1
				0.21	95.42					
	0.30 0.60 0.70	ES D					Soft greenish gre (MADE GROUNE	ey CLAY with occasional	brick gravel.	
				0.90	94.73	***********		End of Borehole at 0.90m		1.0
										2.0
										3.0
										4.0
										5.0
emarks:				90m bgl c	on concret	te. 2) Backf	illed with arisings.		B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PiD = Photolonization Detector (ppm) SFF = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Checke	ed:

								Borehole No	о.
Hvd	rock		WWW	ı.hvd	rock.	com	Windowless Sampler	WS05	
iiya	ı ocı							Sheet 1 of 2	
Project Name	: Kraft P	hase 2					Co-ords: 445167E, 241361N	Hole Type: WLS	:
Location:	Banbu	ry				ject No: 161279	Ground Level: 96.14m OD	Scale: 1:25	
Client:	db syn	nmetry			1		Date(s): 08/06/16	Hole Diamete	er:
Water	Sample	and In S	itu Testing	Depth	Level		Church una Danaulintian	110111111	
Vell Strikes	Depth (m)	Туре	Results	(m)	(m OD)	Legend	Stratum Description		
	0.10 0.20	ES D					Soft orangish brown with pockets of grey g CLAY. Gravel is fine to coarse, subangular to sandstone, rare concrete and coal. (MADE	angular	
	0.50	ES		0.40	95.74		Firm friable orangish brown slightly sandy: CLAY. Gravel is fine to coarse, subrounded to sandstone, mudstone and quartz. (RIVER TOEPOSITS)	o rounded	
	1.00	ES SPT	N=14						1.0
	1.20-1.65	D D	(2,1/2,3,3,6)	1.30	94.84		Firm greenish grey slightly sandy slightly gr Gravel is fine to coarse, subrounded to rou and mudstone with a mild organic odour.	nded quartz,	
	2.00	SPT	N=4	1.80	94.34		Firm orange mottled grey slightly sandy slig CLAY. Gravel is coarse, subrounded to roun		2.0
	2.00-2.45 2.20	D D	(1,1/1,1,1,1)	2.20	93.94		and quartz. (RIVER TERRACE DEPOSITS) Soft orange mottled grey sandy CLAY. (RIVI DEPOSITS)	ER TERRACE	
				2.80	93.34		Between 2.70m bgl and 2.80m bgl: Very sa very soft. Very loose to loose blueish grey slightly cla		
	3.00 3.00-3.45	SPT D	N=4 (1,0/0,2,1,1)	3.20	92.94		(RIVER TERRACE DEPOSITS) Soft blueish grey CLAY. (CHARMOUTH MUI		3.0
							FORMATION)	STONE	
	3.80 4.00 4.00-4.45	D SPT D	N=7 (1,3/3,1,2,1)						4.0
				4.30	91.84		Very weak blueish grey MUDSTONE with so fragments. (CHARMOUTH MUDSTONE FO		_
	5.00	SPT	N=15 (4,2/2,3,4,6)				Continued on Next Sheet		5.0
emarks:	1) Hand du	g pit to		Casing re	fusal at 4.	50m bgl. 3	D B B B B B B B B B B B B B B B B B B B	c Sample turbed Sample disturbed Sample (Thin Wall) wironmental Sample ter Sample hotoionization Detector (ppm) landard Penetration Test bestos Bulk Sample	

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	whole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445167E, 241361N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	96.14m OD			Scale: 1:25		
Clie	nt:	db sym	nmetry					Date(s):	08/06/16			Diamete 10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	n				
					5.45	90.69			End of Borehole at 5.45r	n			7.0 8.0	
Rema					Casing re	fusal at 4.	50m bgl. 3) Backfilled with ari	sings on completion.	B = Bulk Sample D = Disturbed Sar U = Undisturbed Sur UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pu AB = Asbestos Bu	Sample I Sample (Thal Sample e tion Detect enetration T Ik Sample	or (ppm) est		
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	1: S	ı,C

Н	yd	rock		www	ı.hyd	rock.	com	Windowless Sampler	WS07 Sheet 1 of 1	
Projec	t Name	: Kraft P	hase 2					Co-ords: 445069E, 241356N	Hole Type: WLS	
Locati	on:	Banbu	ry				ject No: 161279	Ground Level: 97.38m OD	Scale: 1:25	
Client	:	db syn	nmetry			·		Date(s): 08/06/16	Hole Diamete	er:
اام∧	Water			Situ Testing	Depth	Level	Legend	Stratum Description		
	Strikes	Depth (m)	Туре	Results	(m)	(m OD)		Soft orangish brown sandy slightly gravelly C	I AY. Gravel is	
		0.10 0.10	D ES					fine to coarse, subrounded to subangular flir		
		0.30-1.00 0.40	B ES		0.30	97.08		Soft brown sandy CLAY with rare subrounded		
		0.40						subangular quartz, and mudstone gravel. (R DEPOSITS)	IVER TERRACE	
								DEFOSITS)		
		1.10	ES		1.00	96.38		Soft yellowish brown sandy CLAY with some	fine coal	1.0 -
		1.20	SPT	N=6				fragments. (RIVER TERRACE DEPOSITS)		
		1.20-1.65	D	(1,1/1,1,2,2)						
					1.50	95.88				
								Firm orange locally grey mottled CLAY with s staining. (RIVER TERRACE DEPOSITS)	ome iron	
		1.70	D					stag. (
		2.00	SPT	N=12 (2,2/2,3,3,4)						2.0 -
		2.00-2.45	D	() , , , , , , , , , , , , , , , , , ,						
		2.50	D							
		2.50								
								Between 2.70m bgl and 3.10m bgl: Very san	dy and	
								soft.		
		3.00	SPT	N=0 (0,0/0,0,0,0)						3.0 -
		3.00-3.45	D	(0,0/0,0,0,0)	3.10	94.28		Very soft grey very sandy CLAY. (RIVER TERR	ACE	
								DEPOSITS)		
		2.50								
		3.50	D							
					3.90	93.48				
		4.00	SPT	N=12	3.50	33.10		Orange slightly gravelly clayey SAND. Gravel coarse, subangular to angular quartz. (RIVEI		4.0 -
		4.00-4.45	D	(2,2/1,3,4,4)				DEPOSITS)	(TEMIONEE	
							7			
					4.50	92.88		End of Borehole at 4.50m		ı
										5.0 -
Remark	ks:		with aris	sings on compl		fusal at 4.	50m bgl, n	U = Undis UT = Undis ES = Envir W = Water PID = Prof SPT = Stan	sed Sample urbed Sample turbed Sample (Thin Wall) onnental Sample 'Sample 'Sample olonization Detector (ppm) dard Penetration Test stos Bulk Sample	l: so

	lyd ect Name	rock :: Kraft P	hase 2	www	ı.hydı	rock.	com	Window Co-ords:	/less Sample	Borehole N WSO8 Sheet 1 of Hole Type WLS	1
Loca	tion:	Banbu	ry				ject No: 161279	Ground Level:	95.95m OD	Scale: 1:25	
Clier	nt:	db sym	nmetry				101279	Date(s):	08/06/16	Hole Diame	ter:
Well	Water			Situ Testing	Depth	Level	Legend		Stratum Description	•	
	Strikes	Depth (m)	Туре	Results	(m)	(m OD)		ASPHALT. (MAD			
		0.30	ES		0.20	95.75		Yellow clayey sa	ndy fine to coarse, suba		
					0.50	95.45			End of Borehole at 0.50m	<u> </u>	-
											1.0 —
											-
											2.0 —
											-
											3.0 —
											-
											4.0 —
											-
											5.0 —
Rema	rks:	1) Hand du	ug pit te	rminated at 0.5	1 d	lue to refu	ısal. 2) Bad	kfilled with arisings	I I I	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) EFT = Standard Penetration Test AB = Abbestos Bulk Sample	
Groun	ndwater:	None enco	untered	d						Logged: NT Checke	ed: s

	yd t Name	rock Kraft P		www	.hyd	rock.	com	Window Co-ords:	rless Sample 445014E, 241457N	Sheet 1 of Hole Type	2
Locatio		Banbu	rv				ject No:	Ground Level:	96.50m OD	WLS Scale:	
Client:		db sym				C1	161279	Date(s):	08/06/16	1:25 Hole Diame	ter:
vell v	Nater	Sample	and In	Situ Testing	Depth	Level	Legend		Stratum Description	110mm	
St	trikes	Depth (m)	Туре	Results	(m)	(m OD)	Legenu	CONCRETE. (MA			_
		0.20	ES		0.18	96.32		Grey slightly san	dy fine to coarse, suba ne and sandstone GRA\		
	•	1.00 1.00-2.00 1.10 1.20-1.65	SPT B ES D	N=21 (2,2/4,5,6,6)	1.00	95.50		Stiff grey thinly I MUDSTONE FOR	aminated CLAY. (CHAR RMATION)	МОИТН	_ 1
		1.70	D		1.60	94.90			/ laminated grey MUDS (CHARMOUTH MUDS		
		2.00	SPT D	N=35 (5,8/12,10,7,6)				At 2.00m bgl	: Abundant shell fragmen	ts.	2
		3.00 3.00-3.45	SPT D	N=35 (3,5/6,8,9,12)							3
		4.00 4.00-4.45	SPT D	N=41 (3,7/9,10,10,12)							2
marks	s:	5.00 5.00-5.45 1) Hand du	SPT D Jg pit to	N≥50 (6,9/50 for 240mm) D 1.20m bgl. 2) G	Gas and g	roundwa	ter monito	ring pipe installed t	Continued on Next Shee	B = Bulk Sample	5
	water:	Response 2	zone be	etween 1.0m bgl	and 5.0	m bgl.		<u> </u>		D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample W = Water Sample PID = Photoionization Detector (ppm) SFT = Standard Penetration Test AB = Asbestos Bulk Sample Logged: NT Checkee	ed:

Project Name: Krait Phase 2 Project Not Co-ords: 445048_241477N Scale: Us Vs Vs Vs Vs Vs Vs Vs	H	lyd	rock		www	.hyd	rock.c	com	Window	rless Sample	er	٧	SO9 et 2 of 2		
Collection: Bunbury Scale Collection State Collection State Collection Collect	Proj	ect Name	: Kraft P	hase 2					Co-ords:	445014E, 241457N		Но	le Type:		
Mater Service Servic	Loca	tion:	Banbu	ry					Ground Level:	96.50m OD		;	Scale: 1:25	or	
Strikes Septite (m) Type Results Substitute Sub	Clie	nt:							Date(s):	08/06/16				er.	
Remarks: 1) Hand dug pit to 1,20m bgl, 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. 1. The state of Boronous at 5.50m bgl. 200 - 1. The state of Boronous at 5.50m bgl. 1. The state of Boronous at 5.50m bgl. 200 - 2	Well							Legend		Stratum Description	1				
Remarks: 1) Hand dug pit to 1.20m bgl. 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. 8 = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Undisturbed Sample U = Undisturbed Sample U = Undisturbed Sample N = Marker Sample PID = Photolonization Test AB = Asbestos Bulk Sample N = Marker Sample PID = Photolonization Test AB = Asbestos Bulk Sample				Туре	nesuits					End of Borehole at 5.39m				9.0	
			Response 2	zone be	tween 1.0m bg	l and 5.0	m bgl.	ter monito	ring pipe installed t		D = Disturbed San U = Undisturbed S UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e tion Detecto netration To k Sample	or (ppm) est	d:	SC

									Bore	hole No.
Hyd	rock		www	.hyd	rock.	com	Window	less Sample	er W	/S11
		hase 2					Co-ords:	44F200F 24142FN		et 1 of 1 e Type:
Project Name					Pro	oject No:		445200E, 241435N		WLS cale:
Location:	Banbu					161279	Ground Level:	96.86m OD		1:25 Diameter:
Client:		nmetry		1 1			Date(s):	02/06/16		.0mm
Well Water Strikes	Sample Depth (m)	Type	Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	า	
				0.30	96.56		CONCRETE. (MA	ADE GROUND) ne to coarse, angular to	o subangular	
	0.40	ES		0.60	96.26		mudstone, conc GROUND)	rete and sandstone GR	AVEL. (MADE	
	0.80	ES						dy gravelly CLAY. Grave ngular ironstone and sa		
	1.20 1.20-1.65	SPT D	N=35 (4,10/7,8,8,12)							
	2.00 2.00-2.45	SPT D	N=27 (5,7/8,8,6,5)							2.0 -
	2.70 3.00 3.00-3.45	D SPT D	N=12 (1,1/2,3,3,4)	2.60	94.26 94.06		is fine to mediur (ALLUVIUM) Firm orange grav	ly CLAY with a mild orgon, subangular to angular to angular to angular to angular sandstone with s	e to coarse,	
				3.90	92.96					
				4.00	92.86		Soft grey sandy (CLAY with rare remnant		ots. 4.0
										5.0
Remarks:	1) Hand du on comple		1.20m bgl. 2) (Collpase b	oetween	1	to 4.00m bgl. 3) Bad	killieu with ansings	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thir ES = Environmental Sample W = Water Sample PilD = Photoionization Detector SPT = Standard Penetration Tes AB = Asbestos Bulk Sample	(ppm)
roundwater:	None enco	ountered	d.						Logged: NT C	hecked:

Hydrock		www.hydrock.com				Window	er WS12 Sheet 1 of				
Project Name	: Kraft P	hase 2					Co-ords:	445132E, 241444N	Hole Type	e:	
Location:	Banbu	ry				ject No: 161279	Ground Level:	96.86m OD	Scale: 1:25		
Client:	db syn	nmetry					Date(s):	03/06/16	Hole Diame		
/ell Water			itu Testing	Depth	Level	Legend		Stratum Description			
Strikes	Depth (m)	Туре	Results	(m)	(m OD)		CONCRETE. (MA	ADE GROUND)			
				0.20	96.66						
	0.30	ES						clayey sandy fine to coa ne and rare concrete GR			
	0.50-1.30	В		0.50	96.36		GROUND)				
	0.60	ES						orangish brown sandy sl gular to angular limesto			
	0.00							EL. (MADE GROUND)	ric, sariastoric aria		
	0.80	D									
	1.00	SPT	N=14 (3,3/3,4,3,4)							1.0	
	1.00-1.45	D	(3,3/3,4,3,4)								
				1.30	95.56		Firm greenish gr	ey CLAY with a mild org	anic odour and	-	
	1.40	D						ootlets. (ALLUVIUM)	ame ododi ama		
	1.70	D									
				1.80	95.06		Firm brownish o	range locally grey mottl	ed sandy CLAY.	1	
	2.00	SPT	N=11				(ALLUVIUM)	Om and 2.10m bgl: Rare fli	nt aravel	2.	
	2.00-2.45	D	(2,3/3,2,3,3)				between 1.80	om ana 2.10m byr. Kare jii	nt gravei.		
	3.00	SPT	N=6							3.0	
	3.00-3.45	D	(1,1/1,1,2,2)	3.10	93.76		Soft light grov sl	ightly sandy CLAY. (ALLU	17/11 18/43		
							Soft light grey si	ignitiy sandy CLAT. (ALLC	J V I O I VI)		
				3.40	93.46						
							Very soft light gr	rey CLAY. (ALLUVIUM)			
	4.00	SPT	N=3 (0,0/0,0,0,3)							4.	
	4.00-4.45	D									
				4.60	92.26	7.00:500	Brown slightly g	ravelly SAND. Gravel is f	ine to coarse	-	
				4.80	92.06	1	subangular to a	ngular quartz. (RIVER T	ERRACE DEPOSITS)		
						====	Very soft grey CI FORMATION)	LAY. (CHARMOUTH MU	DSTONE		
	5.00	SPT	N=15 (1,0/2,3,4,6)				TOMVIATION	Continued on Next Sheet		5.0	
	5.00-5.45	D		<u> </u>	F 00 - 1	La) D. J.C.	La al costati i costati		3 = Bulk Sample		
emarks:	1) Hand du	ug pit to	u./um bgl. 2)	Cased to	5.00m bg	ı. 3) Backfil	led with arisings or	E V	s = Bulk Sample J = Disturbed Sample J = Undisturbed Sample Thotsturbed Sample (Thin Wall) SS = Environmental Sample W = Water Sample VID = Photoionization Detector (ppm) PPT = Standard Penetration Test		

Hydr	ock	Www	v.hvdi	rock.c	com	Window	less Sample	Borehole I	
Tiyai	OCK		y on				Sheet 2 o		
Project Name:	Kraft Phas	se 2				Co-ords: 445132E, 241444	445132E, 241444N	Hole Typ WLS	
Location:	Banbury		Project No: C161279			Ground Level:	96.86m OD	Scale: 1:25	
Client:	db symme	etry			Date(s):	03/06/16	Hole Diame		
Water Strikes		d In Situ Testing /pe Results	Depth (m)	Level (m OD)	Legend		Stratum Description		
			5.45	91.76			AUDSTONE FORMATION) End of Borehole at 5.45m		7.0 -
									10.0
		pit to 0.70m bgl. 2) encountered at 3.9				led with arisings or	U - UT ES W PIEI SP AB	= Bulk Sample - Disturbed Sample - Undisturbed Sample - Undisturbed Sample - Undisturbed Sample - Environmental Sample - Water Sample - Water Sample - Photoionization Detector (ppm) - Standard Penetration Test - Sandard Penetration Test - Asbestos Bulk Sample Ogged: NT Checke	ed: S

Hydrock			100100	ر ام رحا .	oole -	0.000	Window	r WS13	Borehole No. WS13		
пуи	rock		www	.nyai	OCK.	com			Sheet 1 of		
roject Nam	e: Kraft P	hase 2					Co-ords:	445174E, 241491N	Hole Type		
ocation:	Banbu	ry				ject No: 161279	Ground Level:	98.86m OD	Scale: 1:25		
lient:	db syn	nmetry					Date(s):	02/06/16	Hole Diameter:		
ell Water Strikes			Situ Testing	Depth (m)	Level (m OD)	Legend		Stratum Description			
Strikes	Depth (m)	Туре	Results	(,	(111 00)		CONCRETE. (MA	ADE GROUND)		Τ	
	0.20-0.40 0.30	B ES		0.20	98.66			clayey sandy fine to coar ne and sandstone GRAVEI		_	
	0.60	ES									
	0.80-1.20	В		0.80	98.06		coarse, subangu	sh brown sandy slightly cl lar to angular limestone, EL. (MADE GROUND)		1.	
	1.20	SPT	N=24 (4,4/6,6,6,6)					,			
	1.50	D									
•	2.00	SPT	N=10	2.00	96.86		Soft to firm dark	grey slightly sandy CLAY	with some		
	2.10	D	(1,2/2,2,3,3)					s and a mild organic odou			
				2.30	96.56		•	orangish brown locally gr CLAY. Gravel is fine, angul	•		
	3.00	SPT	N=11 (2,1/2,2,3,4)							3	
	3.30	D									
				3.60 3.70	95.26 95.16			AND. (ALLUVIUM) CLAY. (ALLUVIUM)			
	4.00	SPT	N=3 (2,2/0,1,1,1)	3.90 4.00	94.96 94.86		GRAVEL. (RIVER	ne to medium, angular to TERRACE DEPOSITS) AND. (RIVER TERRACE DE		,	
	4.30	D		4.20	94.66		Very soft grey Cl	AY with rare subrounded ERRACE DEPOSITS)			
	4.90 5.00	D SPT	N=19 (2,2/3,5,5,6)	4.80	94.06		- '	rith some silt sized selenit MUDSTONE FORMATION) Continued on Next Sheet	te crystals.	- !	
marks:							nd groundwater pip	D= U= UT= ES= W=	Bulk Sample Disturbed Sample Undisturbed Sample Undisturbed Sample (Thin Wall) Environmental Sample Water Sample = Photoionization Detector (ppm)		

	lyd ect Name	rock :: Kraft P		www	.hyd	rock.	com	Window Co-ords:	vless Sample	Borehole WS1 Sheet 2 Hole Ty WLS	of 2 pe:	
Loca	tion:	Banbu	ry				iject No: 161279	Ground Level:	98.86m OD	Scale 1:25	:	
Clien	nt:	db symmetry				L.	161279	Date(s):	02/06/16	Hole Diam	iameter:	
Well	Water Strikes	Sample Depth (m)	and In S	itu Testing	Depth (m)	Level (m OD)	Legend		Stratum Description	<u> </u>	<u> </u>	
					5.45	93.41			End of Borehole at 5.45m		7.0 -	
Rema	rks:			1.20m bgl. 2) between 2.0				nd groundwater pip	e installed to 3.00m	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample Plu = Photoinoingation Detector (ppm) SPT = Standard Penetration Test AB = Absbots Sulk Sample	10.0	

	اميرا	ا ما ما			, Jan 1	اء ما		Windowless Sampler	WS14	Ļ
	iya	rock		www.hydrock.com				villaoviess sampler	Sheet 1 of 2	
	ect Name							Co-ords: 445103E, 241472N	Hole Type:	
оса	tion:	Banbu	ry				ject No: .61279	Ground Level: 98.86m OD	Scale: 1:25	
lier	nt:	db sym	nmetry					Date(s): 03/06/16	Hole Diameter	
ell	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend	Stratum Description		
		Deptii (iii)	туре	Results	(,	(02)		CONCRETE. (MADE GROUND)		
					0.17	98.69		ASPHALT. (MADE GROUND)		1
					0.27	98.59		Light brown slightly clayey slightly sandy co- limestone and sandstone GRAVEL. (MADE 0		
					0.80	98.06		Stiff, brownish orange locally iron stained ar	nd grey	$\frac{1}{2}$
		0.90 1.00	ES SPT	N=17				mottled CLAY with rare fine to coarse suban		1
•		1.00-1.45	D	(3,3/3,4,5,5)				gravel. (ALLUVIUM)		
		1.20 1.20-2.00	ES B							
•										
		2.00	SPT	N=12						
		2.00-2.45	D	(1,2/3,3,2,4)				From 2.10m bgl: Firm.		
•		2.50	D							
					2.80	96.06		Firm grey locally iron stained CLAY. (CHARN	IOUTH	
٠		3.00	SPT	N=23				MUDSTONE FORMATION)		3
		3.00-3.45	D	(2,3/4,5,6,8)						
					2.50	05.26				
					3.50	95.36		Very weak locally iron stained MUDSTONE v sized selenite crystals and rare shell frageme		
		3.70	D					(CHARMOUTH MUDSTONE FORMATION)	ziilă.	
		4.00	SPT	N=25 (2,3/5,5,7,8)						
		4.00-4.45	D	(,,,,=,=,,,)						
•										
L:		5.00	SPT	N=29 (4,4/5,6,9,9)				Continued on Next Sheet		- !
	velco:	5.00-5.45	D D		Casas	round	for manife	ring pine installed to 5 00m bgl	Sample	
ma	ırks:			0.70m bgl. 2) tween 1.0m bք			er monito	D = Distu U = Und UT = Unc W = Wat PID = Ph SPT = Sta	ample sturbed Sample sturbed Sample sturbed Sample (Thin Wall) rommental Sample er Sample stoionization Detector (ppm) indiard Penetration Test setos Bulk Sample	
our	ndwater:	None enco	untered	d.				SPT = Sta	ndard Penetration Test estos Bulk Sample	c

H	lyd	rock		www	.hyd	rock.c	com	Window	rless Sample	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445103E, 241472N		Но	le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	98.86m OD			Scale: 1:25		
Clie	nt:	db sym	nmetry					Date(s):	03/06/16			Diamet 10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	93.41			End of Borehole at 5.45m	1			7.0 8.0	
Rema		Response 2	zone be	tween 1.0m bg			ter monito	ring pipe installed t	o 3.oom bgi.	B = Bulk Sample D = Disturbed San U = Undisturbed S UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e tion Detecti netration To k Sample	or (ppm) est	. 1	
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	d: S	зC

									Borehole N	o.
Hyd	rock		www	ı.hvd	rock.	com	Windowle	ess Sample	er WS15	
Tiyu	OCK			,,,,,	i ocit.			Sheet 1 of		
Project Name	: Kraft P	hase 2					Co-ords:	445089E, 241527N	Hole Type WLS	::
Location:	Banbu	ry		Project No: C161279		Ground Level:	98.86m OD	Scale: 1:25		
Client:	db syn	nmetry			,		Date(s):	06/06/16	Hole Diame	ter:
Vell Water	Sample	and In S	itu Testing	Depth	Level	Legend		Stratum Description		
Strikes	Depth (m)	Туре	Results	(m)	(m OD)		CONCRETE. (MADE			T
				0.22	00.54		CONCRETE. (MADE	- GROOND)		
	0.30	ES		0.22	98.64			o coarse, subangular crete GRAVEL. (MAD		
	0.60	ES		0.50	98.36			avelly SAND. Gravel is		
	0.60	E2					subangular to angu TERRACE DEPOSITS	llar mudstone and sa s)	ndstone (RIVER	
				0.90	97.96	- <u>-</u>	Firm grey locally iro	on stained CLAY. (CH	ARMOUTH	١.,
	1.00 1.00-1.45	SPT D	N=8 (1,2/1,2,2,3)				MUDSTONE FORM	ATION)		1.0
	1.00-1.43									
						====				
	1.60	D								
						F====				
	2.00	SPT	N=9							2.0
	2.00-2.45	D	(1,1/1,2,2,4)			====				2.0
	2.00-2.43					===				
	2.40	D		2.30	96.56			inated CLAY. (CHARN	иоитн	
						====	MUDSTONE FORM	ATION)		
				2.80	96.06		Manuscal and MI	IDCTONE	-h -ll for our orbo	1
								JDSTONE with some s DSTONE FORMATION		
	3.00	SPT	N=11 (2,1/2,2,3,4)				•		•	3.0
	3.00-3.45	D								
	4.00	SPT	N=12 (1,2/2,2,4,4)							4.0
	4.00-4.45	D								
	5.00	SPT	N=21 (2,2/4,4,6,7)					Continued on Next Sheet		5.0
	5.00-5.45	D			<u> </u>	<u> </u>			Dulle Consults	
emarks:	1) Hand du	ug pit to	0.65m bgl. 2)	Backfilled	I with aris	ings on cor	npletion.	U U E V P S	.= Bulk Sample = Disturbed Sample = Undisturbed Sample To Undisturbed Sample (Thin Wall) S = Environmental Sample Y = Water Sample (D = Photoionization Detector (ppm) PT = Sandard Penetration Test A schestos Bulk Sample	
oundwater:	None enco	ountered	d.						Logged: NT Checke	d:

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445089E, 241527N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	98.86m OD			Scale: 1:25		
Clie	nt:	db sym	nmetry					Date(s):	06/06/16			Diamet 10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	93.41			End of Borehole at 5.45n	1			7.0 8.0	
Rema				0.65m bgl. 2) E	Backfilled	l with arisi	ngs on coi	mpletion.		B = Bulk Sample D = Disturbed Sar U = Undisturbed UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bul	sample Sample (Thal Sample e tion Detect enetration T k Sample	or (ppm) est		
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	d: S	sС

									Borehole N	о.
H	yd	rock		www	.hyd	rock.	com	Windowless Sampler	WS16	
								4450445 241457N	Sheet 1 of Hole Type	
Project	t Name	: Kraft P	nase 2				* N	Co-ords: 445044E, 241457N	WLS	
Locatio	on:	Banbu	ry				ject No: 161279	Ground Level: 98.86m OD	Scale: 1:25	
Client:		db sym	nmetry					Date(s): 03/06/16	Hole Diamet	ter:
M/ΔII	Vater	Sample	and In	Situ Testing	Depth	Level	Legend	Stratum Description		
S	trikes	Depth (m)	Туре	Results	(m)	(m OD)	Legend	-		
								CONCRETE. (MADE GROUND)		
		0.30	ES		0.26	98.60		Brown clayey slightly sandy fine to coarse, s	ubangular to	
								angular limestone, sandstone and rare brick		
					0.55	98.31		(MADE GROUND) Stiff grey CLAY with some silt sized selenite of	rvstals.	-
		0.70	ES					(CHARMOUTH MUDSTONE FORMATION)	,	
		0.80	D				<u> </u>			
		1.00	SPT	N=15				At 1.00m bgl: Mudstone lithorelic with pyrite	a alona	1.0
		1.00-1.45	D	(2,2/3,3,4,5)	1.10	97.76		fractures.		
								Very weak thinly laminated grey MUDSTONE shell fragments. (CHARMOUTH MUDSTONE		
								shell haginents. (et al. masses in messalent	101111111111111111111111111111111111111	
		2.00	SPT	N=16						2.0
		2.00-2.45	D	(2,1/2,4,4,6)						
		3.00	SPT	N=26						3.0
		3.00-3.45	D	(4,4/6,6,7,7)						
		4.00	SPT	N=26						4.0
		4.00-4.45	D	(3,3/5,6,6,9)						
		-								
		5.00	SPT	N-20						5.0
		5.00	SP1 D	N=39 (4,6/7,9,11,12)				Continued on Next Sheet		3.0
Remark	s:			0.50m bgl. 2)	Backfilled	with arisi	ings on co		ample bed Sample curbed Sample	1
								UT = Undi ES = Envir W = Wate PID = Photo SPT = Star	sturbed Sample (Thin Wall) onmental Sample	
Ground	water:	None enco	untere	d.				Logg	ed: NT Checke	d: So

H	lyd	rock		www	.hyd	rock.c	com	Window	rless Sample	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445044E, 241457N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	98.86m OD			Scale: 1:25 Diamet	~ "	
Clie	nt:	db sym						Date(s):	03/06/16			.10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	93.41			End of Borehole at 5.45n	1			7.0 8.0	
Rema				0.50m bgl. 2) E	J Backfilled	l with arisi	ngs on cor	mpletion.		B = Bulk Sample D = Disturbed Sar U = Undisturbed UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bu	sample Sample (Ti al Sample e tion Detect netration T k Sample	or (ppm) est		
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	2 : t	3C

Hyd	rock		www	ı.hyd	rock.c	com	Window	less Sample		}
Project Name							Co-ords:	445096E, 241545N	Sheet 1 of Hole Type WLS	
Location:	Banbu	ry				ject No: 161279	Ground Level:	96.69m OD	Scale: 1:25	
Client:	db sym	nmetry			C1	101279	Date(s):	09/06/16	Hole Diame	ter:
/ell Water	Sample	and In S	Situ Testing	Depth	Level	Legend		Stratum Description		
Strikes	Depth (m) 0.30	Type ES	Results	(m)	(m OD)	Legenu	coarse, subangu	sandy gravelly CLAY. Gra lar to subrounded chall MADE GROUND)	avel is fine to	
				0.35	96.34		coarse, subangu	sandy gravelly CLAY. Gr. lar to subrounded chall bgl: Becoming very sandy.		1.
	1.20	SPT D	N=4 (0,0/1,1,1,1)	1.20	95.49			brown mottled grey CL stone gravel. (RIVER TE		
	2.00	SPT	N=11 (1,2/3,2,3,3)	1.85	94.84		gravelly. Stiff grey mottle	5m bgl and 1.75m bgl: Bec d brown gravelly CLAY. (to subangular mudston (MATION)	Gravel is fine to	2
	2.60	D					Between 2.3(Om and 2.40m: Very grave	illy CLAY.	
	3.00	SPT	N=20 (2,2/4,4,5,7)							3
	3.60	D		3.55	93.14			hered grey mottled bro HARMOUTH MUDSTON		
	4.00	SPT	N=20 (2,3/4,4,6,6)							4
	4.60	D								
	5.00	SPT	N=21 (2,2/4,5,6,6)					Continued on Next Sheet		- 5
emarks:						 ter monito	ring pipe installed t		B = Bulk Sample D = Disturbed Sample UT = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) SES = Environmental Sample W = Water Sample PID = Photolonization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Sulk Sample	1
oundwater:	None enco	untered	 d.						Logged: WS Checke	٩٠

Co-ords: A459965 241345N Size Wats State Wats State Wats State Wats State Wats State Wats State Wats Strikes Co-ords: A459965 241345N State Wats Wats Strikes Co-ords: Wats Co-ords: Wats Wats Co-ords: Wats Wats Wats Wats Co-ords: Wats Wats Wats Wats Co-ords: Wats	H	lyd	rock		www	.hyd	rock.c	com	Window	rless Sample	er	٧	ehole No		
Column	Proj	ect Name	: Kraft P	hase 2					Co-ords:	445096E, 241545N		Но	le Type:		
Metal Water Strikes	Loca	tion:	Banbu	ry					Ground Level:				Scale: 1:25	or:	
Remarks: A Pand dag pit to 1.20m bgl 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. A Pand dag pit to 1.20m bgl 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. A Pand dag pit to 1.20m bgl and 5.0m bgl. Pand dag pit to 1.20m bgl and 5.0m bgl and 5.0m bgl and 5.0m bgl and 5.0m bgl	Clie	nt:							Date(s):	09/06/16				EI.	
Remarks: 1) Hand dug pit to 1.20m bgl. 2) Sas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. 13.45 Page 2015 P	Well							Legend		Stratum Description	n				
Response zone between 1.0m bgl and 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. D = Disturbed Sample UT = Undisturbed Sample UT =						5.45	91.24			End of Borehole at 5.45m	1			9.0	
TOURDAY CONTRACTOR OF THE PROPERTY OF THE PROP			Response 2	zone be	tween 1.0m bg			ter monito	ring pipe installed t	. J.om bgi.	D = Disturbed San U = Undisturbed S UT = Undisturbed ES = Environment W = Water Sampl PID = Photoionis SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e tion Detecti netration To k Sample	or (ppm) est	1. 6.	

Project Name Kraft Phase 2 Project No. Co-ords:	Hvd	rock		www	,.hyd ı	rock.c	com	Window	less Sample)
Project No. C16:179					,			Co-ords:	445047E, 241576N	Hole Type	
Date s : Date s : Date s : Daylog s s Daylog s s Date s : Daylog s s Date s : Daylog s s Daylog s	Location:		ırv				-	Ground Level:	97.32m OD	Scale:	
Water Strikes Depth (m) Vype Results Depth (m) Depth (m) Depth (m) Vype Results Depth (m)	Client:		•			C1	161279	Date(s):	09/06/16	Hole Diame	ter:
Strikes Opph (m) Vype Results (m) (m OD)	Water			Situ Testing	Depth	Level	Ī				
abundant rovolets. Gravel is fine to cases, angular to submounded concrete, filin, occasional brief and rare plastic. (MADE GROUND) 1.00	Strikes	Deptii (iii)		Results		(m OD)	Legend				
### Suppose of the property of		0.30	D					abundant rootle subrounded cor	ts. Gravel is fine to coar crete, flint, occasional b	rse, angular to	
1.00 ES 1.20 S97 N-13 1.20 S97 (1,273,3.4) 1.20 95.12 Firm brown slightly sandy CLAY with some relic rootlets. Mottled red along rootlets. (ALLUVIUM) Between 1.60m bgl and 1.70m bgl: Becoming predominantly grey. Soft locally very soft brown mottled grey very sandy slightly gravelly CLAY. (ALLUVIUM) 2.50 D S97 N-13 1.00 S97 N-11 1.12/1.2.4.4) Stiff dark grey mottled brown gravelly CLAY. Gravel is angular, fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Soft N-22		0.40-1.00 0.50	B D		0.40	96.92		Gravel is fine to			
1.50 D 2.50 D											1.
Between 1.60m bgl and 1.70m bgl: Becoming predominantly grey. Soft locally very soft brown mottled grey very sandy slightly gravelly CLAY. (ALLUVIUM) 2.50 D 3.00 SPT N-11 (1.2/1.2.4.4) 3.50 D 3.55 93.77 Stiff dark grey mottled brown gravelly CLAY. Gravel is angular, fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION)					1.20	96.12					
2.00 set N=3 (0.071.1.0.1) 2.50 D 3.00 set N=11 (1.271.2.4.4) 3.50 D 3.55 93.77 Soft locally very soft brown mottled grey very sandy slightly gravelly CLAY. (ALLUVIUM) Firm dark grey mottled brown gravelly CLAY. Gravel is angular, fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) The state of the state		1.50	В		1.80	05 52		predominant	ly grey.		
3.00 SPT N=11 (1,2/1,2,4,4) 3.50 D 3.55 93.77 Stiff dark grey very gravelly CLAY. Gravel is angular, fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) 3.50 D 3.55 93.77 Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) 3.50 SPT N=20 (2,3/4,4,5,7) 4.00 SPT N=20 (2,3/4,4,5,7) The semantic of the semantic o		2.00	SPT		1.50	33.32				y very sandy	2.
Signature of the standard stan		2.50	D								
3.90 D 4.00 SPT N=20 (2,3/4,4,5,7) Suff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) To spr (2,3/4,4,5,7) Suff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION) To spr (2,3/4,4,5,7) To spr (4,5/6,8,9,9) Continued on Next Sheet 1) Hand dug pit to 1.20m bgl. 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. B = Buk Sample D = Disturbed Sample U = Undisturbed S		3.00	SPT		2.80	94.52		angular, fine to	coarse, angular weak m	udstone.	3.
FORMATION) 3.90 4.00 SPT N=20 (2.3/4,4,5,7) SPT N=32 (4,5/6,8,9,9) Continued on Next Sheet 1) Hand dug pit to 1.20m bgl. 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. B= Bulk Sample D= Disturbed Sample Use distu		3.50	D		3.55	93.77		Stiff dark grey vo	ery gravelly CLAY. Gravel	is fine to coarse,	
(2,3/4,4,5,7) SPT N=32 (4,5/6,8,9,9) Continued on Next Sheet 1) Hand dug pit to 1.20m bgl. 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. 8 = Bulk Sample D = Disturbed Sample U = Undisturbed Sample U = Serviconnental				N=20				angular weak m			4.
emarks: 1) Hand dug pit to 1.20m bgl. 2) Gas and groundwater monitoring pipe installed to 5.0m bgl. Response zone between 1.0m bgl and 5.0m bgl. B = Bulk Sample D = Disturbed Sample UT = Undisturbed Sample UT = Photoionization Detector (ppm) SPT = Standard Penetration Test											
Response zone between 1.0m bgl and 5.0m bgl. U = Undisturbed Sample UT = Notionization Detector (ppm) SPT = Standard Penetration Test		5.00	SPT						Continued on Next Sheet		5.
	emarks:						ter monito	ring pipe installed t	L L V F	D = Disturbed Sample J = Undisturbed Sample JT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample DiD = Photoionization Detector (ppm) PT = Standard Penetration Test	

	lyd ect Name	rock		www	.hyd	rock.	com	Window Co-ords:	/less Sample	Borehole I WS19 Sheet 2 or Hole Typ WLS	9 f 2
Loca	tion:	Banbu	ry				ject No:	Ground Level:	97.32m OD	Scale:	
Clien	nt:	db sym				L.	161279	Date(s):	09/06/16	1:25 Hole Diame	
Well	Water Strikes	Sample	and In S	itu Testing	Depth (m)	Level (m OD)	Legend		Stratum Description	110mm	1
					5.45	91.87			End of Borehole at 5.45m		6.0 —
											9.0 -
Rema	rks:	Response z	one bet	1.20m bgl. 2) tween 1.0m bg	l and 5.0		ter monito	ring pipe installed t	L E V P S A	B = Bulk Sample D = Disturbed Sample J = Undisturbed Sample J = Undisturbed Sample Tir = Undisturbed Sample S = Environmental Sample W = Water Sample D = Photoionization Detector (ppm) PTP = Standard Penetration Test B = Aubestos Bulk Sample Logged: WS Checke	ed: sc

Hvd	rock		www	v.hyd	rock.	com	Windowless Sampler	Borehole No. WS20
Project Nam		hase 2					Co-ords: 445021E, 241585N	Sheet 1 of 2 Hole Type: WLS
Location:	Banbu	ry				oject No: 161279	Ground Level: 97.98m OD	Scale: 1:25
Client:	db syn	nmetry				2012/0	Date(s): 09/06/16	Hole Diameter:
Vell Water			itu Testing	Depth	Level	Legend	Stratum Description	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)		Firm friable brown sandy gravelly CLAY with	rootlets.
	0.25	ES		0.30	97.68		Gravel is fine to coarse, angular to subround (TOPSOIL)	
	0.40	ES		0.50	97.08		Firm friable light brown slightly sandy gravel is fine to coarse, subangular to subrounded	
	0.50			0.50	97.48		(ALLUVIUM)	
	0.60	ES					Firm friable slightly sandy dark grey mottled (ALLUVIUM)	brown CLAY.
	0.90	ES						
								1.
	1.20	SPT	N=9					
			(0,1/2,2,2,3)	1.40	96.58			
							Firm greenish greck locally speckled black Cl mild organic odour. (ALLUVIUM)	_AY with a
	1.70	D					a o.gao oaoa (<u></u>	
	1.70							
	2.00	SPT	N=5	2.00	95.98			2
	2.00	371	(0,1/1,1,2,1)	2.00	95.96		Firm dark brown mottled grey locally speckle CLAY. (ALLUVIUM)	ed black sandy
							CLAT. (ALLOVIOW)	
				2.50	95.48		Soft light grey CLAY. (ALLUVIUM)	
				2.60	95.38		Firm light brown mottled grey slightly silty C	LAY.
							(CHARMOUTH MUDSTONE FORMATION)	
	3.00	SPT	N=9					3.
			(1,1/2,2,2,3)					
	3.60	D					Between 3.50 and 3.90m bgl: Weak mudsto	ne gravel.
	3.00							
				3.90	94.08			
	4.00	SPT	N=21	3.90	94.08		Stiff dark grey very gravelly CLAY. Gravel is fin angular, very weak mudstone. (CHARMOUT	
			(2,3/3,5,6,7)				FORMATION)	THUODSTONE
	4.60	D						
	5.00	SPT	N=27 (2,5/5,7,7,8)				Continued on Next Sheet	5.
emarks:	1) Hand du	l lg pit to	1.20m bgl. 2)	 Backfilled	l I with aris	ings on co	mpletion. B = Bulk S D = Distur	ample bed Sample
			ζ,				U = Undis UT = Undi UT = Undi ES = Envir W = Wate PID = Pho SPT = Star	turbed Sample sturbed Sample (Thin Wall) onmental Sample r Sample toionization Detector (ppm) adard Penetration Test
roundwater	: None enco	unterec	1				AB = Asbe Logg	ed: WS Checked:

	lyd ect Name	rock :: Kraft P		www	.hyd	rock.	com	Window Co-ords:	vless Sample	Borehole I WS20 Sheet 2 or Hole Typ WLS) f 2
Loca	tion:	Banbu	ry				ject No: 161279	Ground Level:	97.98m OD	Scale: 1:25	
Clier	nt:	db sym	nmetry			C	1012/9	Date(s):	09/06/16	Hole Diame	
Well	Water Strikes		and In S	itu Testing	Depth (m)	Level (m OD)	Legend		Stratum Description	1	ı
		Depth (m)	Type	Results	5.45	92.53			End of Borehole at 5.45m		6.0 —
Rema	rks:	1) Hand du		1.20m bgl. 2) l	Backfilled	with aris	ings on cor	mpletion.	D U U E: W P; Sf	i= Bulk Sample 1= Disturbed Sample 1= Undisturbed Sample (Thin Wall) 5= Environmental Sample 10= Photoionization Detector (ppm) PT = Standard Penetration Test B = Asbestos Bulk Sample Logged: WS Checke	10.0 -

Hye Project Na	drock	Phase 2	www	/.hyd	rock.	com	Window Co-ords:	vless Sample	Sheet 1 of Hole Type	2
Location:	Banbu				Pro	ject No:	Ground Level:	98.76m OD	WLS Scale:	
					C1	.61279			1:25 Hole Diamet	ter:
Client:		nmetry	Situ Testing	D	1		Date(s):	09/06/16	110mm	
Well Strik		Туре	Results	Depth (m)	Level (m OD)	Legend		Stratum Description	ı	
	0.30	ES		0.40	98.36		coarse, subangu	wn sandy gravelly CLAY. Ilar to subrounded flint.	(TOPSOIL)	
	0.70	ES		0.80	97.96		coarse, subangu DEPOSITS) Between 0.4	vn sandy gravelly CLAY. (llar to subrounded flint. Om bgl and 0.80m bgl: Roo rick fragments and concret	(RIVER TERRACE	
	1.00	ES					Firm light brown	n mottled light grey sand coarse, angular to subro	dy gravelly CLAY.	1.0
	1.20	SPT	N=7 (1,1/2,1,2,2)	1.20	97.56		Firm grey mottle	ed brown slightly sandy ine to coarse, angular to ER TERRACE DEPOSITS)		
	1.50	D		1.80	96.96		From 1.30m From 1.50m present.	bgl: Relic roots present. bgl: Fine to medium shell fi bgl: Becoming slightly sand	_	
	2.00	SPT	N=7 (1,1/1,2,2,2)				FORMATION)	CLAY. (CHARMOUTH M		2.0
	2.40	D								
	3.00	SPT	N=20 (2,2/4,5,5,6)							3.0 -
	3.65	D					From 3.30m	bgl: Becoming stiff and gre	гу.	
	4.00	SPT	N=16 (2,2/2,4,4,6)							4.0
	4.80	D								
	5.00	SPT	N=19 (2,3/3,5,5,6)					Continued on Next Sheet		5.0
Remarks:	1) Hand du	g pit to	1.20m bgl. 2)	Backfilled	with arisi	ings on co	mpletion.	C L E V P S S	3 = Bulk Sample) = Disturbed Sample J = Undisturbed Sample JT = Undisturbed Sample (Thin Wall) SS = Environmental Sample W = Water Sample 10] = Photolonization Detector (ppm) PST = Standard Penetration Test 10] = Arbestore Bulk Sample 10] = Arbestore Bulk Sample 10]	
Groundwat	ter: None enco	ountered	d.					S		

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	ehole No VS21 et 2 of 2		
	ect Name							Co-ords:	444987E, 241555N		Но	le Type: WLS		_
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	98.76m OD		;	Scale: 1:25 Diamet		_
Clie	nt:	db sym						Date(s):	09/06/16			10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
			· ipe	nesures	5.45	93.31			End of Borehole at 5.45n	n			7.0 8.0	
Rema	rks:	1) Hand du	ıl ıg pit to	1.20m bgl. 2) E	Backfilled	l with arisi	ngs on cor	mpletion.		B = Bulk Sample D = Disturbed San U = Undisturbed S UT = Undisturbed S ES = Environment W = Water Sampl PID = Photoiniza SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e ion Detecto netration To	r (ppm)	I	
Grour	ndwater:	None enco	untere	d.						Logged:		Checked	d: S	C

	yd ct Name	rock : Kraft P		www	ı.hydı	rock.c	com	Windowless Sample: Co-ords: 445003E, 241523N	Sheet 1 of Hole Type	2
Locat	ion:	Banbu	ry				ject No:	Ground Level: 99.72m OD	Scale:	
Clien	t:	db sym	nmetry			C1	61279	Date(s): 06/06/16	1:25 Hole Diamet	ter:
M/AII	Water			Situ Testing	Depth	Level	Legend	Stratum Description	110//////	
	Strikes	Depth (m)	Туре	Results	(m)	(m OD)		ASPHALT. (MADE GROUND)		ī
					0.05	99.67 99.42		Yellowish slightly sandy fine to coarse, sul angular sandstone and concrete GRAVEL. GROUND)		
		0.40	ES					Firm orange locally grey mottled CLAY wit staining. (RIVER TERRACE DEPOSITS)	h some iron	
		0.70	ES					From 0.80m bgl: Stiff.		1.0
										1.0
		1.20 1.20-1.65	SPT D	N=17 (2,2/3,4,5,5)						
		1.20-1.65	ט							
		1.80	D		1.80	97.92		Very stiff grey CLAY with abundant iron st	aining and silt	-
		2.00	SPT	N=24				sized selenite crystals. (CHARMOUTH MUFORMATION)	IDSTONE	2.0
		2.00-2.45	D	(2,4/5,6,7,6)				PORMATION		
		2.40	D							
					2.65	97.07				
								Very weak thinly laminated grey MUDSTC shell fragments. (CHARMOUTH MUDSTO		
		3.00	SPT	N-16						3.0
		3.00-3.45	D	N=16 (2,2/3,4,4,5)						3.0
		3.90	D							
		4.00	SPT	N=27 (3,2/4,6,5,12)						4.0
		4.00-4.45	D							
		5.00	SPT	N=21						5.0
		5.00-5.45	D	(2,2/4,5,5,7)				Continued on Next Sheet		
Remar	·ks:	1) Hand du	ıg pit to	1.20m bgl. 2)	Backfilled	with arisi	ngs on co	U = I UT = ES = W = PID: SPT:	sulk Sample Disturbed Sample Undisturbed Sample Undisturbed Sample (Thin Wall) Environmental Sample Water Sample Photolonization Detector (ppm) - Standard Penetration Test Asbestos Bulk Sample	

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445003E, 241523N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	99.72m OD			Scale: 1:25 Diamet	or:	
Clie	nt:	db sym						Date(s):	06/06/16			10mm	е.	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	94.27			End of Borehole at 5.45n	n			7.0	
Rema				1.20m bgl. 2) [l with arisi	ngs on coi	mpletion.		B = Bulk Sample D = Disturbed Sar U = Undisturbed ' UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bu	ample Sample (Thal Sample e tion Detect netration T k Sample	or (ppm) est	<u>. </u>	
Grour	ıuwater:	Groundwa	ter enc	ountered at 4.0	um pgl.					Logged:	I VI	Checked	⊿: S	

Hydı	rock		www	ı.hyd	rock.c	com	Window	less Sample	Borehole N WS23	
Project Name							Co-ords:	444987E, 241467N	Sheet 1 of Hole Type WLS	
Location:	Banbu	ry				ject No:	Ground Level:	101.65m OD	Scale: 1:25	
Client:	db syn	nmetry			C1	.61279	Date(s):	06/06/16	Hole Diame	ter:
Water	Sample	and In S	itu Testing	Depth	Level	Legend		Stratum Description	'	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)	Legend	ASPHALT. (MAD			1
	0.20	ES		0.05	101.60		Yellowish brown	sandy fine to coarse, so ne and concrete GRAVE		
	0.70	ES		0.90	100.75		Firm grey mottle	ed orange CLAY with son	ne iron staining.	
							(RIVER TERRACE	DEPOSITS)		1.0
	1.20	SPT	N=17 (2,3/3,5,4,5)							
	1.20-1.65	D								
	1.50	D								
	2.00	SPT	N=27							2.0
	2.00-2.45	D	(2,4/5,6,7,9)				Between 2.0i staining.	m bgl and 2.20m bgl: Abur	ndant iron	
	2.50									
	2.50	D								
				2.70	98.95			ocally iron stained with		1
							fragments. (CH/	ARMOUTH MUDSTONE	FORMATION)	
	3.00 3.00-3.45	SPT D	N=27 (4,7/6,7,7,7)							3.0
	3.00-3.43									
	3.50	D								
	4.00	SPT	N=21 (2,2/4,4,6,7)							4.0
	4.00-4.45	D								
				4.50	97.15		Very weak grey	MUDSTONE with some	shell fragments.	-
								MUDSTONE FORMATION		
	5.00	SPT	N=28					Continued on Next Sheet		5.0
	5.00-5.45	D	(3,5/6,6,7,9)							
Remarks:			1.20m bgl. 2)	Backfilled	d with arisi	ngs on coi	mpletion.	L L E V P	a = Bulk Sample = butsurbed Sample = bundisturbed Sample IT = Undisturbed Sample (Thin Wall) SS = Environmental Sample W = Water Sample UD = Photolonization Detector (ppm) PFT = Standard Penetration Test BB = Asbestos Bulk Sample	
roundwater:	None enco	untered	l						Logged: NT Checke	d: S

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	444987E, 241467N			le Type: WLS		
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	101.65m OD			Scale: 1:25 Diamet	or:	_
Clie	nt:	db sym						Date(s):	06/06/16			.10mm	er.	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	n				
					5.45	96.20			End of Borehole at 5.45r	n			7.0	
Rema				1.20m bgl. 2) E	J Backfilled	l with arisi	I ngs on coi	mpletion.		B = Bulk Sample D = Disturbed Sar U = Undisturbed Sar UT = Undisturbed Sar ES = Environment W = Water Sampl PID = Photoloniza SPT = Standard Pe AB = Asbestos Bu	Sample Sample (Thal Sample e tion Detect netration T k Sample	or (ppm) est		
Grour	ndwater:	None enco	untere	a.						Logged:	NT	Checked	1: SO	Ĵ

Hyd	rock		www	ı.hvd	rock.c	com	Window	less Sample	Borehole N WS25	
iiya	OCK								Sheet 1 of	
roject Name	: Kraft P	hase 2					Co-ords:	444943E, 241473N	Hole Type WLS	2:
ocation:	Banbu	ry				ject No: 161279	Ground Level:	102.68m OD	Scale: 1:25	
lient:	db sym	nmetry			()	101273	Date(s):	07/06/16	Hole Diame	ter
Water	•	and In S	Situ Testing	Depth	Level	Legend		Stratum Description	1	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)		Provin gravally C	AND. Gravel is fine to c		1
	0.10	ES						ete, flint, brick and very		
	0.30-0.80 0.40	B ES		0.30	102.38			sandy gravelly CLAY. G		
								ar to angular quartz, sa ER TERRACE DEPOSITS)	andstone and	
							,			
				0.80	101.88					
								lly grey mottled CLAY w mudstone gravel. (RIV		
						<u> </u>	DEPOSITS)	aastorie Bravei. (IIIV	. I. T. I.	:
	1.20	SPT	N=10			====				
	1.20-1.65	D	(1,2/2,2,3,3)							
	1.20-2.00	B D								
	1.40									
	2.00	SPT	N=13 (2,1/2,3,4,4)	2.10	100 50	F===				:
	2.00-2.45 2.00-3.00	D B		2.10	100.58			CLAY with some iron s	-	
		_				F====	· · · · · · · · · · · · · · · · · · ·	IUDSTONE FORMATION m bgl and 2.70m bgl: Abu	•	
							staining.	m bgrunu 2.76m bgi. Abt	maant non	
	2.80	D								
† <u>.</u>				2.90	99.78		Very weak grey N	MUDSTONE with abund	lant iron staining.	١.
	3.00	SPT	N=21 (3,4/5,4,6,6)					IUDSTONE FORMATION		3
	3.00-3.45 3.00-4.00	D B								
 	4.00	CDT	N-20	3.90	98.78		Very weak grey N	//UDSTONE with some	silt sized selenite	١.
1:1	4.00	SPT	N=30 (3,5/6,7,8,9)				crystals. (CHARN	OUTH MUDSTONE FO	RMATION)	4
	4.00-4.45 4.00-5.00	D B								
:										
1.]										
1:	5.00	SPT	N=30]
			N=30 (3,4/6,6,8,10)					Continued on Next Sheet		'
emarks:	5.00-5.45 1) Hand du	g pit to	1.20m høl 21	L Gas and o	L zorundwai	ter monito	ring pipe installed to	5.0m bgl	B = Bulk Sample	
			1.20m bgi. 2) tween 1.0m bg			es. monito	g pipe mistained to		D - Disturbed Sample UT = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) EFT = Standard Penetration Test AB = Asbestos Bulk Sample	
oundwater:	None enco	untoro	1						Logged: NT Checke	_

H	lyd	rock		www	.hyd	rock.	com	Window	less Sampl	er	٧	ehole No		
Proj	ect Name	: Kraft P	hase 2					Co-ords:	444943E, 241473N		Но	le Type: WLS		
Loca	tion:	Banbu	ry				ject No: 161279	Ground Level:	102.68m OD			Scale: 1:25	~ *•	
Clie	nt:	db sym						Date(s):	07/06/16			Diamet 10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Description	n				
					5.45	97.23			End of Borehole at 5.45n	n			7.0 7.0	
Rema		Response 2	zone be	tween 1.0m bg			ter monito	ring pipe installed t	o J.om bgi.	B = Bulk Sample D = Disturbed Sam U = Undisturbed S UT = Undisturbed ES = Environment: W = Water Sampli PID = Photoioniza SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e tion Detect netration To k Sample	or (ppm) est		
Grour	ndwater:	None enco	untere	d.						Logged:	NT	Checked	1: S	С

Hyd	rock		www	ı.hyd	rock.c	com	Window	less Sample		5
Project Name		hase 2					Co-ords:	445008E, 241406N	Sheet 1 of	
Location:	Banbu	ry				ject No:	Ground Level:	100.15m OD	Scale:	
Client:	db syn	nmetry			CI	.61279	Date(s):	06/06/16	1:25 Hole Diame	
Vell Water	Sample	and In S	Situ Testing	Depth	Level	Lagand		Street une Description	110mm	
Strikes	Depth (m)	Туре	Results	(m)	(m OD)	Legend	ACDIIAIT (MAAD	Stratum Description		
	0.20	ES		0.05	100.10			n sandy fine to coarse, su ne and concrete GRAVEL		1
	0.40-0.60 0.50	B ES		0.40	99.75		Firm grey locally staining and ver	v orange mottled CLAY w y rare limestone gravel.		
	0.80 0.80-1.00	D B					DEPOSITS)			
										1.0
	1.20 1.20-1.65	SPT D	N=9 (2,1/2,1,3,3)							
	1.20-2.00	В								
	2.00	SPT D	N=15 (2,1/2,4,4,5)							2.
		_								
* .										
•										
	3.00 3.00-3.45	SPT D	N=22 (3,4/5,5,5,7)							3.
*										
	4.00	SPT	N=8							4.
	4.00-4.45	D	(2,2/2,1,2,3)							"
				4.20	95.95			MUDSTONE with some s		
							crystals. (CHAR	MOUTH MUDSTONE FOR	RMATION)	
	4.00									
	4.80	D								
1.1	5.00	SPT	N=31 (2,3/6,6,8,11)					Continued on Next Sheet		5.
	5.00-5.45	D D		Constitution	٠ الـ ـ		ring nice that the la		= Bulk Sample	
emarks:			1.20m bgl. 2) tween 1.0m bg			er monito	ring pipe installed t	U UT ESS W Pil	= ours_ample = Undisturbed Sample = Undisturbed Sample (Thin Wall) = Environmental Sample - Water Sample D = Photoionization Detector (ppm) Photoionization Detector (ppm) Asbestos Bulk Sample	
oundwater:	None enco	untere	d.					L	ogged: NT Check	ed:

H	lyd	rock		www	.hyd	rock.c	com	Window	less Sampl	er	٧	/S26 et 2 of 2		_
Proj	ect Name	: Kraft P	hase 2					Co-ords:	445008E, 241406N		Но	le Type: WLS		_
Loca	tion:	Banbu	ry				ject No: .61279	Ground Level:	100.15m OD		:	Scale: 1:25		
Clie	nt:	db sym	nmetry			1		Date(s):	06/06/16			Diamete 10mm	er:	
Well	Water Strikes	Sample Depth (m)		Situ Testing Results	Depth (m)	Level (m OD)	Legend		Stratum Descriptio	n				
					5.45	94.70			End of Borehole at 5.45r	n			6.0	
Rema	nrks:		zone be	tween 1.0m bg			ter monito	ring pipe installed t		B = Bulk Sample D = Disturbed San U = Undisturbed S UT = Undisturbed ES = Environment W = Water Sampl PID = Photoioniza SPT = Standard Pe AB = Asbestos Bul	ample Sample (Th al Sample e tion Detecto netration To k Sample	r (ppm)	l: sc	_



Appendix C

Geotechnical Test Results and SPT Depth plots

Determination of Moisture Content

Tested in Accordance with BS 1377-2:1990: Clause 3.2

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Client:

Hydrock Consultants Ltd

Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

C161279 Client Reference: Job Number: 16-20746

Date Sampled: 02,07,08/06/2016

Date Received: 21/06/2016

07/05/2016 Date Tested: Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591033	В	WS01	1.2	1.9	В	Yellowish brown slightly gravelly CLAY	20
591034	D	WS01	3	3.45	D	Greyish brown silty CLAY	24
591036	D	WS03	4	4.45	D	Greyish brown slightly gravelly CLAY	25
591037	D	WS05	2.2	Not Given	D	Yellowish brown to grey slightly gravelly slightly sandy silty CLAY	25
591038	В	WS07	0.3	1	В	Brown slightly gravelly sandy CLAY	17
591039	В	WS07	2	3	В	Yellowish brown slightly sandy silty CLAY	22
591040	D	WS07	3.5	Not Given	D	Yellowish brown to grey silty CLAY	29
591041	В	WS09	1.2	2	В	Greyish brown CLAY	19
591042	D	WS11	1.2	1.65	В	Orange slightly gravelly slightly sandy CLAY	22
591043	D	WS11	2.7	Not Given	D	Yellowish brown to grey slightly gravelly CLAY	34

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mi nonawa Myther

Signed:

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

GF 099.6 Page 1 of 1

[&]quot;Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.

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The results included within the report are representative of the samples submitted for analysis.

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

Determination of Moisture Content

Tested in Accordance with BS 1377-2:1990: Clause 3.2

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Client:

Hydrock Consultants Ltd

Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

C161279 Client Reference:

Job Number: 16-20746

Date Sampled: 02,03,06/06/2016

Date Received: 21/06/2016

> 30/06/2016 Date Tested:

Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591044	D	WS12	2	2.45	D	Yellowish brown to grey slightly sandy CLAY	21
591045	D	WS12	3	3.45	D	Yellowish brown sandy CLAY	16
591047	D	WS13	3.3	Not Given	D	Yellowish brown to grey slightly gravelly CLAY	17
591048	D	WS13	4.9	Not Given	D	Brownish grey silty CLAY	25
591049	В	WS14	1.2	2	В	Yellowish brown slightly gravelly slightly sandy CLAY	20
591050	D	WS14	2.5	Not Given	D	Yellowish brown slightly gravelly CLAY	21
591051	D	WS20	4	4.45	D	Greyish brown silty CLAY	20
591052	D	WS15	1	1.45	D	Yellowish brown to grey CLAY	22
591053	D	WS15	2	2.45	D	Yellowish brown to brownish grey silty CLAY	29
591054	D	WS25	4	4.45	D	Greyish brown CLAY	20

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mi nonawa Myther

Signed:

Terry Stafford

Mirosława Pytlik PL Head of Geotechnical section Date Reported: 12/07/2016

Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Moisture Content

Tested in Accordance with BS 1377-2:1990: Clause 3.2

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Client:

Hydrock Consultants Ltd

Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

C161279 Client Reference: Job Number: 16-20746

Date Sampled: 03,06,09/06/2016

Date Received: 21/06/2016

30/06/2016 Date Tested:

Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591055	D	WS16	0.8	Not Given	D	Brownish grey slightly gravelly silty CLAY	24
591056	D	WS16	3	3.45	D	Greyish brown CLAY	22
591057	D	WS18	1.6	Not Given	D	Yellowish brown to brown slightly gravelly silty CLAY	25
591058	D	WS19	1.5	Not Given	D	Yellowish brown CLAY	30
591059	D	WS19	2.5	Not Given	DD	Yellowish brown slightly sandy silty CLAY	33
591060	D	WS20	1.7	Not Given	D	Yellowish brown to grey CLAY	27
591061	D	WS20	3.6	Not Given	D	Yellowish brown to grey CLAY	27
591062	D	WS21	1.5	Not Given	D	Orange slightly gravelly CLAY	36
591063	D	WS22	1.2	1.65	D	Yellowish brown to grey slightly gravelly silty CLAY	25
591064	D	WS22	2	2.45	D	Brownish grey CLAY	24

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Signed:

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

Page 1 of 1 GF 099.6

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Determination of Moisture Content

Tested in Accordance with BS 1377-2:1990: Clause 3.2

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Client:

Hydrock Consultants Ltd

Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

C161279 Client Reference:

Job Number: 16-20746

Date Sampled: 31/05,02,06,07/06/2016

Date Received: 21/06/2016

30/06, 05/07/2016 Date Tested:

Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591065	D	WS23	1.2	1.65	D	Yellowish brown to grey slightly sandy CLAY	24
591066	D	WS23	2.5	Not Given	D	Yellowish brown to grey CLAY	29
591078	D	BH02	1.3	Not Given	D	Brown slightly sandy CLAY with roottlets	37
591085	В	BH02	0.5	0.8	В	Brown gravelly sandy CLAY	28
591089	В	вноз	8	8.4	В	Grey CLAY	22
591093	В	BH04	0.7	Not Given	В	Brown gravelly slightly sandy silty CLAY	23
591094	В	BH04	1.2	Not Given	В	Yellowish brown to grey silty CLAY	29
591095	U	BH04	2	2.45	U	Yellowish brown to grey silty CLAY	27
591096	U	BH04	4	4.45	U	Greyish brown silty CLAY	21
591097	С	BH04	6	6.3	U	Greyish brown CLAY	19

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

Mi nonawa Myther

Signed:

Terry Stafford Geotechnical Manager

PL Head of Geotechnical section Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

GF 099.6 Page 1 of 1

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."



Determination of Moisture Content

Tested in Accordance with BS 1377-2:1990: Clause 3.2

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Hydrock Consultants Ltd

Client: Hydrock Consultants
Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06, 05/07/2016

Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591098	С	BH04	9	9.4	U	Greyish brown CLAY	21
591099	С	BH04	12	12.4	U	Greyish brown silty CLAY	17
591100	С	BH04	14	14.3	U	Greyish brown silty CLAY	13

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Signed:

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

Page 1 of 1 GF 099.6

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 07/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

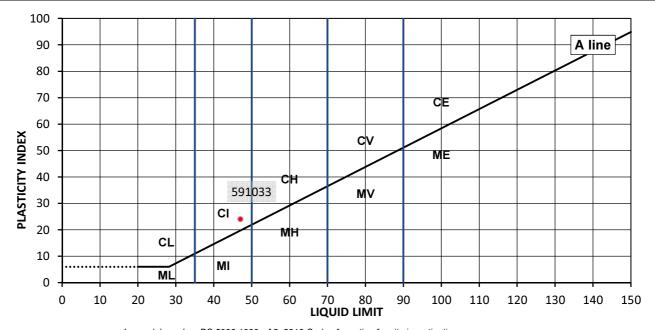
TEST RESULTS

Laboratory Reference: 591033

Sample Reference: В

В Description: Yellowish brown slightly gravelly CLAY Sample Type: WS01 Location: Depth Top [m]: 1.2 Tested after >425um removed by hand Sample Preparation: Depth Base [m]: 1.9

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
20	47	23	24	96



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Signed:

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mi nonawa Byther

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 07/06/2016 Date Sampled:

21/06/2016 Date Received:

Sampled By: Not Given

TEST RESULTS

Description:

Laboratory Reference: 591034

Sample Reference: D

Greyish brown silty CLAY

WS01 Location: Tested in natural condition Sample Preparation:

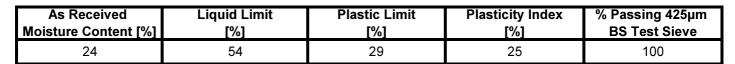
D Sample Type:

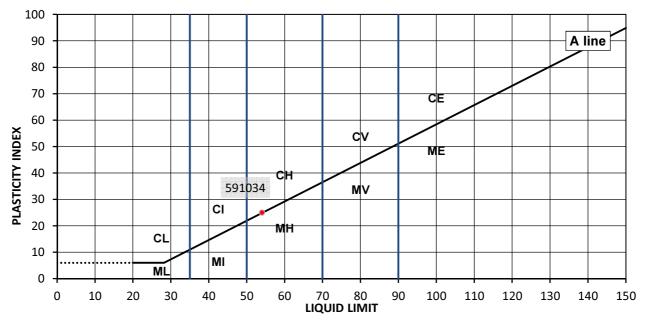
3

30/06/2016

Depth Base [m]: 3.45

Depth Top [m]:





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



D

4

Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 07/06/2016

21/06/2016 Date Received:

Date Tested: 30/06/2016 Sampled By: Not Given

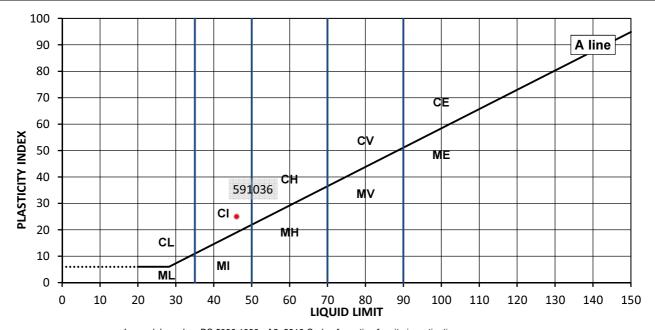
TEST RESULTS

Laboratory Reference: 591036

Sample Reference: D

Description: Greyish brown slightly gravelly CLAY Sample Type: WS03 Location: Depth Top [m]: Tested after >425um removed by hand Sample Preparation: Depth Base [m]: 4.45

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
25	46	21	25	97



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Signed:

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

Mi nonawa Byther

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 08/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Description:

Laboratory Reference: 591037

> Sample Reference: D

Yellowish brown to grey slightly gravelly slightly sandy silty CLAY

WS05 Location:

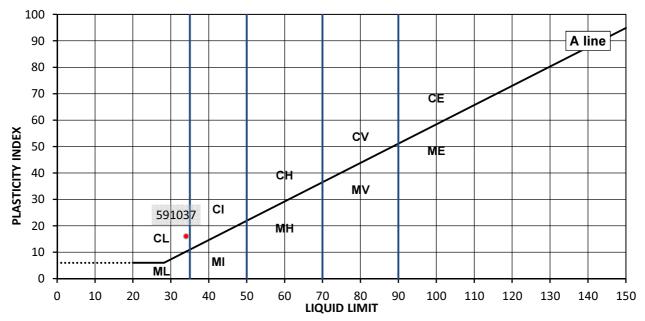
Tested after >425um removed by hand

D Sample Type:

Depth Top [m]: Depth Base [m]: Not Given

2.2

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
25	34	18	16	95



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mi nonawa Byther

Mirosława Pytlik PL Head of Geotechnical section

12/07/2016 Date Reported:

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 08/06/2016 Date Sampled:

21/06/2016 Date Received: Date Tested: 30/06/2016

Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Laboratory Reference: 591038

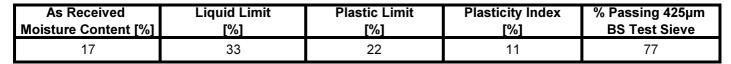
Sample Reference: В

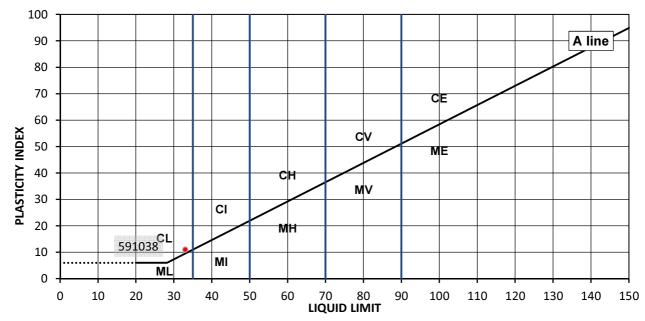
Tested after >425um removed by hand

Brown slightly gravelly sandy CLAY Description: WS07 Location:

В Sample Type: Depth Top [m]: 0.3

Depth Base [m]: 1





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

Date Reported:

Mi nonawa Byther

PL Head of Geotechnical section 12/07/2016 Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 Date Sampled: 08/06/2016

Date Received: 21/06/2016

Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591040

Sample Reference: D

Description: Yellowish brown to grey silty CLAY WS07 Location:

Tested in natural condition Sample Preparation:

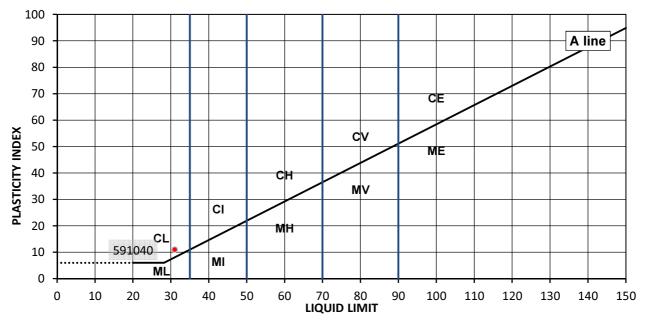
D Sample Type:

30/06/2016

Depth Top [m]: Depth Base [m]: Not Given

3.5

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
29	31	20	11	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

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Date Reported:

Mi nonawa Byther

PL Head of Geotechnical section

12/07/2016

Signed:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 Date Sampled: 02/06/2016

21/06/2016 Date Received:

Sampled By: Not Given

TEST RESULTS

Description:

Laboratory Reference: 591042

> Sample Reference: D

Orange slightly gravelly slightly sandy CLAY WS11

Location: Tested after >425um removed by hand Sample Preparation:

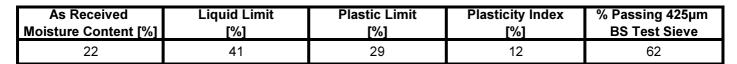
В Sample Type:

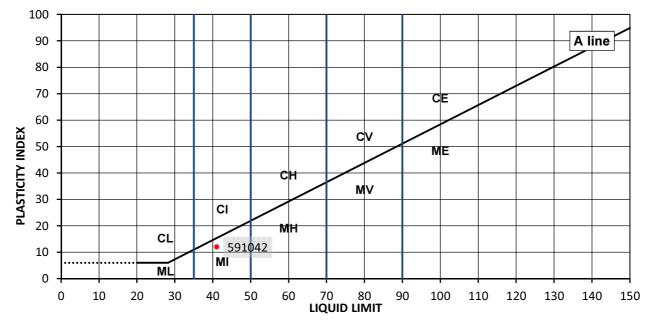
1.2

30/06/2016

Depth Base [m]: 1.65

Depth Top [m]:





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

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Approved:

Mirosława Pytlik

Date Reported:

Mi nonawa Byther PL Head of Geotechnical section

12/07/2016

Terry Stafford Geotechnical Manager

Signed:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 Date Sampled: 02/06/2016

Date Received: 21/06/2016

Sampled By: Not Given

TEST RESULTS

Description:

Location:

Laboratory Reference: 591047

> Sample Reference: D

Yellowish brown to grey slightly gravelly CLAY WS13

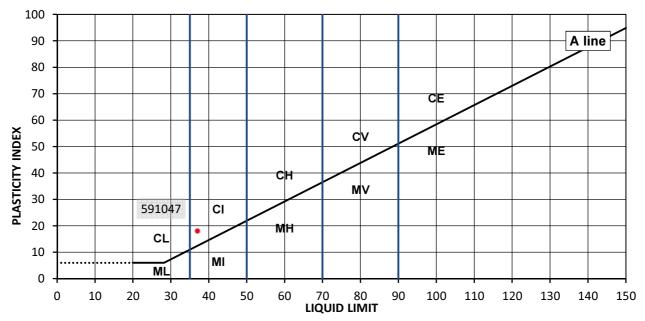
Tested in natural condition Sample Preparation:

D Sample Type:

30/06/2016

Depth Top [m]: 3.3 Depth Base [m]: Not Given

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
17	37	19	18	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

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Approved:

Mi nonawa Byther

Signed:

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

C161279

30/06/2016

Not Given

Client Reference:

Sampled By:



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Job Number: 16-20746 Holdenby Road Date Sampled: 02/06/2016 Spratton, Northampton Date Received: 21/06/2016

NN6 8LD

Nathan Thompson / Adam Cheers Date Tested: Contact:

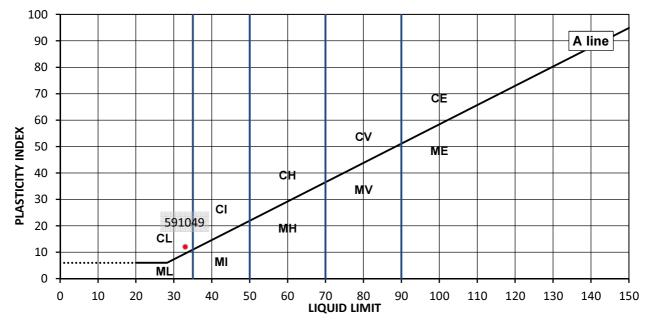
Site Name: Kraft Phase 2 Site Address: Not Given

TEST RESULTS Laboratory Reference: 591049

> Sample Reference: В

В Description: Yellowish brown slightly gravelly slightly sandy CLAY Sample Type: WS14 Location: Depth Top [m]: 1.2 Tested after >425um removed by hand Sample Preparation: Depth Base [m]: 2

As Received Liquid Limit **Plastic Limit** Plasticity Index % Passing 425µm **Moisture Content [%] BS Test Sieve** [%] [%] [%] 20 21 12 74 33



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

Comments:

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Terry Stafford Geotechnical Manager

append to classification for organic material (eg CHO)

for and on behalf of i2 Analytical Ltd

Organic

Minonawa Byther

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 Date Sampled: 03/06/2016

Date Received: 21/06/2016

30/06/2016

D

Sampled By: Not Given

TEST RESULTS

Description:

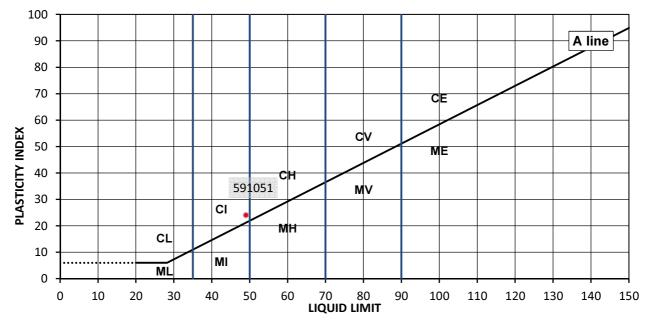
Laboratory Reference: 591051

Sample Reference: D

Greyish brown silty CLAY Sample Type:

WS20 Location: Depth Top [m]: 4 Tested in natural condition Sample Preparation: Depth Base [m]: 4.45

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
20	49	25	24	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Signed:

Comments:

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Approved:

Mirosława Pytlik

Date Reported:

PL Head of Geotechnical section

Mi nonawa Byther

12/07/2016

Terry Stafford Geotechnical Manager

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for and on behalf of i2 Analytical Ltd

Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Location:

Laboratory Reference: 591053

Sample Reference: D

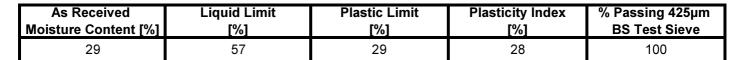
Description: Yellowish brown to brownish grey silty CLAY

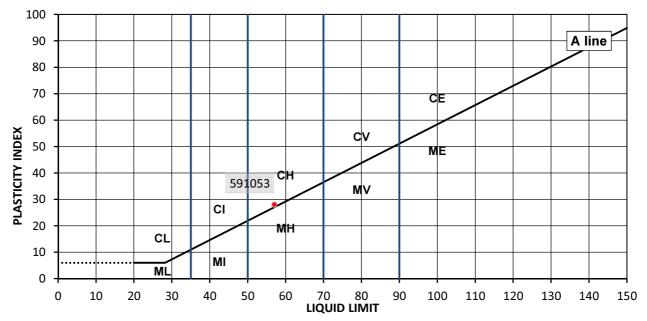
WS15 Tested in natural condition

D Sample Type:

2

Depth Top [m]: Depth Base [m]: 2.45





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Mirosława Pytlik PL Head of Geotechnical section 12/07/2016 Date Reported:

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 03/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591055

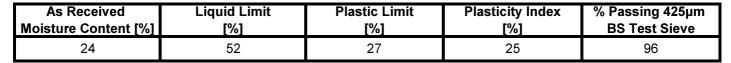
> Sample Reference: D

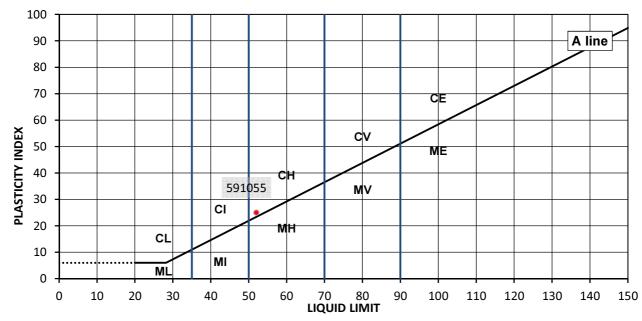
Description: Brownish grey slightly gravelly silty CLAY WS16 Location:

Tested after >425um removed by hand Sample Preparation:

D Sample Type: Depth Top [m]: 8.0

Depth Base [m]: Not Given





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Signed:

Comments:

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Date Reported:

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12/07/2016

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Date Tested:

Job Number: 16-20746 Date Sampled: 09/06/2016

Date Received: 21/06/2016

Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591057

Sample Reference: D

Description: Yellowish brown to brown slightly gravelly silty CLAY

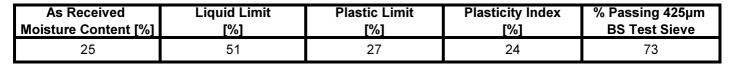
WS18 Location: Tested after washing to remove >425um Sample Preparation:

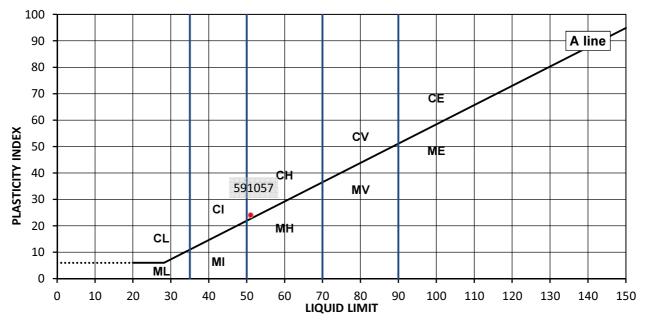
D Sample Type:

30/06/2016

Depth Top [m]: Depth Base [m]: Not Given

1.6





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

Organic append to classification for organic material (eg CHO)

Signed:

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

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PL Head of Geotechnical section

Minonawa Byther

Terry Stafford Geotechnical Manager

12/07/2016 Date Reported:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Location:

Laboratory Reference: 591063

> Sample Reference: D

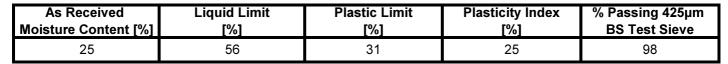
Description: Yellowish brown to grey slightly gravelly silty CLAY

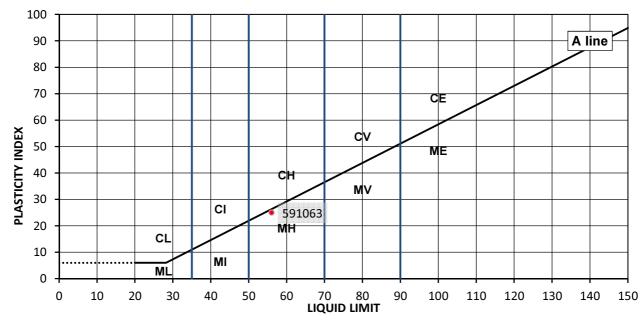
WS22 Tested after >425um removed by hand Sample Preparation:

D Sample Type:

Depth Top [m]: Depth Base [m]: 1.65

1.2





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Signed:

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 31/05/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Laboratory Reference: 591078

Sample Reference: D

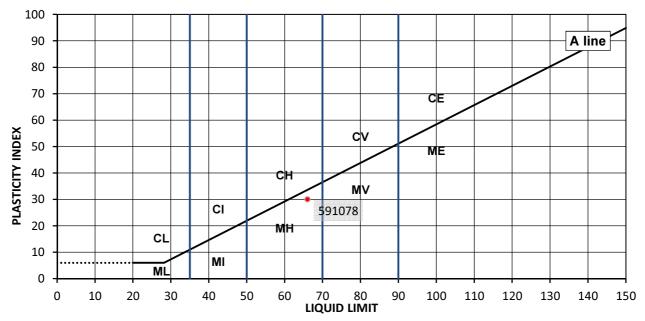
Tested after >425um removed by hand

Description: Brown slightly sandy CLAY with roottlets BH02 Location:

D Sample Type: Depth Top [m]: 1.3

Depth Base [m]: Not Given

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
37	66	36	30	99



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

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Approved:

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Signed:

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Laboratory Reference: 591093

Sample Reference: В

Description: Brown gravelly slightly sandy silty CLAY **BH04** Location:

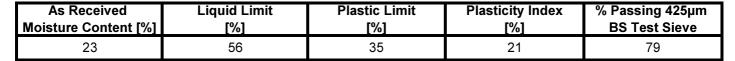
Tested after >425um removed by hand

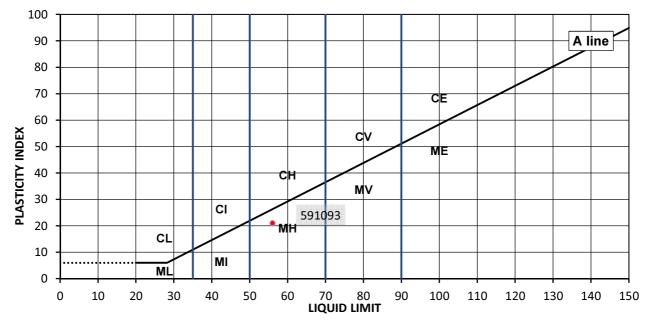
В Sample Type:

0.7

Depth Base [m]: Not Given

Depth Top [m]:





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav Τ Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

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Approved:

Date Reported:

Mi nonawa Byther

Mirosława Pytlik PL Head of Geotechnical section

12/07/2016

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Laboratory Reference: 591094

Sample Reference: В

Description: Yellowish brown to grey silty CLAY **BH04** Location:

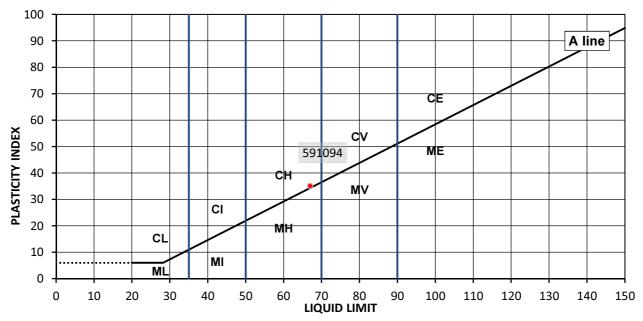
Tested in natural condition

В Sample Type:

Depth Top [m]: Depth Base [m]: Not Given

1.2

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
29	67	32	35	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Signed:

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mi nonawa Byther

Terry Stafford Geotechnical Manager

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

for and on behalf of i2 Analytical Ltd

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The results included within the report are representative of the samples submitted for analysis.

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



U

Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

> Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591095

Sample Reference: U

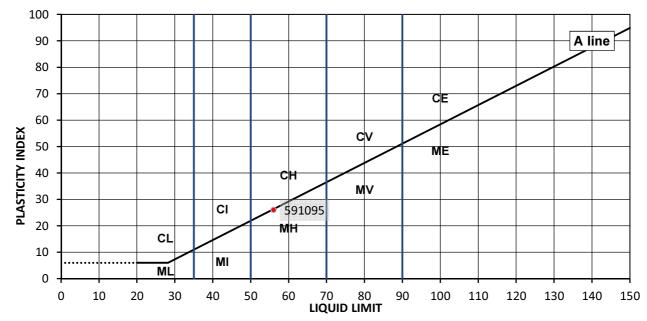
Description: Yellowish brown to grey silty CLAY **BH04** Location:

2 Depth Top [m]:

Sample Type:

Tested in natural condition Sample Preparation: Depth Base [m]: 2.45

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
27	56	30	26	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

Date Reported:

Mi nonawa Byther

PL Head of Geotechnical section

12/07/2016

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



U

4

Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 Date Sampled: 06/06/2016

Date Received: 21/06/2016 Date Tested: 30/06/2016

Sampled By: Not Given

Depth Top [m]:

TEST RESULTS

Description:

Location:

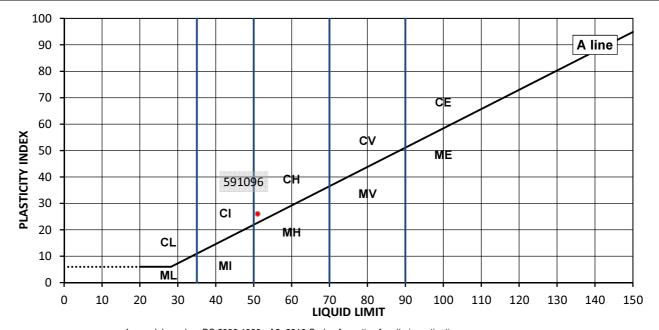
Laboratory Reference: 591096

Sample Reference: U

Greyish brown silty CLAY Sample Type: **BH04**

Tested in natural condition Sample Preparation: Depth Base [m]: 4.45

As Received	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Moisture Content [%]	[%]	[%]	[%]	BS Test Sieve
21	51	25	26	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 V Very high 70 to 90 Е Extremely high exceeding 90

O Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Signed:

Mirosława Pytlik

PL Head of Geotechnical section 12/07/2016 Date Reported:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

Mi nonawa Byther

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Determination of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clause 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd Client Address:

2-4 Hawthorne Park Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746 06/06/2016 Date Sampled:

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Sample Preparation:

Location:

Laboratory Reference: 591098

Sample Reference: С

Description: Greyish brown CLAY

BH04

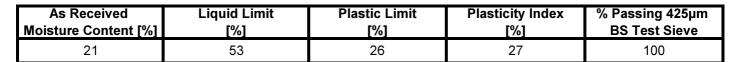
Tested in natural condition

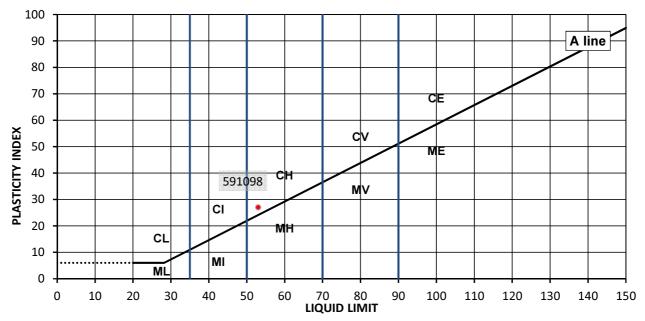
U Sample Type:

9

Depth Base [m]: 9.4

Depth Top [m]:





Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit C Clav L Iow below 35 Silt Medium 35 to 50 Н High 50 to 70 Very high V 70 to 90 Е Extremely high exceeding 90

Organic append to classification for organic material (eg CHO)

Comments:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Byther

Signed:

Mirosława Pytlik PL Head of Geotechnical section 12/07/2016 Date Reported:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Summary of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given Client Reference: C161279 Job Number: 16-20746

Date Sampled: 31/05,06/06/2016

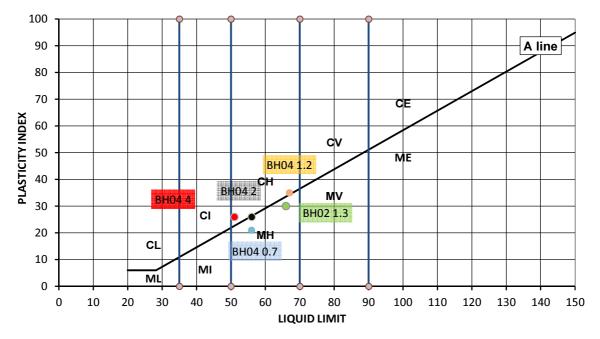
Date Received: 21/06/2016

Date Tested: 30/06/2016

Sampled By: Not Given

TEST RESULTS

Location	Depth [m]	As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425μm BS Test Sieve
BH02	1.3	37	66	36	30	99
BH04	0.7	23	56	35	21	79
BH04	1.2	29	67	32	35	100
BH04	2	27	56	30	26	100
BH04	4	21	51	25	26	100



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit Clay below 35 Low M Silt Medium 35 to 50 Н 50 to 70 Very high 70 to 90 Ε Extremely high exceeding 90

Organic O append to classification for organic material (eg CHO)

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved: Mirosława Pytlik

PL Head of Geotechnical section

Minonawa Byther

Signed: Terry Stafford

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

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Page 1 of 1 GF 121.4



Summary of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address: Holdenby Road

Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Kraft Phase 2 Site Name: Site Address: Not Given

Client Reference: C161279 16-20746 Job Number:

06,07,08/06/2016 Date Sampled:

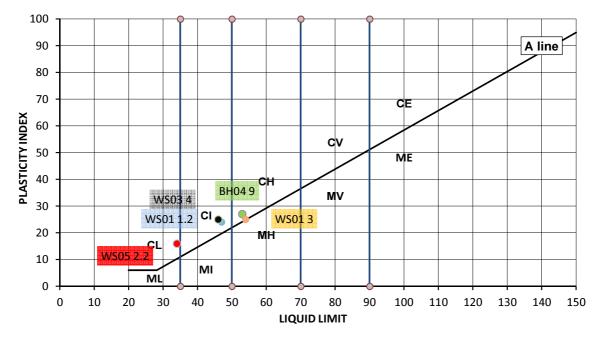
21/06/2016 Date Received:

30/06/2016 Date Tested:

Not Given Sampled By:

TEST RESULTS

Location	Depth [m]	As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425μm BS Test Sieve
BH04	9	21	53	26	27	100
WS01	1.2	20	47	23	24	96
WS01	3	24	54	29	25	100
WS03	4	25	46	21	25	97
WS05	2.2	25	34	18	16	95



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit Clay below 35 Low M Silt Medium 35 to 50 Н 50 to 70 Very high 70 to 90 Ε Extremely high exceeding 90

Organic append to classification for organic material (eg CHO)

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved: Mirosława Pytlik

PL Head of Geotechnical section

Signed: Terry Stafford

Geotechnical Manager

Date Reported: 12/07/2016

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Page 1 of 1 GF 121.4



Summary of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road

Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

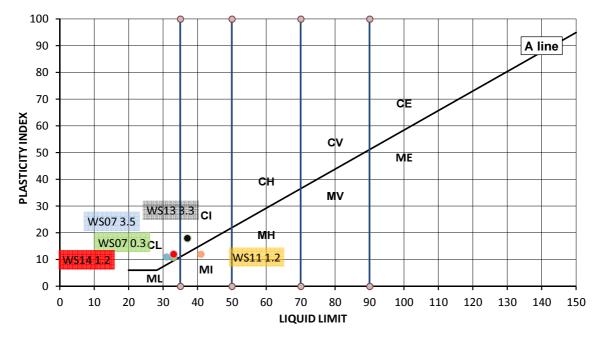
Site Name: Kraft Phase 2 Site Address: Not Given Client Reference: C161279 Job Number: 16-20746

Date Sampled: 02,08/06/2016 Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Location	Depth [m]	As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425μm BS Test Sieve
WS07	0.3	17	33	22	11	77
WS07	3.5	29	31	20	11	100
WS11	1.2	22	41	29	12	62
WS13	3.3	17	37	19	18	100
WS14	1.2	20	33	21	12	74



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit Clay below 35 Low M Silt Medium 35 to 50 Н 50 to 70 Very high 70 to 90 Ε Extremely high exceeding 90

Organic O append to classification for organic material (eg CHO)

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved: Mirosława Pytlik

PL Head of Geotechnical section

Minonawa Byther

Signed: Terry Stafford

Geotechnical Manager

Date Reported: 12/07/2016

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Page 1 of 1 GF 121.4



Summary of Liquid and Plastic Limits

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road

Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given Client Reference: C161279 Job Number: 16-20746

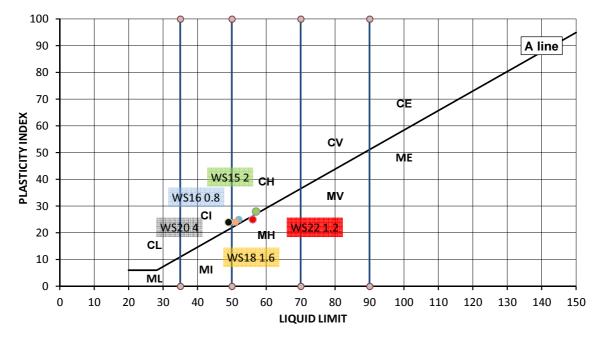
Date Sampled: 03,06,09/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Location	Depth [m]	As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425μm BS Test Sieve
WS15	2	29	57	29	28	100
WS16	8.0	24	52	27	25	96
WS18	1.6	25	51	27	24	73
WS20	4	20	49	25	24	100
WS22	1.2	25	56	31	25	98



Legend, based on BS 5930:1999 +A2: 2010 Code of practice for site investigations

Plasticity Liquid Limit Clay below 35 Low M Silt Medium 35 to 50 Н 50 to 70 Very high 70 to 90 Ε Extremely high exceeding 90

Organic O append to classification for organic material (eg CHO)

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved: Mirosława Pytlik

PL Head of Geotechnical section

on Minonawa Myth

Signed: Terry Stafford

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

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Page 1 of 1 GF 121.4



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Laboratory Reference:

Yellowish brown slightly gravelly CLAY

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

WS01

Not Given

TEST RESULTS

Location:

Supplier:

Sample description:

Client Reference: C161279
Job Number: 16-20746
Date Sampled: 07/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Sample Reference: B
Sample Type: B
Depth Top [m]: 1.2
Depth Base [m]: 1.9

	CLAY		SILT			SAND			GRAVEL		COBBLES	BOULDERS
	CLAT	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	000000	BOOLDENO
•	100											
	90											
	80											
%	70											
	60											
Passing	50			مد								
ntage	40											
Percentage	30											
ш	20											
	10											
	0											
	0.001		0.01		0.1	Parti	1 cle Size in	nm	10		100	100

591033

Sie	ving	Sedime	entation
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0630	49
90	100	0.0524	47
75	100	0.0368	45
63	100	0.0259	43
50	98	0.0181	39
37.5	93	0.0131	38
28	93	0.0039	28
20	88	0.0018	24
14	85		
10	82		
6.3	80		
5	77		
3.35	73		
2	68		
1.18	66		
0.6	64	Particle density	(assumed)
0.425	62	2.65	Mg/m3
0.3	57		
0.212	53		
0.15	50		
0.063	49		

Dry Mass of sample [g]: 3681

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	31.90
Sand	19.30
Silt	23.90
Clay	24.90

Grading Analysis		
D100	mm	63
D60	mm	0.374
D30	mm	0.005
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below Insufficient material supplied to be representative in accordance with BS1377 requirements

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.



Determination of Particle Size Distribution

Yellowish brown slightly sandy silty CLAY

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Laboratory Reference:

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

WS07

Not Given

TEST RESULTS

Location:

Supplier:

Sample description:

Client Reference: C161279 16-20746 Job Number: 08/06/2016 Date Sampled: 21/06/2016 Date Received: Date Tested: 30/06/2016 Sampled By:

Not Given

Sample Reference: В Sample Type: В 2 Depth Top [m]: Depth Base [m]: 3

	LAY		SILT			SAND			GRAVEL		COBBLES	BOULDERS
_		Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		į.
100												
90	_											
80	-											
70	_	+++										
% D 60												
Passing 00 -												
age 10												
Percentage												
g 30												
20												
10	-	+++										
0 ┞												
0.00	1		0.01		0.1		1 cle Size in		10		100	100

591039

Sie	/ing	Sedimentation		
Particle Size mm	% Passing	Particle Size mm	% Passing	
125	100	0.0630	78	
90	100	0.0558	74	
75	100	0.0389	68	
63	100	0.0271	62	
50	100	0.0189	58	
37.5	100	0.0136	52	
28	100	0.0039	36	
20	100	0.0018	30	
14	100			
10	100			
6.3	100			
5	100			
3.35	99			
2	99			
1.18	98			
0.6	97	Particle density	(assumed)	
0.425	96	2.65	Mg/m3	
0.3	94			
0.212	88			
0.15	85			
0.063	78			

1057 Dry Mass of sample [g]:

Sample Proportions	% dry mass	
Very coarse	0.00	
Gravel	1.40	
Sand	21.10	
Silt	46.90	
Clay	30.60	

Grading Analysis		
D100	mm	10
D60	mm	0.0234
D30	mm	0.00185
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.

GF 100.7 Page 1 of 1



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

WS13

TEST RESULTS

Location:

Sample description:

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 02/06/2016

Date Received: 21/06/2016

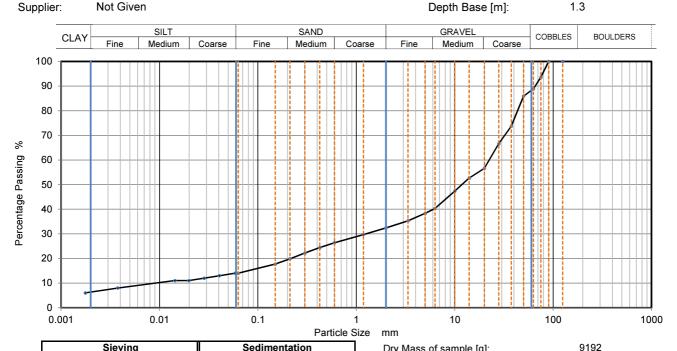
Date Tested: 30/06/2016 Sampled By: Not Given

Laboratory Reference: 591046 Sample Reference: B
Yellowish brown sandy clayey fine to coarse
Sample Type: B

GRAVEL

Depth Top [m]: 0.5

yen Depth Base [m]: 1.3



Sie	ving	Sedimentation		
Particle Size mm	% Passing	Particle Size mm	% Passing	
125	100	0.0630	14	
90	100	0.0585	14	
75	94	0.0406	13	
63	89	0.0284	12	
50	86	0.0199	11	
37.5	74	0.0143	11	
28	67	0.0038	8	
20	57	0.0018	6	
14	53			
10	47			
6.3	40			
5	38			
3.35	35			
2	32			
1.18	30			
0.6	26	Particle density	(assumed)	
0.425	24	2.65	Mg/m3	
0.3	22			
0.212	20			
0.15	18			
0.063	14			

JI Y	Mass of sample	, [a].	0.02

Sample Proportions	% dry mass		
Very coarse	11.10		
Gravel	56.40		
Sand	18.40		
Silt	8.00		
Clay	6.10		

Grading Analysis		
D100	mm	90
D60	mm	22.4
D30	mm	1.25
D10	mm	0.0114
Uniformity Coefficient		2000
Curvature Coefficient		6.1

Remarks

Preparation and testing in accordance with BS1377 unless noted below Insufficient material supplied to be representative in accordance with BS1377 requirements

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Mi romawa By

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Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

Client Reference:



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Sample description:

Job Number: 16-20746

Date Sampled: 02/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

C161279

Laboratory Reference: 591049 Sample Reference: B

Yellowish brown slightly gravelly slightly sandy

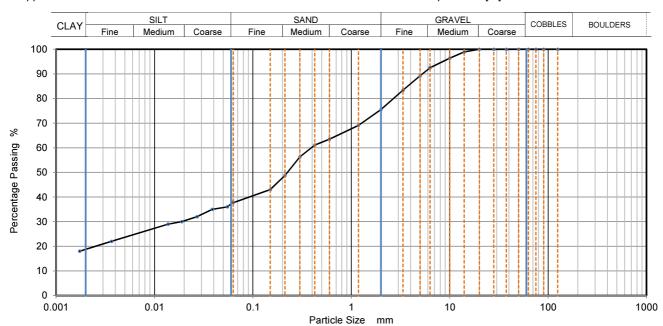
CLAY

Sample Type:

B

 Location:
 WS14
 Depth Top [m]:
 1.2

 Supplier:
 Not Given
 Depth Base [m]:
 2



ntation	Dry Mass of sample [g]:	1159

Siev	/ing	Sedimentation		
Particle Size mm	% Passing	Particle Size mm	% Passing	
125	100	0.0630	38	
90	100	0.0550	36	
75	100	0.0387	35	
63	100	0.0271	32	
50	100	0.0189	30	
37.5	100	0.0137	29	
28	100	0.0037	22	
20	100	0.0017	18	
14	99			
10	96			
6.3	93			
5	89			
3.35	83			
2	76			
1.18	69			
0.6	64	Particle density	(assumed)	
0.425	61	2.65	Mg/m3	
0.3	56			
0.212	49			
0.15	43			
0.063	38			

Sample Proportions	% dry mass		
Very coarse	0.00		
Gravel	24.50		
Sand	37.80		
Silt	19.10		
Clay	18.60		

Grading Analysis		
D100	mm	20
D60	mm	0.393
D30	mm	0.0169
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

 $Opinions\ and\ interpretations\ expressed\ herein\ are\ outside\ of\ the\ scope\ of\ the\ UKAS\ Accreditation.$

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The results included within the report are representative of the samples submitted for analysis.

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Sample description:

| Client Reference: C161279 | Job Number: 16-20746 | Date Sampled: 07/06/2016 | Date Received: 21/06/2016

Date Tested: 07/01/2016 Sampled By: Not Given

Laboratory Reference: 591067 Sample Reference: D

Yelloiwsh brown slightly gravelly slightly sandy CLAY Sample Type: D

 Location:
 WS25
 Depth Top [m]:
 1

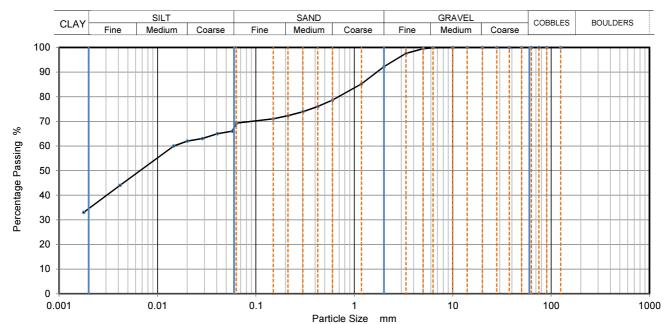
 Supplier:
 Not Given
 Depth Base [m]:
 2

Sedimentation

Particle density (assumed)

Mg/m3

2.65



Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0630	69
90	100	0.0577	66
75	100	0.0406	65
63	100	0.0286	63
50	100	0.0201	62
37.5	100	0.0146	60
28	100	0.0042	44
20	100	0.0018	33
14	100		
10	100		
6.3	100		
5	100		
3.35	98		

85 79

76

74

72

71

69

Minonawa Bythe

Dry Mass of sam	ple [g]:	754

Sample Proportions	% dry mass	
Very coarse	0.00	
Gravel	7.80	
Sand	22.90	
Silt	34.70	
Clay	34.60	

Grading Analysis		
D100	mm	10
D60	mm	0.0143
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

1.18

0.6 0.425

0.3

0.212

0.15

0.063

PL Head of Geotechnical section
Date Reported: 12/07/2016

Sieving

Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

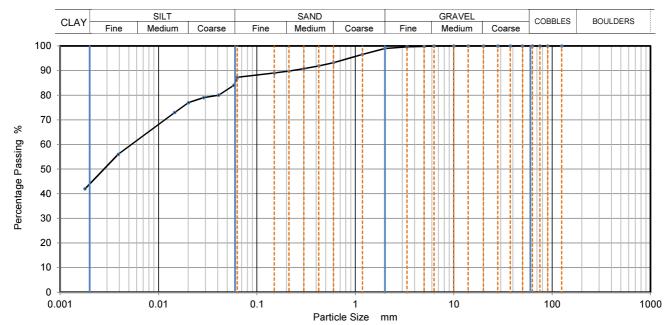
Date Sampled: 07/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591068 Sample Reference: B

Sample description:Greyish brown slightly sandy CLAYSample Type:BLocation:WS25Depth Top [m]:2Supplier:Not GivenDepth Base [m]:3



Sie	ving	Sedimentation	
Particle Size	% Passing	Particle Size	% Passing
mm	, o r a.com.g	mm	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
125	100	0.0630	87
90	100	0.0583	84
75	100	0.0408	80
63	100	0.0287	79
50	100	0.0202	77
37.5	100	0.0146	73
28	100	0.0039	56
20	100	0.0018	42
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	97		
0.6	93	Particle density	(assumed)
0.425	92	2.65	Mg/m3
0.3	91		
0.212	90		
0.15	89		
0.063	87		

Dry Mass of sample [g]:	926

Sample Proportions	% dry mass	
Very coarse	0.00	
Gravel	1.00	
Sand	11.70	
Silt	43.40	
Clay	43.90	

Grading Analysis		
D100	mm	6.3
D60	mm	0.00533
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section
Date Reported: 12/07/2016

Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Sample description:

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 06/06/2016

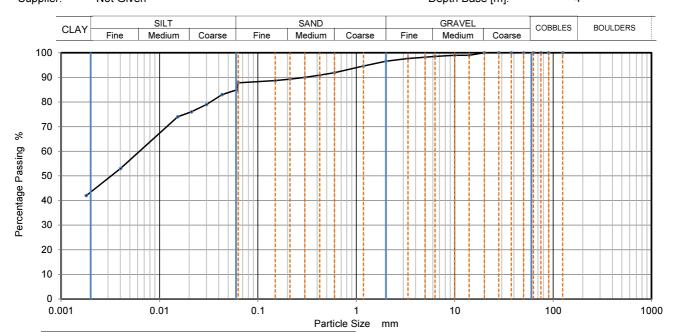
Date Received: 21/06/2016

Date Tested: 30/06/2016 Sampled By: Not Given

Laboratory Reference: 591069 Sample Reference: B

Greyish brown CLAY with thin laminae of orangish
Sample Type:
B

Location:WS25Depth Top [m]:3Supplier:Not GivenDepth Base [m]:4



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0630	88
90	100	0.0613	85
75	100	0.0432	83
63	100	0.0301	79
50	100	0.0211	76
37.5	100	0.0153	74
28	100	0.0040	53
20	100	0.0018	42
14	99		
10	99		
6.3	99		
5	98		
3.35	98		
2	97		
1.18	95		
0.6	92	Particle density	(assumed)
0.425	91	2.65	Mg/m3
0.3	90		
0.212	89		
0.15	89		
0.063	88		

Dry Mass of sample [g]: 886

Sample Proportions	% dry mass	
Very coarse	0.00	
Gravel	3.40	
Sand	8.80	
Silt	44.00	
Clay	43.80	

Grading Analysis		
D100	mm	20
D60	mm	0.00627
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Mi nonawa Byther

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.



Determination of Particle Size Distribution

i2 Analytical Ltd
7 Woodshots Meadow
Croxley Green Business Park
Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Sample description:

Client Reference: C161279

Job Number: 16-20746

Job Number: 16-20746

Date Sampled: 31/05/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016

Sampled By: Not Given

В

TEST RESULTS

Laboratory Reference: 591081 Sample Reference: B

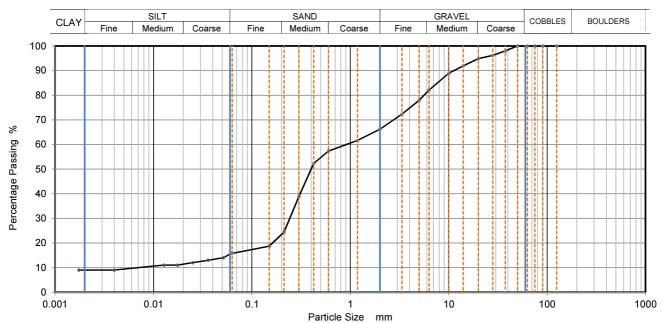
Yellowish brown very gravelly clayey fine to

coarse SAND

Sample Type:

 Location:
 BH02
 Depth Top [m]:
 3.2

 Supplier:
 Not Given
 Depth Base [m]:
 3.7



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0630	16
90	100	0.0513	14
75	100	0.0358	13
63	100	0.0250	12
50	100	0.0176	11
37.5	98	0.0127	11
28	96	0.0040	9
20	95	0.0017	9
14	92		
10	89		
6.3	82		
5	78		
3.35	72		
2	66		
1.18	62		
0.6	57	Particle density	(assumed)
0.425	52	2.65	Mg/m3
0.3	39		
0.212	24		
0.15	19		
0.063	16		

Dry IV	lass of	sampl	e [g]:	611

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	33.80
Sand	50.40
Silt	7.10
Clay	8 70

Grading Analysis		
D100	mm	50
D60	mm	0.915
D30	mm	0.243
D10	mm	0.00795
Uniformity Coefficient		120
Curvature Coefficient		8.1

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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Mi nonawa Bythe

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Hydrock Consultants Ltd Client: 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Site Name: Kraft Phase 2 Site Address: Not Given

BH03

Not Given

Sample description:

Location:

Supplier:

Client Reference: C161279

16-20746 Job Number: Date Sampled: 02/06/2016

Date Received: 21/06/2016 Date Tested: 30/06/2016

Sampled By: Not Given

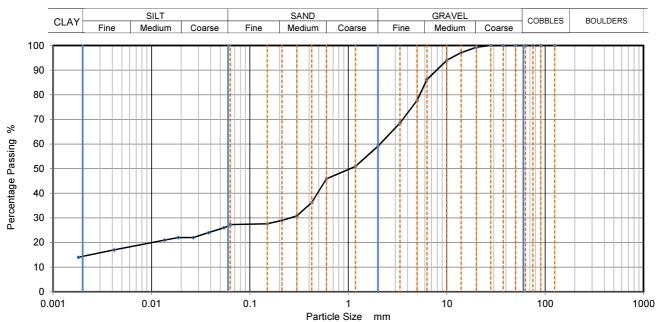
В

TEST RESULTS Laboratory Reference: 591088 Sample Reference:

Yellowish brown very sandy clayey fine to coarse

GRAVEL

Sample Type: В Depth Top [m]: 5.8 Depth Base [m]: 6.5



Sie	ving	Sedimentation		
Particle Size mm	% Passing	Particle Size mm	% Passing	
125	100	0.0630	27	
90	100	0.0544	26	
75	100	0.0381	24	
63	100	0.0266	22	
50	100	0.0187	22	
37.5	100	0.0136	21	
28	100	0.0042	17	
20	99	0.0018	14	
14	97			
10	94			
6.3	86			
5	78			
3.35	69			
2	59			
1.18	51			
0.6	46	Particle density	(assumed)	
0.425	36	2.65	Mg/m3	
0.3	31			
0.212	29			
0.15	28			
0.063	27			

4075 Dry Mass of sample [g]:

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	40.90
Sand	31.80
Silt	12.60
Clay	14.70

Grading Analysis		
D100	mm	28
D60	mm	2.1
D30	mm	0.257
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.

GF 100.7 Page 1 of 1



Determination of Particle Size Distribution

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Laboratory Reference:

Hydrock Consultants Ltd Client: 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

Grey CLAY

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

BH03

Not Given

TEST RESULTS

Location:

Supplier:

Sample description:

Client Reference: C161279 16-20746 Job Number: 02/06/2016 Date Sampled: 21/06/2016 Date Received: Date Tested: 30/06/2016

Not Given

Sampled By:

591089 Sample Reference: В Sample Type: В 8 Depth Top [m]: Depth Base [m]: 8.4

SILT SAND GRAVEL COBBLES **BOULDERS** CLAY Fine Coarse Fine Fine Medium Medium Medium Coarse Coarse 100 90 80 70 60 Percentage Passing 50 40 30 20 10 0 0.001 0.01 0.1 10 100 1000 Particle Size mm

Siev	/ing	Sedimentation		
Particle Size mm	% Passing	Particle Size mm	% Passing	
125	100	0.0630	99	
90	100	0.0598	95	
75	100	0.0419	92	
63	100	0.0292	86	
50	100	0.0204	81	
37.5	100	0.0148	77	
28	100	0.0044	60	
20	100	0.0018	46	
14	100			
10	100			
6.3	100			
5	100			
3.35	100			
2	100			
1.18	100			
0.6	100	Particle density	(assumed)	
0.425	100	2.65	Mg/m3	
0.3	100			
0.212	99			
0.15	99			

1281 Dry Mass of sample [g]:

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	1.40
Silt	51.00
Clay	47.60

Grading Analysis		
D100	mm	2
D60	mm	0.0044
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Preparation and testing in accordance with BS1377 unless noted below

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Approved:

Minonawa Mythis. Mirosława Pytlik

0.063

PL Head of Geotechnical section Date Reported: 12/07/2016

Signed:

Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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GF 100.7 Page 1 of 1



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

C161279

16-20746

07/06/2016

21/06/2016

30/06/2016

Not Given

Client Reference:

Job Number:

Date Sampled:

Date Tested:

Sampled By:

Date Received:



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

> 591035 Laboratory Reference: В Sample Type:

В Sample Reference: 0.8 Depth Top [m]: WS03 Location: Depth Base [m]: 1.5

Specimen Preparation

Test Results:

Condition Remoulded Soaking details Not soaked

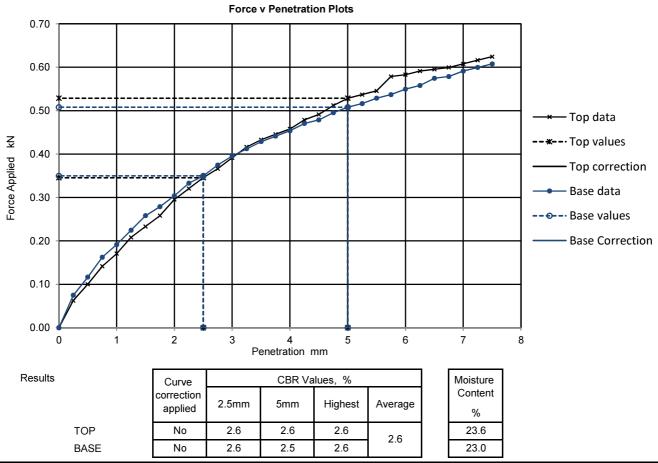
Details Period of soaking Recompacted with specified standard effort using 2.5kg days

Time to surface days Brown gravelly sandy CLAY with rootlets Amount of swell recorded Sample Description: mm

Material retained on 20mm sieve removed Dry density after soaking Mq/m3

Initial Specimen details Bulk density 2.02 Mg/m3 Surcharge applied 8 kg Dry density 1.63 Mg/m3 4.85 kPa

> Moisture content 24.1



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen

Aproved:

Mirosława Pytlik

Date Reported:

12/07/2016

PL Head of Geotechnical section

Signed:

Terry Stafford Geotechnical Manager

specific remarks

for and on behalf of i2 Analytical Ltd

GF 108.6

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Page 1 of 1



Determination of California Bearing Ratio

i2 Analytical Ltd7 Woodshots MeadowCroxley Green Business ParkWatford Herts WD18 8YS

C161279

16-20746

08/06/2016

21/06/2016

30/06/2016

Not Given

Client Reference:

Job Number:

Date Tested:

Sampled By:

Amount of swell recorded

Dry density after soaking

Date Sampled:

Date Received:



days

days

mm

Mq/m3

Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Laboratory Reference: 591038 Sample Type: B

 Sample Reference:
 B
 Depth Top [m]:
 0.3

 Location:
 WS07
 Depth Base [m]:
 1

Specimen Preparation

Test Results:

Condition Remoulded Soaking details Not soaked

Details Recompacted with specified standard effort using 2.5kg Period of soaking

rammer Time to surface

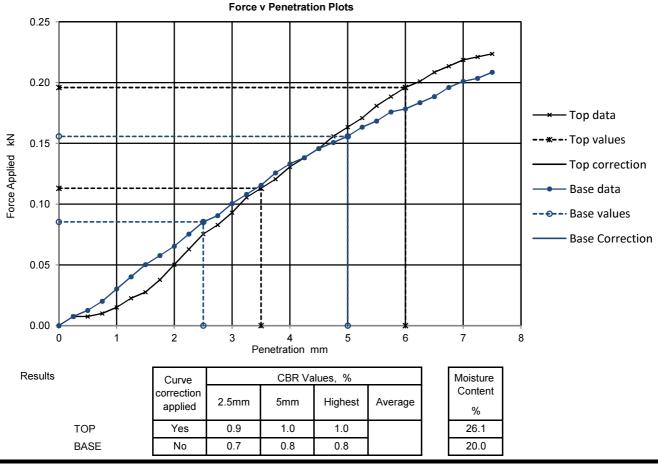
Sample Description: Brown slightly gravelly sandy CLAY

Material retained on 20mm sieve removed 5 %

Initial Specimen details Bulk density 2.02 Mg/m3 Surcharge applied 8 kg

Dry density 1.64 Mg/m3 4.86 kPa

Moisture content 23.1 %



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen specific remarks:

Aproved:

Mi nonawa Byther

Mirosława Pytlik
PL Head of Geotechnical section
Date Reported: 12/07/2016

Signed:

Terry Stafford
Geotechnical Manager

for and on behalf of i2 Analytical Ltd



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers Site Name:

Kraft Phase 2 Site Address: Not Given

Client Reference: C161279 Job Number: 16-20746 Date Sampled: 08/06/2016

Date Received: 21/06/2016 Date Tested: 30/06/2016 Sampled By: Not Given

591041 **Test Results:** Laboratory Reference: В Sample Type:

В Sample Reference: 1.2 Depth Top [m]: WS09 Location: Depth Base [m]: 2

Specimen Preparation

Condition Remoulded Soaking details Not soaked

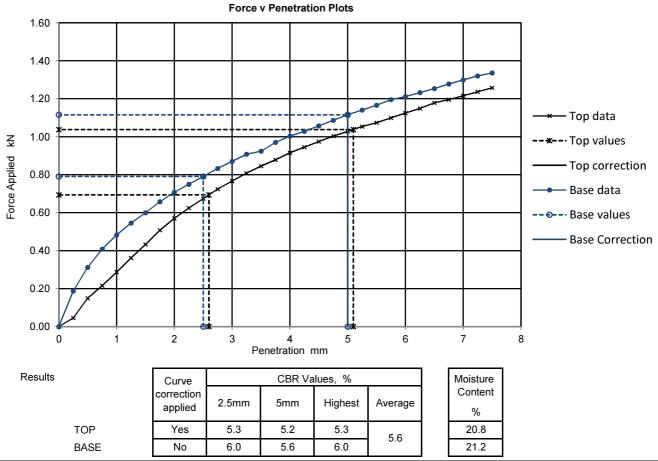
Details Period of soaking Recompacted with specified standard effort using 2.5kg days

Time to surface days Greyish brown CLAY Amount of swell recorded Sample Description: mm Material retained on 20mm sieve removed 2 Dry density after soaking Mq/m3

Initial Specimen details Bulk density 1.98 Mg/m3 Surcharge applied 8 kg

Dry density 1.68 Mg/m3 4.86 kPa

> Moisture content 17.9



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen

Aproved:

Signed:

Terry Stafford Geotechnical Manager

specific remarks

Mirosława Pytlik PL Head of Geotechnical section

12/07/2016 Date Reported:

for and on behalf of i2 Analytical Ltd

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Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

Client Reference:

Job Number:

Date Tested:

Sampled By:

Date Sampled:

Date Received:



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd

Client Address: 2-4 Hawthorne Park Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address Not Given

591046 **Test Results:** Laboratory Reference:

Sample Reference:

WS13 Location:

В Sample Type:

Depth Top [m]: 0.5 Depth Base [m]: 1.3

Specimen Preparation

Condition Remoulded

Initial Specimen details

Details Recompacted with specified standard effort using 2.5kg

rammer

Yellowish brown sandy clayey fine to coarse GRAVEL Sample Description:

Material retained on 20mm sieve removed

1.46 Bulk density Mg/m3

36

%

1.18 Dry density Mg/m3 24 0 Moisture content %

Soaking details Not soaked Period of soaking days Time to surface days Amount of swell recorded mm Dry density after soaking Mg/m3

C161279

16-20746

02/06/2016

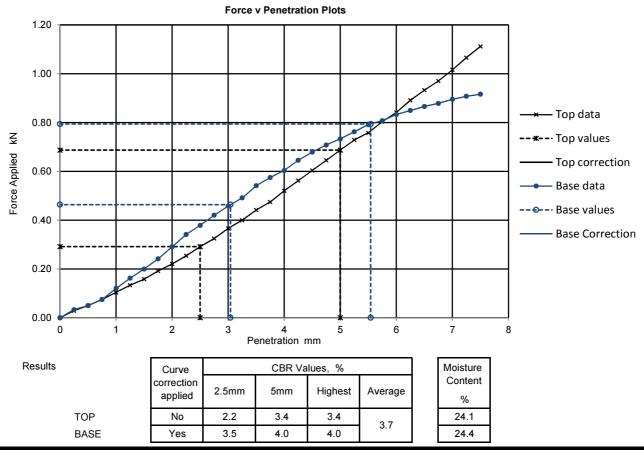
21/06/2016

30/06/2016

Not Given

8 Surcharge applied kg

3.26 kPa



Test carried out with > 25 % retained on 20mm as

per clause 7.2.1.2 General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen specific remarks:

Aproved:

Mu nonawa hother

Signed:

Terry Stafford

Mirosława Pytlik

PL Head of Geotechnical section Date Reported: 12/07/2016 Geotechnical Manager

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

C161279

16-20746

02/06/2016

21/06/2016

30/06/2016

Not Given

Client Reference:

Job Number:

Date Tested:

Sampled By:

Date Sampled:

Date Received:

Sample Type:



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address:

2-4 Hawthorne Park Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers Site Name:

Kraft Phase 2 Site Address: Not Given

591049 Laboratory Reference: В

В Sample Reference: 1.2 Depth Top [m]:

WS14 Location: Depth Base [m]: 2

Specimen Preparation

Test Results:

Condition Remoulded Soaking details Not soaked

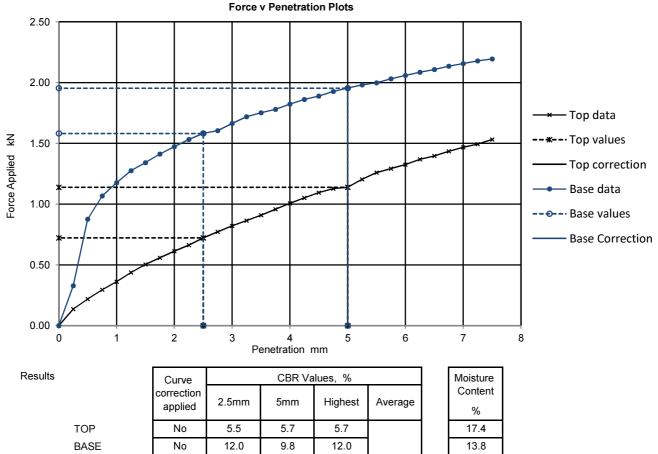
Details Period of soaking days Recompacted with specified standard effort using 2.5kg

Time to surface days Yellowish brown slightly gravelly slightly sandy CLAY Amount of swell recorded Sample Description: mm Material retained on 20mm sieve removed Dry density after soaking Mq/m3

Initial Specimen details Bulk density 2.09 Mg/m3 Surcharge applied 8 kg

Dry density 1.80 Mg/m3 4.86 kPa

Moisture content 16.1



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen

Aproved:

Signed:

Terry Stafford

Mirosława Pytlik PL Head of Geotechnical section Date Reported: 12/07/2016

Geotechnical Manager

specific remarks

for and on behalf of i2 Analytical Ltd



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Mq/m3

Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address:

2-4 Hawthorne Park Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers Site Name:

Kraft Phase 2 Site Address: Not Given

Job Number: 16-20746 Date Sampled: 07/06/2016 Date Received: 21/06/2016

Dry density after soaking

Client Reference:

Date Tested: 01/07/2016 Sampled By: Not Given

C161279

591067 Laboratory Reference: D Sample Type:

D Sample Reference: Depth Top [m]: 1 WS25 Location: Depth Base [m]: 2

Specimen Preparation

Test Results:

Condition Remoulded Soaking details Not soaked

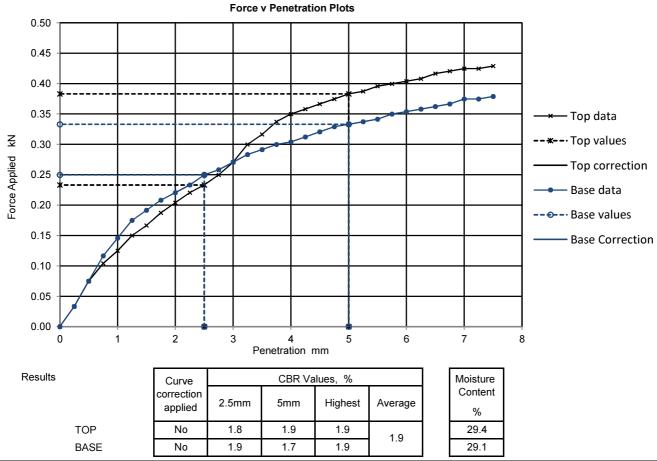
Details Period of soaking days Recompacted with specified standard effort using 2.5kg

Time to surface days Yelloiwsh brown slightly gravelly slightly sandy CLAY Amount of swell recorded Sample Description: mm Material retained on 20mm sieve removed

Initial Specimen details Bulk density 1.92 Mg/m3 Surcharge applied 8 kg

Dry density 1.53 Mg/m3 4.86 kPa

Moisture content 25.4



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen

Aproved:

Signed:

Terry Stafford Geotechnical Manager

specific remarks

Mirosława Pytlik PL Head of Geotechnical section 12/07/2016 Date Reported:

for and on behalf of i2 Analytical Ltd

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Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

C161279

16-20746

06/06/2016

21/06/2016

01/07/2016

Not Given

Client Reference:

Job Number:

Date Sampled:

Date Tested:

Sampled By:

Date Received:



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

591070 Laboratory Reference: В Sample Type:

В Sample Reference: 0.4 Depth Top [m]: 0.6

WS26 Location: Depth Base [m]:

Specimen Preparation

Test Results:

Condition Remoulded Soaking details Not soaked

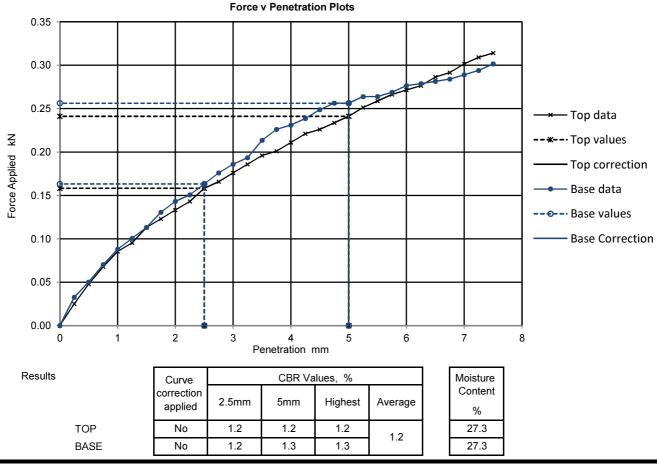
Details Period of soaking Recompacted with specified standard effort using 2.5kg days

Time to surface days Brown gravelly sandy CLAY with rootlets Amount of swell recorded Sample Description: mm

Material retained on 20mm sieve removed Dry density after soaking Mq/m3

Initial Specimen details Bulk density 1.98 Mg/m3 Surcharge applied 8 kg Dry density 1.50 Mg/m3 4.84 kPa

Moisture content 32.0



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen specific remarks

Aproved:

Date Reported:

12/07/2016

Signed:

Terry Stafford

Mirosława Pytlik PL Head of Geotechnical section

Geotechnical Manager

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

GF 108.6 Page 1 of 1

for and on behalf of i2 Analytical Ltd



Determination of California Bearing Ratio

i2 Analytical Ltd7 Woodshots MeadowCroxley Green Business ParkWatford Herts WD18 8YS



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers Site Name: Kraft Phase 2

Site Name: Kraft Phase 2 Site Address: Not Given Client Reference: C161279 Job Number: 16-20746

Date Sampled: 06/06/2016

Date Received: 21/06/2016

Date Tested: 01/07/2016

Date Tested: 01/07/2016 Sampled By: Not Given

Test Results: Laboratory Reference: 591071 Sample Type: B

 Sample Reference:
 B
 Depth Top [m]:
 0.8

 Location:
 WS26
 Depth Base [m]:
 1

Specimen Preparation

Condition Remoulded Soaking details Not soaked

Details Recompacted with specified standard effort using 2.5kg Period of soaking days

rammer Time to surface days on: Yellowish brown sandy CLAY Amount of swell recorded mm

Sample Description: Yellowish brown sandy CLAY

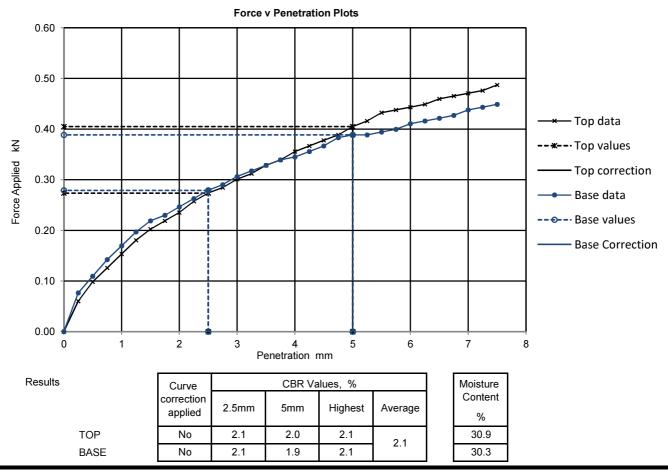
Amount of swell recorded mm

Material retained on 20mm sieve removed 0 % Dry density after soaking Mg/m3

Initial Specimen details Bulk density 1.93 Mg/m3 Surcharge applied 8 kg

Dry density 1.50 Mg/m3 4.86 kPa

Moisture content 28.3 %



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen specific remarks

Aproved:

Minonawa Byther

Signed:
Terry Stafford

Mirosława Pytlik
PL Head of Geotechnical section
Date Reported: 12/07/2016

Geotechnical Manager

for and on behalf of i2 Analytical Ltd



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

C161279

16-20746

31/05/2016

21/06/2016

Not Given

В

Client Reference:

Job Number:

Date Sampled:

Date Received:

Sampled By:

Dry density after soaking

Date Tested: 04/07/2016



Mg/m3

Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address:

2-4 Hawthorne Park Holdenby Road

Spratton, Northampton

Material retained on 20mm sieve removed

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address Not Given

591080 **Test Results:** Laboratory Reference: Sample Type:

> В Sample Reference: Depth Top [m]: 2.6

BH02 Location: Depth Base [m]:

Specimen Preparation

Condition Remoulded Not soaked Soaking details

Details Period of soaking days Recompacted with specified standard effort using 2.5kg Time to surface days

Brown slightly gravelly slightly sandy CLAY with thin Amount of swell recorded mm

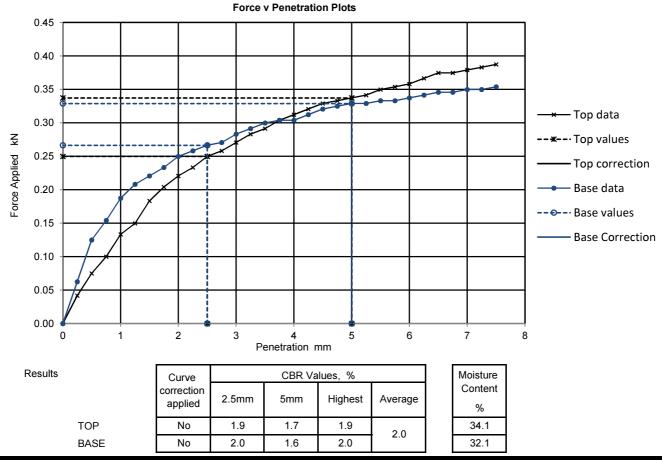
Sample Description: laminae of grey clay and rootlets 0

Initial Specimen details **Bulk density** 1.91 Mg/m3 Surcharge applied kg

Dry density 1.42 Mg/m3 4.84 kPa

%

Moisture content 34 3 %



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen specific remarks:

Aproved:

Signed:

Mirosława Pytlik PL Head of Geotechnical section Date Reported: 12/07/2016 Terry Stafford Geotechnical Manager

for and on behalf of i2 Analytical Ltd



Determination of California Bearing Ratio

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS

Client Reference:



Tested in Accordance with BS 1377-4: 1990: Clause 7

Client: Hydrock Consultants Ltd Client Address: 2-4 Hawthorne Park

Holdenby Road

Spratton, Northampton

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2 Site Address: Not Given

Job Number: 16-20746 Date Sampled: 02/06/2016 Date Received: 21/06/2016

Date Tested: 04/07/2016 Sampled By: Not Given

C161279

591085 **Test Results:** Laboratory Reference: В Sample Type:

> В Sample Reference: 0.5 Depth Top [m]: BH02 Location: Depth Base [m]: 0.8

Specimen Preparation

Condition Remoulded Soaking details Not soaked

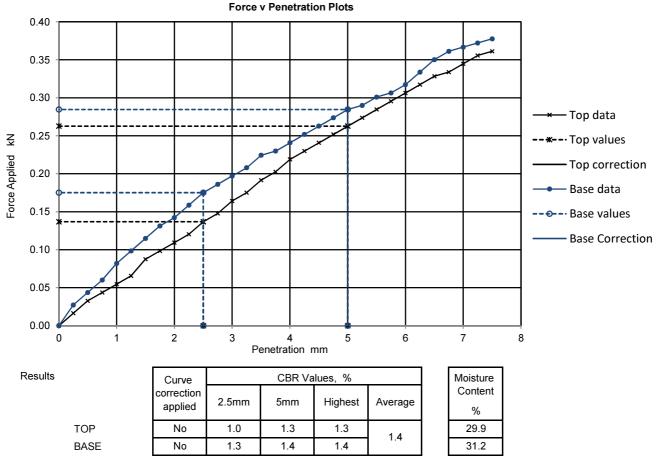
Details Period of soaking Recompacted with specified standard effort using 2.5kg days

Time to surface days Brown gravelly sandy CLAY Amount of swell recorded Sample Description: mm

Material retained on 20mm sieve removed 2 Dry density after soaking Mq/m3

Initial Specimen details Bulk density 1.89 Mg/m3 Surcharge applied 8 kg Dry density 1.45 Mg/m3 4.86 kPa

> Moisture content 30.5



General Remarks:

Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Test/ Specimen

Aproved:

Signed:

Mirosława Pytlik PL Head of Geotechnical section 12/07/2016 Date Reported:

Terry Stafford Geotechnical Manager

specific remarks

for and on behalf of i2 Analytical Ltd



Dry Density / Moisture Content Relationship Light Compaction

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



Tested in accordance with BS 1377-4:1990: Clause 3.3 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

Kraft Phase 2 Site Name: Not Given Site Address:

Sample Description:

Client Reference: C161279 Job Number: 16-20746

Date Sampled: 08/06/2016 Date Received: 21/06/2016 Date Tested: 30/06/2016

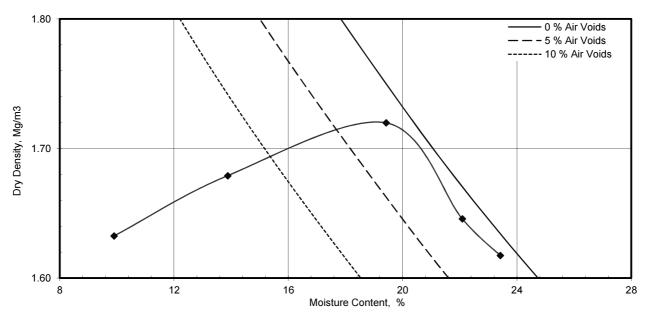
Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591038 Sample Reference: WS07 Location: Brown slightly gravelly sandy CLAY

0.3 Depth Top [m]: Depth Base [m]: 1

Sample Type: В



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	4
Particle Density -	Mg/m³	2.65

Maximum Dry Density	Mg/m³	1.72	
	-		
Optimum Moisture Content	%	19	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed:

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

Mi nonawa h

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<u>Dry Density / Moisture Content Relationship</u> <u>Light Compaction</u>

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Tested in accordance with BS 1377-4:1990: Clause 3.3 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 08/06/2016

Date Received: 21/06/2016

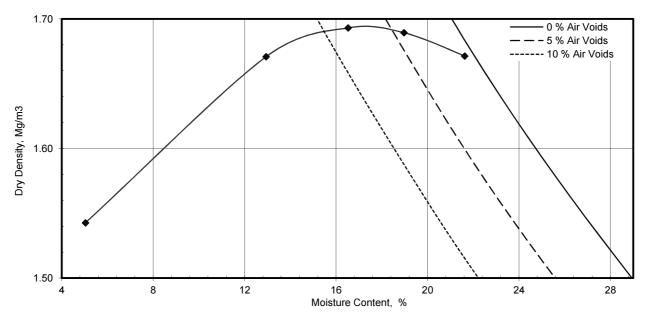
Date Tested: 30/06/2016 Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591041
Sample Reference: B
Location: WS09
Sample Description: Greyish brown CLAY

Depth Top [m]: 1.2
Depth Base [m]: 2

Sample Type: B



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density -	Mg/m³	2.65

Maximum Dry Density	Mg/m³	1.69	
	-		
Optimum Moisture Content	%	17	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed:

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

Mi nonawa h

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<u>Dry Density / Moisture Content Relationship</u> <u>Light Compaction</u>

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Tested in accordance with BS 1377-4:1990: Clause 3.3 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 02/06/2016

Date Received: 21/06/2016

Date Tested: 30/06/2016

Sampled By: Not Given

TEST RESULTS

 Laboratory Reference:
 591049

 Sample Reference:
 B

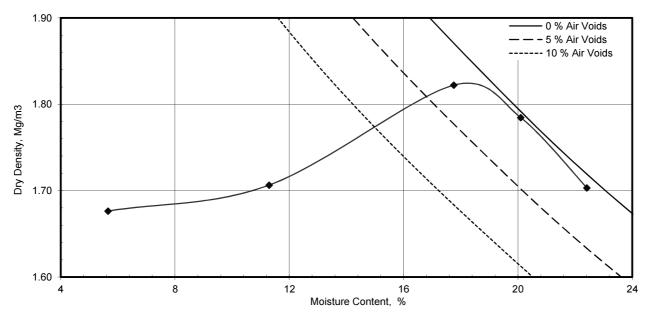
 Location:
 WS14

 Sample Description:
 Yellowish brown slightly gravelly slightly sandy CLAY

 Depth Top [m]:
 1.2

 Depth Base [m]:
 2

 Sample Type:
 B



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density -	Mg/m³	2.80

Maximum Dry Density	Mg/m³	1.82	
	-		
Optimum Moisture Content	%	18	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed:

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

Mi nonawa h

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<u>Dry Density / Moisture Content Relationship</u> <u>Light Compaction</u>

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Tested in accordance with BS 1377-4:1990: Clause 3.3 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

Date Sampled: 02/06/2016

Date Received: 21/06/2016

Date Tested: 04/07/2016

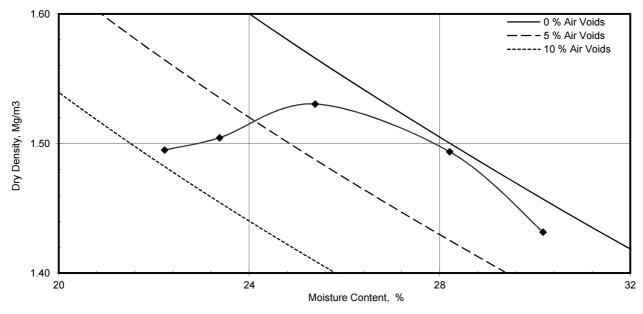
Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591085
Sample Reference: B
Location: BH02
Sample Description: Brown gravelly sandy CLAY

Depth Top [m]: 0.5
Depth Base [m]: 0.8

Sample Type: B



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	2
Particle Density -	Mg/m³	2.60

Maximum Dry Density	Mg/m³	1.53	
	·		
Optimum Moisture Content	%	25	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Minonawa hotis

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

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<u>Dry Density / Moisture Content Relationship</u> <u>Light Compaction</u>

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Tested in accordance with BS 1377-4:1990: Clause 3.4 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279

Job Number: 16-20746

Date Sampled: Not Given

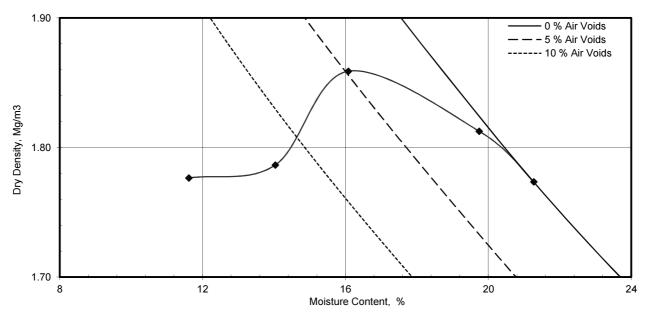
Date Received: 21/06/2016

Date Tested: 01/07/2016

Sampled By: Not Given

TEST RESULTS

Laboratory Reference:592608Sample Reference:Not GivenDepth Top [m]:2Location:WS01Depth Base [m]:3Sample Description:Yellowish brown slightly sandy clayey GRAVEL with glassSample Type:B



Preparation		Material used was natural
Mould Type		CBR
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	13
Material Retained on 20.0 mm Sieve	%	11
Particle Density - Assumed	Mg/m³	2.85

Maximum Dry Density	Mg/m³	1.86	
	-		
Optimum Moisture Content	%	16	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed:

Mirosława Pytlik

Terry Stafford

Terry Stantord

PL Head of Geotechnical section

Date Reported: 12/07/2016

Geotechnical Manager

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The results included within the report are representative of the samples submitted for analysis.

Mi nonawa h

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland."

for and on behalf of i2 Analytical Ltd



Dry Density / Moisture Content Relationship Light Compaction

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



1

В

Tested in accordance with BS 1377-4:1990: Clause 3.3 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd 2-4 Hawthorne Park Client Address:

Holdenby Road Spratton, Northampton

NN6 8LD

Nathan Thompson / Adam Cheers Contact:

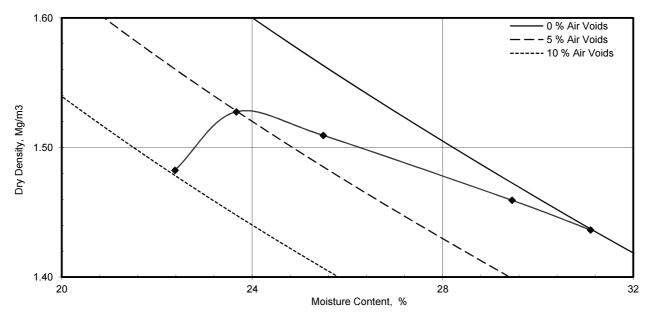
Kraft Phase 2 Site Name: Not Given Site Address:

Client Reference: C161279 Job Number: 16-20746 Date Sampled: Not Given Date Received: 21/06/2016 Date Tested: 01/07/2016

Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 592609 Sample Reference: Not Given 0.5 Depth Top [m]: WS18 Depth Base [m]: Location: Greyish brown sandy CLAY Sample Type: Sample Description:



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.60

Maximum Dry Density	Mg/m³	1.53	
	•		
Optimum Moisture Content	%	24	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed: Mi nonawa h

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

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The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.'



<u>Dry Density / Moisture Content Relationship</u> <u>Light Compaction</u>

i2 Analytical Ltd 7 Woodshots Meadow Croxley Green Business Park Watford Herts WD18 8YS



4041

Tested in accordance with BS 1377-4:1990: Clause 3.4 using 2.5kg[light] Rammer

Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park

Holdenby Road Spratton, Northampton

NN6 8LD

Contact: Nathan Thompson / Adam Cheers

Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279
Job Number: 16-20746
Date Sampled: Not Given
Date Received: 21/06/2016
Date Tested: 01/07/2016

Sampled By: Not Given

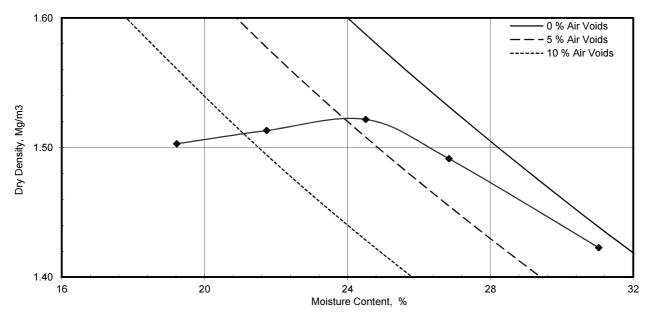
TEST RESULTS

 Laboratory Reference:
 592610

 Sample Reference:
 Not Given
 Depth Top [m]:
 0.3

 Location:
 WS25
 Depth Base [m]:
 0.85

 Sample Description:
 Brown gravelly sandy CLAY with grass and rootlets
 Sample Type:
 B



Preparation		Material used was natural
Mould Type		CBR
Samples Used		Composite specimens tested
Material Retained on 37.5 mm Sieve	%	1
Material Retained on 20.0 mm Sieve	%	3
Particle Density - Assumed	Mg/m³	2.60

Maximum Dry Density	Mg/m³	1.52	
	•		
Optimum Moisture Content	%	25	

Comments: Re-issue 1 - Format of Point Load Strength Index results changed as per client request

Aproved:

Signed:

Mirosława Pytlik

Terry Stafford

PL Head of Geotechnical section

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Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

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 $[&]quot;Opinions and interpretations expressed herein are outside of the scope of the UKAS \ Accreditation.\\$

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The results included within the report are representative of the samples submitted for analysis.

The analysis was carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland.'

Unconsolidated Undrained (Single Stage)

Summary Report

Sample Details Depth 2.00-2.45 Description Brown slightly sandy CLAY Type Lο Initial Sample Length 139.6 (mm) Initial Sample Diameter 69.3 Dο (mm) Wο Initial Sample Weight (gr) 971.1 sketch showing specimen (Mg/m3) **Bulk Density** ρο 1.84 location in original sample Particle Density ρs (Mg/m3) 2.65

Initial Conditions			
Initial Cell Pressure	σ3	(kPa)	40
Strain Rate	ms	(mm/min)	2.79220
MembraneThickness	mь	(mm)	0.21
Displacement Input	L IP	(mm)	CH 2
Load Input	N IP	(N)	CH 1
Initial Moisture	ω _i %	(%)	23
Initial Dry Density	ρ d0	(Mg/m3)	1.49
Initial Voids Ratio	eo		0.77
Initial Degree of Saturation	So	(%)	80

Final Conditions			
Max Deviator Stress	(σ1-σ3)f	(kPa)	152
MembraneCorrection	m c	(kPa)	1.145
Strain At Max Stress	ε _f %	(%)	13.95
Shear Strength	CU	(kPa)	76
Final Moisture	ω _f %	(%)	23
Final Dry Density	ρdf	(Mg/m3)	1.49
Final Voids Ratio	ef		0.77
Final Degree of Saturation	Sf	(%)	80.3
Notes			





	Test Method	BS1377-7 : 1			Test Name	591079	
厦	Database: .\SQ	LEXPRESS \ 6171	-I2 Analytical		Test Date	02/07/2016	
alytic	Site Reference	Kraft Phase 2	2		Borehole	BH02	
\$	Jobfile	16-20746			Sample	591079	
	Client	Hydrock Con	sultants		Depth	2.00-2.45	
Environmental Science	Operator	bielatowiczs	Checked	pytli	km	Approved	pytlikm

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Unconsolidated Undrained (Single Stage)

Summary Report

Sample Details sketch showing specimen location in original sample

Depth		2.00-2.40					
Description		Yellowish brown silty CLAY					
Type		U					
	Initial Sample Length	Lo	(mm)	139.9			
	Initial Sample Diameter	Do	(mm)	68.9			
	Initial Sample Weight	W o	(gr)	1112.0			
	Bulk Density	ρο	(Mg/m3)	2.13			
	Particle Density	ρs	(Mg/m3)	2 65			

Initial Conditions			
Initial Cell Pressure	σ3	(kPa)	40
Strain Rate	ms	(mm/min)	2.79700
MembraneThickness	mь	(mm)	0.28
Displacement Input	L IP	(mm)	CH 2
Load Input	N IP	(N)	CH 4
Initial Moisture	ω _i %	(%)	30
Initial Dry Density	ρ d0	(Mg/m3)	1.64
Initial Voids Ratio	eo		0.62
Initial Degree of Saturation	So	(%)	100

Final Conditions			
Max Deviator Stress	(0 1 - 0 3) f	(kPa)	168
MembraneCorrection	m c	(kPa)	1.536
Strain At Max Stress	ε _f %	(%)	18.25
Shear Strength	CU	(kPa)	84
Final Moisture	ω f%	(%)	30
Final Dry Density	ρdf	(Mg/m3)	1.64
Final Voids Ratio	ef		0.62
Final Degree of Saturation	Sf	(%)	100.0
Notes			





To the state of th	Test Method Database: .\SQ	BS1377-7 : 1 LEXPRESS \ 6171			Test Name Test Date	591086 04/07/2016	
Analytic	Site Reference Jobfile	Kraft Phase 2 16-20746	2		Borehole Sample	BH03 591086	
	Client	Hydrock Con	sultants		Depth	2.00-2.40	
Environmental Science	Operator	bielatowiczs	Checked	pytli	km	Approved	pytlikm

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Unconsolidated Undrained (Single Stage)

Summary Report

Sample Details Depth 4.00-4.40 Description Yellowish brown CLAY Type Lο Initial Sample Length 139.2 (mm) Initial Sample Diameter 69.1 Dο (mm) Wο Initial Sample Weight (gr) 1053.3 sketch showing specimen (Mg/m3) **Bulk Density** ρο 2.02 location in original sample Particle Density ρs (Mg/m3) 2.65

Initial Conditions			
Initial Cell Pressure	σ3	(kPa)	80
Strain Rate	ms	(mm/min)	2.78320
MembraneThickness	mь	(mm)	0.28
Displacement Input	L IP	(mm)	CH 2
Load Input	N IP	(N)	CH 4
Initial Moisture	ω _i %	(%)	25
Initial Dry Density	p d0	(Mg/m3)	1.61
Initial Voids Ratio	e o	•	0.64
Initial Degree of Saturation	S.	(%)	100

Final Conditions			
Max Deviator Stress	(σ1-σ3)f	(kPa)	74
MembraneCorrection	m c	(kPa)	1.532
Strain At Max Stress	ε f%	(%)	19.95
Shear Strength	Cυ	(kPa)	37
Final Moisture	ω f%	(%)	25
Final Dry Density	ρdf	(Mg/m3)	1.61
Final Voids Ratio	ef		0.64
Final Degree of Saturation	Sf	(%)	100.0
Notes			





	Test Method	BS1377-7 : 1	900 Clause 8		Test Name	591087	
To The second	Database: .\SQ	LEXPRESS \ 6171	-I2 Analytical		Test Date	04/07/2016	
ig in the second	Site Reference	Kraft Phase 2	2		Borehole	BH03	
A A	Jobfile	16-20746			Sample	591087	
	Client	Hydrock Con	sultants		Depth	4.00-4.40	
Environmental Science	Operator	bielatowiczs	Checked	pytli	km	Approved	pytlikm

Unconsolidated Undrained (Single Stage)

Summary Report

Sample Details sketch showing specimen location in original sample

Depth		2.00-2.45					
Description		Yellowish brown to grey silty CLAY					
Type		U					
	Initial Sample Length	Lo	(mm)	139.7			
	Initial Sample Diameter	Do	(mm)	69.6			
	Initial Sample Weight	Wο	(gr)	1032.7			
	Bulk Density	ρο	(M g/m3)	1.94			
	Particle Density	ρs	(Mg/m3)	2.65			

Initial Conditions			
Initial Cell Pressure	σ3	(kPa)	40
Strain Rate	ms	(mm/min)	2.79480
MembraneThickness	mь	(mm)	0.25
Displacement Input	L IP	(mm)	CH 2
Load Input	N IP	(N)	CH 4
Initial Moisture	ω _i %	(%)	27
Initial Dry Density	ρ d0	(Mg/m3)	1.52
Initial Voids Ratio	e o		0.74
Initial Degree of Saturation	So	(%)	99

Final Conditions			
Max Deviator Stress	(σ1-σ3)·	(kPa)	169
MembraneCorrection	mс	(kPa)	0.932
Strain At Max Stress	ε _f %	(%)	9.31
Shear Strength	cu	(kPa)	85
Final Moisture	ω _f %	(%)	27
Final Dry Density	ρdf	(Mg/m3)	1.52
Final Voids Ratio	e f		0.74
Final Degree of Saturation	Sf	(%)	98.5
Notes			





Failure Sketch (surface inclination)

	Test Method	BS1377-7 : 1	900 Clause 8		Test Name	591095	
ajytical	Database: .\SQLEXPRESS \ 6171-l2 Analytical				Test Date	04/07/2016	
	Site Reference	Kraft Phase	2		Borehole	BH04	
\$	Jobfile	16-20746			Sample	591095	
	Client	Hydrock Consultants			Depth	2.00-2.45	
Environmental Science	Operator	bielatowiczs	Checked	pytli	km	Approved	pytlikm