
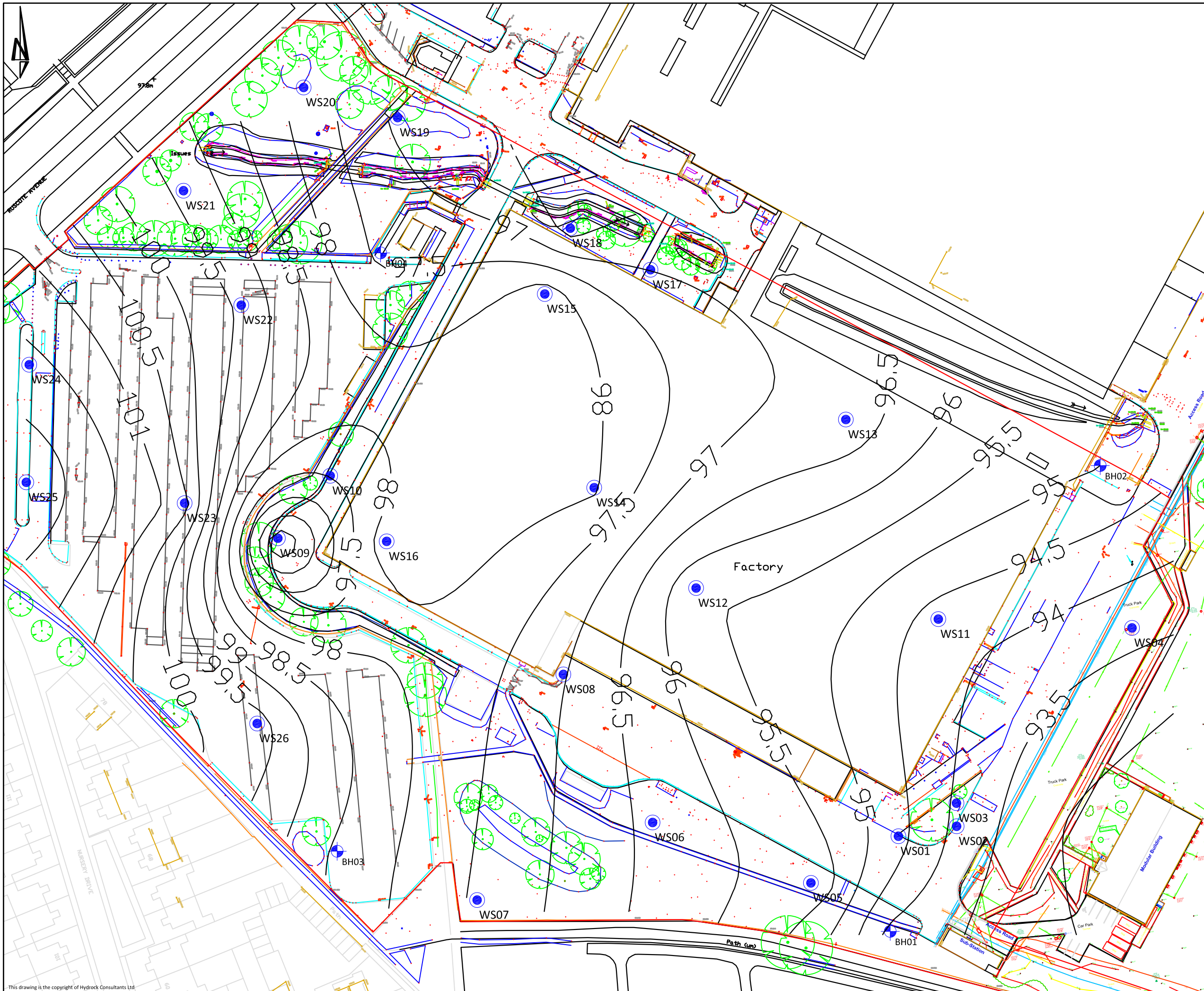



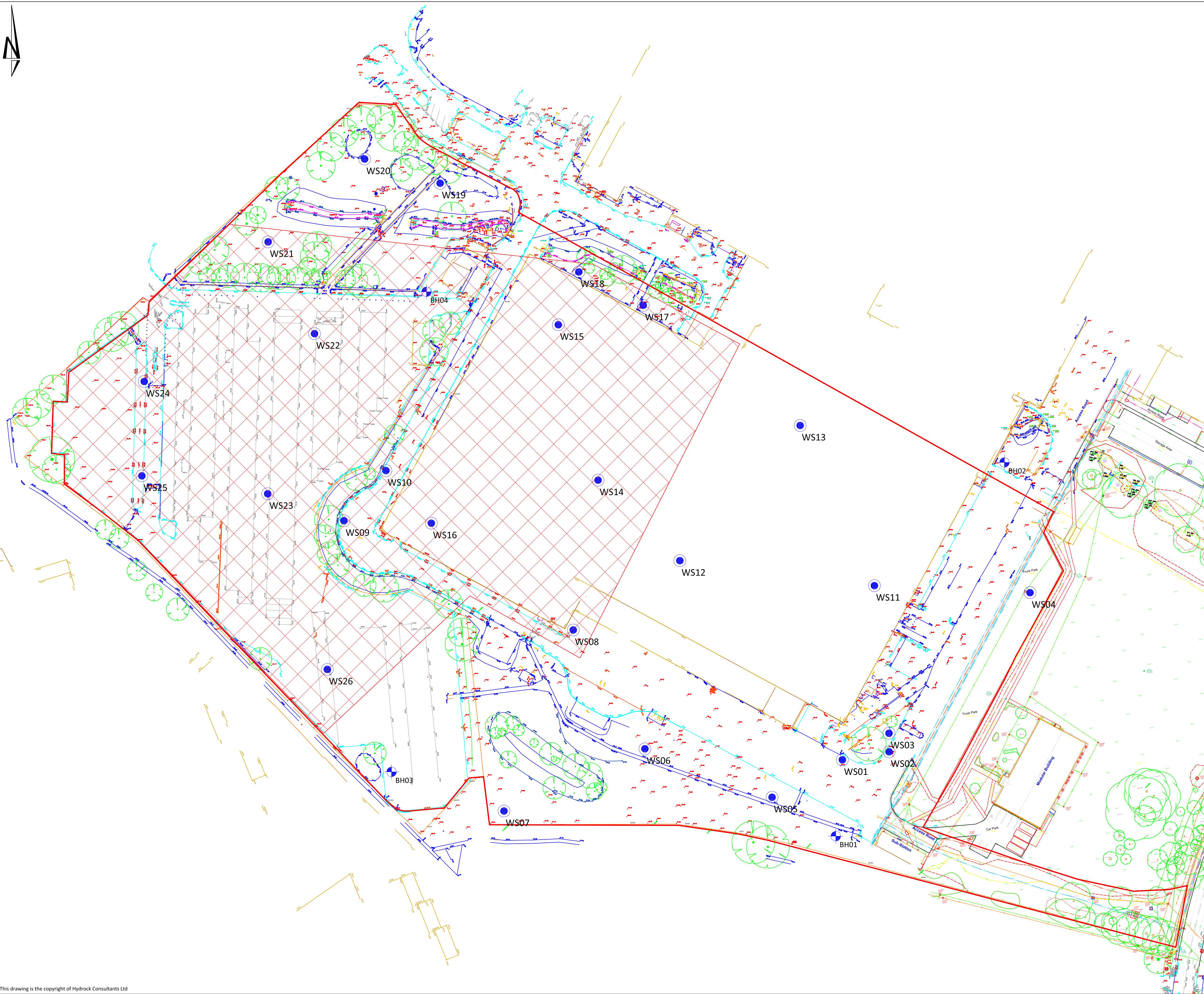
- Notes:**
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
 2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.

Rev	Date	Description	By	Ckd
Architect:				
 Hydrock Consultants Ltd 3 Hawthorn Park Holdenby Road Spratton, Northampton NN6 8LD T +44 (0)1604 842888 northampton@hydrock.com www.hydrock.com				
Client:				
DB Symmetry Ltd				
Project Title:				
KRAFT PHASE 2				
Drawing Title:				
Depth to Base of Made Ground (m)				
Drawing Status:				
FINAL				
Hydrock Job No:				
C/161279				
Drawn	Checked	Scale @ A3	Date	Issue Date
NT	AB	1:1000	14/07/16	14/07/16
Drawing Number:				Revision:
KRF-HYD-02-XX-DR-G-010				-



- Notes:**
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
 2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.

Rev	Date	Description	By	Ckd
Architect:				
 Hydrock Consultants Ltd 3 Hawthorn Park Holdenby Road Spratton, Northampton NN6 8LD T +44 (0)1604 842888 northampton@hydrock.com www.hydrock.com				
Client:				
DB Symmetry Ltd				
Project Title:				
KRAFT PHASE 2				
Drawing Title:				
Level of Base of Made Ground (mAOD)				
Drawing Status:				
FINAL				
Hydrock Job No:				
C/161279				
Drawn	Checked	Scale @ A3	Date	Issue Date
NT	AB	1:1000	14/07/16	14/07/16
Drawing Number:				Revision:
KRF-HYD-02-XX-DR-G-011				-



Notes:

1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
- 3) Exploratory holes, WS02, WS06, WS10, WS17 & WS24 proposed but not undertaken due to services or obstructions.

Legend

- BHXXX
- WSXXX
- Pad / Trenchfill Foundations may be suitable
- Ground Improvement may be suitable

Rev	Date	Description	By	Ckd

Architect :

Hydrock
 Hydrock Consultants Ltd
 3 Hawthorn Park
 Holdenby Road
 Spratton, Northampton
 NN6 8LD
 T +44 (0)1604 842888
 northampton@hydrock.com
 www.hydrock.com

Client :
SAVILLS

Project Title:
Kraft Phase 2

Drawing Title:
Foundation Zonation Plan









Drawing Status:
FINAL

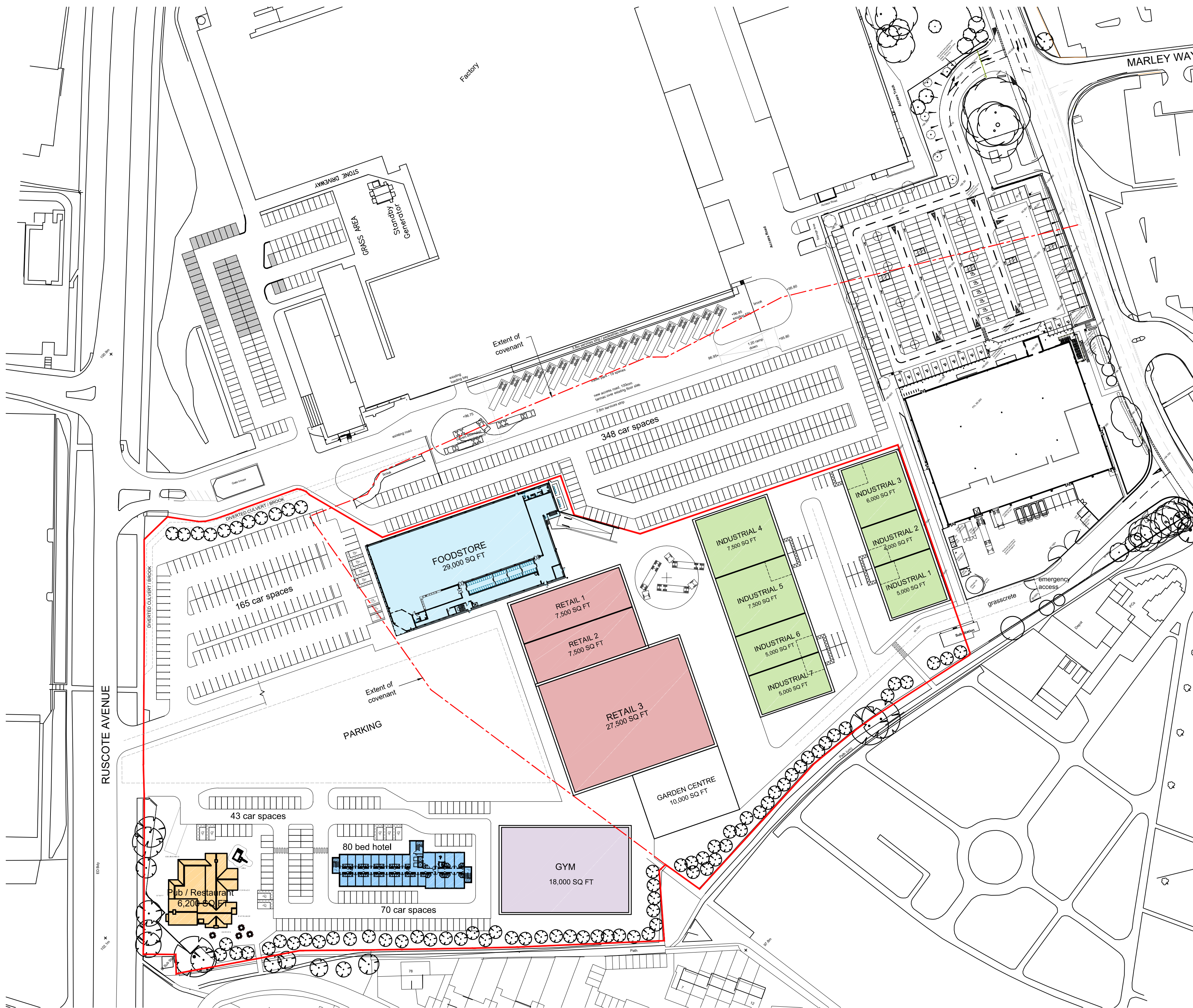
Hydrock Job No:
C/161279

Drawn	Checked	Scale @ A3	Date	Issue Date
NT	SC	1:200	27/06/16	26/07/16
Drawing Number: KRF-HYD-02-XX-DR-G-009				Revision: A

NOTES:

FLOOR AREAS

	FOODSTORE 29,000 SQ FT
	PUB 6,200 SQ FT
	HOTEL 7,500 SQ FT
	GYM 18,000 SQ FT
	RETAIL 42,500 SQ FT
	GARDEN CENTRE 10,000 SQ FT
	INDUSTRIAL 40,000 SQ FT
	12% OFFICE SPACE (INDUSTRIAL) 4,800 SQ FT



03	23.06.16	D.K.	Covenant boundary redesign.	SB.
02	06.06.16	D.K.	Additional retail units / Layout adjusted.	SB.
01	05.05.16	D.K.	Boundaries and area schedule added.	SB.

Rev	Date	Initial	Notes	Chk
-----	------	---------	-------	-----

FOR INFORMATION

Client

KIER PROPERTY

Project

RUSCOTE AVENUE, BANBURY

Drawing Title

PROPOSED MASTERPLAN

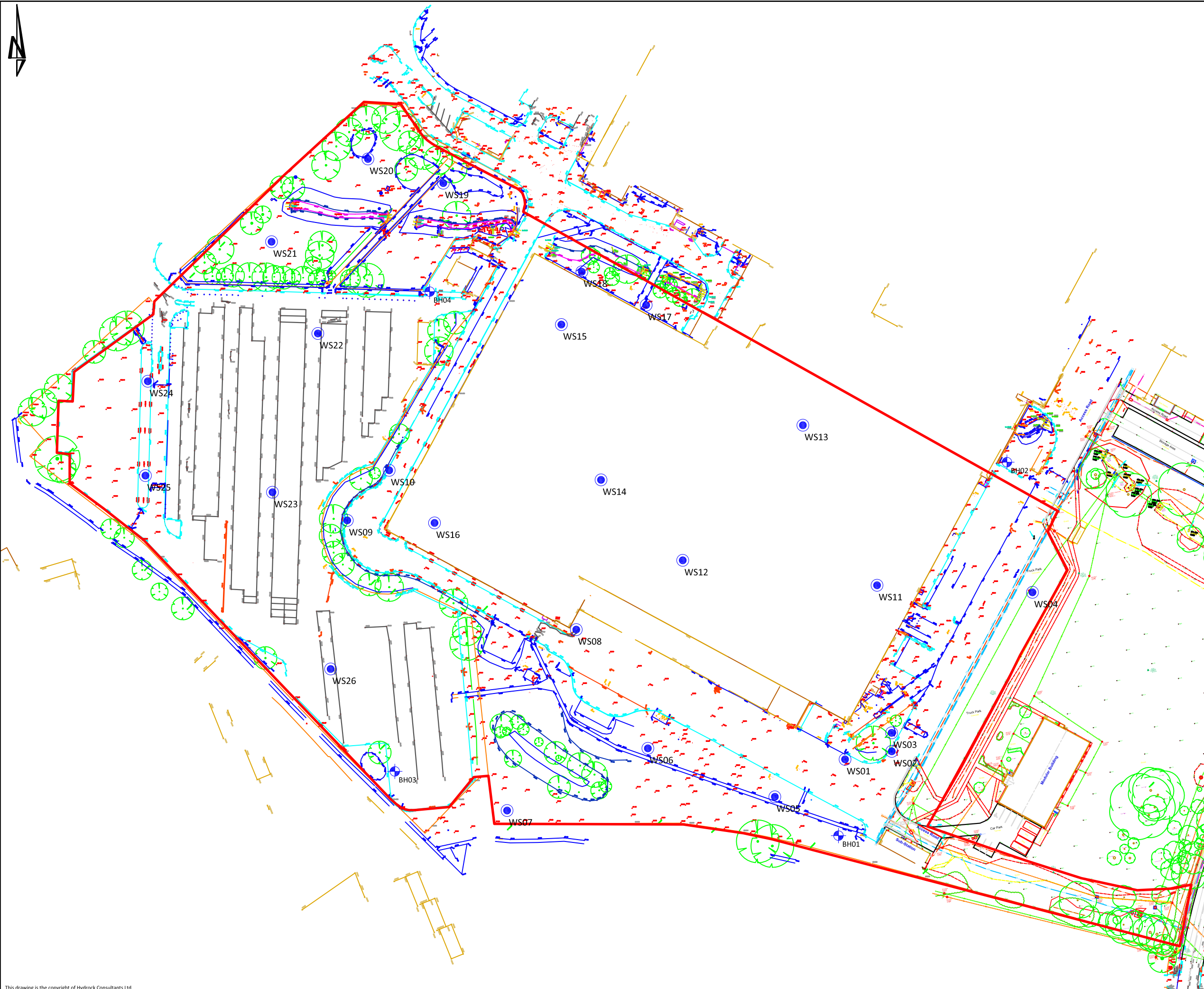
Drawn	Checked	Paper Size	Scale	Date
DK	SB	A2	1:1000	24/05/16
Project No.	Drawing No.	Revision		
16284	0004	03		

CORSTORPHINE + WRIGHT





Appendix B

Ground Investigation Plan & Exploratory Hole Plan



- Notes:**
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
 2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
 - 3) Exploratory holes, WS02, WS06, WS10, WS17 & WS24 proposed but not undertaken.

Legend

-  BHXXX
-  WSXXX

Rev	Date	Description	By	Ckd

Architect :



Hydrock Consultants Ltd
3 Hawthorn Park
Holdenby Road
Spratton, Northampton
NN6 8LD
T +44 (0)1604 842888
northampton@hydrock.com
www.hydrock.com

Client :
SAVILLS

Project Title:
Kraft Phase 2

Drawing Title:
Exploratory Hole Location Plan

Drawing Status:
FINAL

Hydrock Job No:
C/161279

Drawn	Checked	Scale @ A3	Date	Issue Date
NT	SC	1:200	27/06/16	27/06/16

Drawing Number:
KRF-HYD-02-XX-DR-G-004

Revision:
-

Project Name: Kraft Phase 2

Co-ords: 445186E, 241347N

Hole Type: DNP+RC

Location: Banbury

Project No: C161279

Ground Level: 95.83m OD

Scale: 1:50

Client: db symmetry

Date(s): 26/05/16 - 27/05/16

Hole Diameter: 110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES		0.25	95.58	Soft brown slightly sandy CLAY with rare gravel of fine to coarse, subangular to angular ash and flint. (MADE GROUND)	
		0.40	ES					
		1.20	SPT	N=12 (1,2/2,3,3,4)	1.00	94.83	Orangish locally grey brown sandy fine to coarse, flint, and rare concrete GRAVEL. (MADE GROUND) <i>At 0.55m bgl: One piece of metal.</i>	
		1.40-1.70	B		2.00	93.83	Stiff brownish orange gravelly CLAY. Gravel is fine to coarse, subangular to angular ironstone, flint and limestone. (MADE GROUND)	
		2.00-2.45	U	0 Blows (100% rec)				
		2.10	D		2.50	93.33	Soft fissured grey locally orange mottled sandy CLAY. Sand infilled fissures and orange root traces. (ALLUVIUM)	
		2.90-3.00	B		3.00	92.83	Firm grey locally orange mottled slightly sandy CLAY with some local iron staining. (ALLUVIUM)	
		3.00	SPT	N=37 (4,8/8,10,10,9)				
		3.10	D		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	N=12 (5,4/4,3,3,2)	4.40	91.43	Medium dense orange very sandy fine to coarse, rounded to subangular flint GRAVEL. (RIVER TERRACE DEPOSITS) <i>Between 3.40m bgl and 3.50m bgl: Sand lense. Between 4.0m bgl and 4.40m bgl: Coarse gravel.</i>	
		4.50-4.80	B					
		5.50	SPT	N=26 (3,3/3,5,8,10)	6.80	89.03	Stiff finely laminated grey CLAY with some silt sized selenite crystals and very rare mudstone lithorelicts. (CHARMOUTH MUDSTONE FORMATION)	
		5.50-7.00	100	100 100 1				
		7.00-8.50	100	100 100 0	7.00	88.83	Strong grey LIMESTONE with abundant shell fragments. (CHARMOUTH MUDSTONE FORMATION) Hard finely laminated grey CLAY with frequent shell fragments. (CHARMOUTH MUDSTONE FORMATION) <i>At 7.20m bgl: One horizontal fracture.</i>	
		8.50-10.0 0	100	100 100 0				

Continued on Next Sheet

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.50m bgl. Rotary coring to 19.50m bgl. 3) SPT at 5.50m bgl 25, SPT at 7.50m bgl, 50/65mm, SPT at 9.0m bgl, 50/190mm, SPT at 10.50m bgl, 150/180mm, SPT at 12.0m bgl, 50/110mm, SPT at 13.5m bgl, 50/100mm, SPT at 15.0m bgl, 50/100mm, SPT @ 16.50m, 50/85mm, SPT at 18.0m bgl, 50/45mm, SPT at 19.50m bgl, 50/55mm. 4) Backfilled with bentonite.

Groundwater: Groundwater encountered at 1.97m bgl.

Logged: NT **Checked:** SC

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Project Name: Kraft Phase 2

Co-ords: 445186E, 241347N

Hole Type: DNP+RC

Location: Banbury

Project No. C161279

Ground Level: 95.83m OD

Scale: 1:50

Client: db symmetry

Date (s): 26/05/16 - 27/05/16

Hole Diameter: 110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
		10.00-11.50	100	100	100	2				
		11.50-13.00	100	100	100	0	12.55	83.28		
		13.00-14.50	100	100	100	0	13.35	82.48	Stong grey LIMESTONE with abundant shell and fossil fragments. (CHARMOUTH MUDSTONE FORMATION) <i>At 12.76m bgl: Horizontal fracture.</i> <i>At 12.92m bgl: Horizontal fracture.</i>	
		14.50-16.00	100	100	100	0	15.15	80.68	Hard finely laminated grey CLAY with abundant shell fragments and fossils. (CHARMOUTH MUDSTONE FORMATION) <i>At 13.70m bgl: 1cm limestone band.</i>	
		16.00-17.50	100	100	100	0			Very weak thinly laminated grey MUDSTONE with some shell fragments and rare limestone lithorelicts / concretions (CHARMOUTH MUDSTONE FORMATION)	
		17.50-19.00	100	100	100	0				
		19.00-20.00	100	100	100		19.61	76.22		<i>At 18.85m bgl: Two to five centimetre limestone band.</i>
									End of Borehole at 19.61m	

Remarks:

1) Hand dug pit to 1.20m bgl. 2 Percussive drilling to 5.50m bgl. Rotary coring to 19.50m bgl. 3) SPT at 5.50m bgl 25, SPT at 7.50m bgl, 50/65mm, SPT at 9.0m bgl, 50/190mm, SPTat 10.50m bgl, 150/180mm, SPT at 12.0m bgl, 50/110mm, SPT at 13.5m bgl, 50/100mm, SPT at 15.0m bgl, 50/100mm, SPT @ 16.50m, 50/85mm, SPT at 18.0m bgl, 50/45mm, SPT at 19.50m bgl, 50/55mm. 4) Backfilled with bentonite.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

Groundwater encountered at 1.97m bgl.

Logged: NT

Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445245E, 241478N

Hole Type:
DNP+RC

Location: Banbury

Project No:
C161279

Ground Level: 96.20m OD

Scale:
1:50

Client: db symmetry

Date(s): 31/05/16 - 01/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES		0.15	96.05	Soft brown very sandy gravelly CLAY. Gravel is fine to coarse, subangular to angular flint and brick. (MADE GROUND)	
		0.50	ES		0.80	95.40		
		1.20	SPT	N=12 (4,6/4,3,2,3)	1.20	95.00	Firm orangish brown sandy gravelly CLAY with a low cobble content. Gravel is fine to coarse, angular to subangular flint, brick and concrete. (MADE GROUND)	
		1.20-1.65	D				Brownish orange sandy very gravelly CLAY with a low cobble content. Gravel is fine to coarse, subangular to angular sandstone and ironstone. (MADE GROUND)	
		1.30	D					
		2.00-2.45	D				Firm greenish grey slightly sandy CLAY with some rootlets and rare angular coal gravel. Mild organic odour. (ALLUVIUM)	
		2.00-2.45	U	0 Blows (45% rec)				
		2.60	B		2.70	93.50	Firm orange gravelly sandy CLAY. Gravel is fine to coarse, subrounded to rounded flint. (RIVER TERRACE DEPOSITS)	
		3.00	SPT	N=23 (4,6/6,6,5,6)	2.90	93.30		
		3.00-3.45	D				Medium dense orange gravelly SAND. Gravel is fine to coarse, subrounded to subangular quartz and flint. (RIVER TERRACE DEPOSITS)	
		3.20-3.70	B					
		4.00	SPT	N=13 (4,4/3,3,4,3)	4.00	92.20	Medium dense orange sandy fine to coarse, subrounded to rounded flint GRAVEL. (RIVER TERRACE DEPOSITS)	
					4.55	91.65		
		5.30-5.50	B				Stiff grey thinly laminated CLAY with rare shell fragments and silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
		5.50	SPT	N=40 (12,10/8,8,10,14)				
		5.50-7.00	100	100 100				
		7.00-8.50	100	100 100 0	7.00	89.20	Very weak thinly laminated grey MUDSTONE with some fine silt sized selenite crystals and shell fragments. (CHARMOUTH MUDSTONE FORMATION) <i>At 7.10m bgl: 4cm limestone band recovered as gravel.</i>	
		8.50-10.0	100	100 100 0				
Continued on Next Sheet								

Remarks:	1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.5m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 7.00m bgl, 50/190mm, SPT at 8.50m bgl, 51/215mm, SPT at 10.0m bgl, 50/150mm, SPT at 11.50m bgl, 50/120mm, SPT at 13.0m bgl, 50/180mm, SPT at 14.50m bgl, 50/170mm, SPT at 16.0m bgl, 50/155mm, SPT at 17.50m bgl, 50/140mm, SPT at 19.0m bgl, 9/10mm, SPT at 20.0m bgl, 50/65mm. 4) Backfilled with bentonite.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445245E, 241478N

Hole Type:
DNP+RC

Location: Banbury

Project No.
C161279

Ground Level: 96.20m OD

Scale:
1:50

Client: db symmetry

Date (s): 31/05/16 - 01/06/16

Hole Diameter:
110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
		10.00-11.50	100	100	100	0	11.20	85.00		<p>Weak grey thinly laminated MUDSTONE with abundant shell fragments. (CHARMOUTH MUDSTONE FORMATION)</p> <p>At 13.70m bgl: Horizontal fracture.</p> <p>Strong grey LIMESTONE with abundant shell fragments / fossils. (CHARMOUTH MUDSTONE FORMATION)</p> <p>Weak thinly laminated grey MUDSTONE with abundant fossils and shells. (CHARMOUTH MUDSTONE FORMATION)</p>
		11.50-13.00	100	100	100	0				
		13.00-14.50	100	100	100	1	13.90	82.30		
		14.50-16.00	100	100	100	0	14.20	82.00		
		16.00-17.50	100	100	100	0				
		17.50-19.00	100	100	100	0				
		19.00-20.00	100	100	100	0				
Continued on Next Sheet										

Remarks:	1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.5m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 7.00m bgl, 50/190mm, SPT at 8.50m bgl, 51/215mm, SPT at 10.0m bgl, 50/150mm, SPT at 11.50m bgl, 50/120mm, SPT at 13.0m bgl, 50/180mm, SPT at 14.50m bgl, 50/170mm, SPT at 16.0m bgl, 50/155mm, SPT at 17.50m bgl, 50/140mm, SPT at 19.0m bgl, 9/10mm, SPT at 20.0m bgl, 50/65mm. 4) Backfilled with bentonite.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445245E, 241478N

Hole Type:
DNP+RC

Location: Banbury

Project No.
C161279

Ground Level: 96.20m OD

Scale:
1:50

Client: db symmetry

Date (s): 31/05/16 - 01/06/16

Hole Diameter:
110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
							20.14	76.06		End of Borehole at 20.14m
										21.0
										22.0
										23.0
										24.0
										25.0
										26.0
										27.0
										28.0
										29.0
										30.0
Remarks:	1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.5m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 7.00m bgl, 50/190mm, SPT at 8.50m bgl, 51/215mm, SPT at 10.0m bgl, 50/150mm, SPT at 11.50m bgl, 50/120mm, SPT at 13.0m bgl, 50/180mm, SPT at 14.50m bgl, 50/170mm, SPT at 16.0m bgl, 50/155mm, SPT at 17.50m bgl, 50/140mm, SPT at 19.0m bgl, 9/10mm, SPT at 20.0m bgl, 50/65mm. 4) Backfilled with bentonite.								B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample	
Groundwater:	None encountered.									Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445030E, 241369N

Hole Type: DNP+RC

Location: Banbury

Project No: C161279

Ground Level: 98.90m OD

Scale: 1:50

Client: db symmetry

Date(s): 02/06/16 - 03/06/16

Hole Diameter: 110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.80 0.60	B ES		0.05 0.50	98.85 98.40	ASPHALT. (MADE GROUND) Red slightly sandy fine to coarse, subangular to angular sandstone GRAVEL. (MADE GROUND)	
		1.00 1.20 1.20	ES D SPT	N=7 (1,1/1,1,2,3)			Firm orange locally grey mottled slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, subangular to angular coal, rare sandstone and subrounded to rounded flint. (RIVER TERRACE DEPOSITS)	
		2.00-2.20 2.00-2.45	B U	0 Blows (100% rec)	2.40	96.50	Orangeish brown clayey SAND with up to 40mm thick beds of clay. (RIVER TERRACE DEPOSITS)	
		3.00	SPT	N=7 (1,1/2,1,2,2)	2.90	96.00	Soft to firm orange sandy CLAY, locally iron stained. (RIVER TERRACE DEPOSITS)	
		3.70-4.00 4.00-4.40	B U	0 Blows (80% rec)				
		4.70 4.70-5.40 5.00	D B SPT	N=10 (2,2/2,2,3,3)	4.60	94.30	Soft orange locally grey mottled sandy CLAY. (RIVER TERRACE DEPOSITS)	
					5.60 5.80	93.30 93.10	Interbedded firm orange sandy CLAY and clayey SAND. (RIVER TERRACE DEPOSITS)	
					6.20	92.70	Orange slightly clayey SAND. (RIVER TERRACE DEPOSITS) Orange slightly clayey sandy fine to medium subrounded to rounded flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		0.00-10.0 0	100	100 100	8.00	90.90	Stiff grey thinly laminated CLAY. (CHARMOUTH MUDSTONE FORMATION)	
					9.00	89.90	Very weak grey MUDSTONE with some shell fragments and rare silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
Continued on Next Sheet								

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.5m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 10.0m bgl, 50/180mm, SPT at 11.50m bgl, 50/180mm, SPT at 13.0m bgl, 50/150mm, SPT at 14.50m bgl, 49/160mm, SPT at 16.0m bgl, 50/140mm, SPT at 17.50m bgl, 50/85mm, SPT at 19.0m bgl, 50/45mm, SPT at 20.0m bgl, 50/55mm. 4) Backfilled with bentonite.

Legend:
 B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed Sample
 UT = Undisturbed Sample (Thin Wall)
 ES = Environmental Sample
 W = Water Sample
 PID = Photoionization Detector (ppm)
 SPT = Standard Penetration Test
 AB = Asbestos Bulk Sample

Groundwater: None encountered. **Logged:** NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445030E, 241369N

Hole Type:
DNP+RC

Location: Banbury

Project No.
C161279

Ground Level: 98.90m OD

Scale:
1:50

Client: db symmetry

Date (s): 02/06/16 - 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
		10.00-11.50	100	100	100	0				
		11.50-13.00	100	100	100	0				From 11.50m bgl: Limestone lithorelicts / concretions.
		13.00-14.50	100	100	100	0				
		14.50-16.00	100	100	100	0				
		16.00-17.50	100	100	100	0				
		17.50-19.00	100	100	100	0				
							18.85	80.05		
							19.00	79.90		
		19.00-20.00	100	100	100	0				Strong grey LIMESTONE with abundant shells and fossils. (CHARMOUTH MUDSTONE FORMATION) Weak grey MUDSTONE with abundant shell fragments. (CHARMOUTH MUDSTONE FORMATION)
Continued on Next Sheet										

Remarks:

1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 5.5m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 10.0m bgl, 50/180mm, SPT at 11.50m bgl, 50/180mm, SPT at 13.0m bgl, 50/150mm, SPT at 14.50m bgl, 49/160mm, SPT at 16.0m bgl, 50/140mm, SPT at 17.50m bgl, 50/85mm, SPT at 19.0m bgl, 50/45mm, SPT at 20.0m bgl, 50/55mm. 4) Backfilled with bentonite.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

None encountered.

Logged: NT

Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445043E, 241538N

Hole Type: DNP+RC

Location: Banbury

Project No: C161279

Ground Level: 97.90m OD

Scale: 1:50

Client: db symmetry

Date(s): 06/06/16 - 08/06/16

Hole Diameter: 110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.03	97.87	ASPHALT. (MADE GROUND)	
		0.60 0.70	ES B		0.50	97.40	Yellowish brown slightly clayey slightly sandy fine to coarse, subangular to angular limestone, sandstone and concrete GRAVEL. (MADE GROUND)	
		1.10 1.20 1.20	ES B SPT	N=7 (1,1/1,2,2,2)	1.00	96.90	Greenish grey slightly gravelly CLAY. Gravel is fine to medium subrounded flint with rare rootlets. (ALLUVIUM)	
		1.90 2.00-2.40 2.00-2.45	D B U	0 Blows (100% rec)	1.80	96.10	Firm grey mottled orange CLAY with rare coal fragments. (ALLUVIUM)	
		3.00	SPT	N=15 (2,2/3,4,4,4)	3.00	94.90	Stiff thinly laminated grey locally orange mottled CLAY. (CHARMOUTH MUDSTONE FORMATION)	
		3.60-3.90	B				Stiff thinly laminated grey CLAY. (CHARMOUTH MUDSTONE FORMATION)	
		4.00-4.45	U	0 Blows (100% rec)	3.90	94.00	Very weak thinly laminated MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)	
		4.00-5.50	100	100 100 0				
		5.50-7.00	100	100 100 0				
		7.00-8.50	100	100 100 0			From 7.0m bgl: Limestone lithorelicts / concretions.	
		8.50-10.0 0	100	100 100 0				
Continued on Next Sheet								

Remarks:	1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 4.0m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 5.50m bgl, 32. SPT at 7.00m bgl, 50/280mm. SPT at 8.50m bgl, 50/160mm. SPT at 10.0m bgl, 50/160mm, SPT at 11.50m bgl, 50/190mm, SPT at 13.0m bgl, 50/160mm, SPT at 14.50m bgl, 50/160mm, SPT at 16.0m bgl, 49/125mm, SPT at 17.50m bgl, 50/105mm, SP at 19.0m bgl, 50/65mm, SPT at 20.0m bgl, 50/45mm. 4) Backfilled with bentonite.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445043E, 241538N

Hole Type:
DNP+RC

Location: Banbury

Project No.
C161279

Ground Level: 97.90m OD

Scale:
1:50

Client: db symmetry

Date (s): 06/06/16 - 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
		10.00-11.50	100	100	100	0	11.30	86.60		Between 10.50m bgl and 11.00m bgl: Abundant limestone lithorelicts / concretions.
		11.50-13.00	100	100	100	0				Weak grey thinly laminated MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)
		13.00-14.50	100	100	100	0				
		14.50-16.00	100	100	100	0				
		16.00-17.50	100	100	100	0				
		17.50-19.00	77	77	77	0				
		19.00-20.00	100	100	100	0	19.80	78.10		Strong grey LIMESTONE with abundant shells and fossils.
										Continued on Next Sheet

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 4.0m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 5.50m bgl, 32. SPT at 7.00m bgl, 50/280mm. SPT at 8.50m bgl, 50/160mm. SPT at 10.0m bgl, 50/160mm, SPT at 11.50m bgl, 50/190mm, SPT at 13.0m bgl, 50/160mm, SPT at 14.50m bgl, 50/160mm, SPT at 16.0m bgl, 49/125mm, SPT at 17.50m bgl, 50/105mm, SP at 19.0m bgl, 50/65mm, SPT at 20.0m bgl, 50/45mm. 4) Backfilled with bentonite.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445043E, 241538N

Hole Type:
DNP+RC

Location: Banbury

Project No.
C161279

Ground Level: 97.90m OD

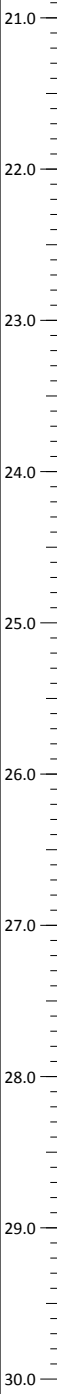
Scale:
1:50

Client: db symmetry

Date (s): 06/06/16 - 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Rotary Coring					Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	TCR	SCR	RQD	FI				
						20.07	77.83		(CHARMOUTH MUDSTONE FORMATION) End of Borehole at 20.09m	



Remarks: 1) Hand dug pit to 1.20m bgl. 2) Percussive drilling to 4.0m bgl. Rotary drilling to 20.0m bgl. 3) SPT at 5.50m bgl, 32. SPT at 7.00m bgl, 50/280mm. SPT at 8.50m bgl, 50/160mm. SPT at 10.0m bgl, 50/160mm, SPT at 11.50m bgl, 50/190mm, SPT at 13.0m bgl, 50/160mm, SPT at 14.50m bgl, 50/160mm, SPT at 16.0m bgl, 49/125mm, SPT at 17.50m bgl, 50/105mm, SP at 19.0m bgl, 50/65mm, SPT at 20.0m bgl, 50/45mm. 4) Backfilled with bentonite.

Groundwater: None encountered.

B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed 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 **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445189E, 241374N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.75m OD

Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
							ASPHALT. (MADE GROUND)	
		0.40	ES		0.32	95.43	Yellowish brown slightly sandy fine to coarse, subangular to angular limestone and sandstone GRAVEL. (MADE GROUND)	
		1.00	ES		1.10	94.65	<i>From 0.90m bgl: More clayey.</i>	
		1.20	SPT	N=4 (2,1/0,1,1,2)	1.10	94.65	Firm locally soft grey CLAY with some remnant rootlets and a very mild organic odour. Rare fine subrounded mudstone and coal gravel. (ALLUVIUM)	
		1.20-1.65 1.20-1.90	D B					
		2.00	SPT	N=6 (1,0/1,2,1,2)	2.00	93.75	<i>Between 1.90m bgl and 2.0m bgl: Sand lens.</i>	
		2.00-2.45 2.00-3.00	D B				Firm locally soft blueish grey CLAY with some purple remant rootlets. (ALLUVIUM)	
		3.00	SPT	N=14 (1,2/2,3,4,5)				
		3.00-3.45	D					
		4.00	SPT	N=21 (2,3/4,5,5,7)	3.50	92.25	Very weak thinly laminated grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)	
		4.00-4.45	D					
		5.00	SPT	N=22 (2,3/4,6,6,6)				
		5.00-5.45	D				Continued on Next Sheet	

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Groundwater and gas monitoring pipe installed to 5.0m bgl. Response zone between 1.0m and 5.0m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445189E, 241374N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.75m OD

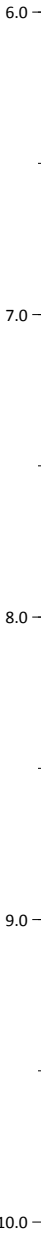
Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	90.30		End of Borehole at 5.45m



Remarks:

1) Hand dug pit to 1.20m bgl. 2) Groundwater and gas monitoring pipe installed to 5.0m bgl. Response zone between 1.0m and 5.0m bgl.

- B = Bulk Sample
- D = Disturbed Sample
- U = Undisturbed Sample
- UT = Undisturbed Sample (Thin Wall)
- ES = Environmental Sample
- W = Water Sample
- PID = Photoionization Detector (ppm)
- SPT = Standard Penetration Test
- AB = Asbestos Bulk Sample

Groundwater:

None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445205E, 241383N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.63m OD

Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.30	95.33		Brown sandy slightly gravelly CLAY. Gravel is fine to coarse, subangular to subrounded concrete, flint and brick. (MADE GROUND)
		0.60	ES					Greyish brown gravelly CLAY. Gravel is fine to coarse, subangular to angular brick, sandstone and concrete. (MADE GROUND)
		0.80-1.50	B		0.80	94.83		Firm locally soft blueish grey slightly gravelly CLAY. Gravel is fine to coarse, subangular to angular sandstone and rare concrete. (MADE GROUND)
		1.20	SPT	N=6 (1,1/1,1,2,2)				
		1.20-1.65	D					
		1.70-2.40	B		1.70	93.93		Firm greenish grey CLAY with some remnant rootlets and reeds with a mild organic odour and rare subrounded to rounded flint gravel. (ALLUVIUM)
		2.00	SPT	N=11 (1,2/2,2,3,4)				
		2.00-2.45	D					<i>At 2.10m bgl: Soft.</i>
		2.60	D		2.50	93.13		Soft brownish orange slightly gravelly sandy CLAY. Gravel is fine to medium, subangular to subrounded flint. (RIVER TERRACE DEPOSITS)
		3.00	SPT	N=25 (3,6/7,6,6,6)	3.00	92.63		Orange slightly clayey gravelly SAND. Gravel is subrounded to rounded flint. (RIVER TERRACE DEPOSITS)
		3.00-3.45	D					
		4.00	SPT	N=5 (2,1/0,1,1,3)	3.80	91.83		Firm grey locally soft CLAY with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)
	4.00-4.45	D						
	4.60	D		4.50	91.13		Very stiff grey CLAY with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)	
	5.00	SPT	N=28 (3,4/5,7,8,8)					
	5.00-5.45	D					Continued on Next Sheet	

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Groundwater and gas monitoring pipe installed to 5.0m bgl. Response zone between 2.0m and 5.0m bgl.

Legend:
 B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed Sample
 UT = Undisturbed Sample (Thin Wall)
 ES = Environmental Sample
 W = Water Sample
 PID = Photoionization Detector (ppm)
 SPT = Standard Penetration Test
 AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445205E, 241383N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.63m OD

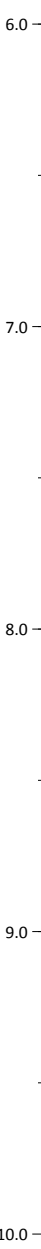
Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	90.18		End of Borehole at 5.45m



Remarks: 1) Hand dug pit to 1.20m bgl. 2) Groundwater and gas monitoring pipe installed to 5.0m bgl. Response zone between 2.0m and 5.0m bgl.

Groundwater: None encountered.

B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed 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 **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445255E, 241432N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.63m OD

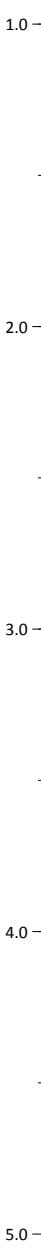
Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	ES		0.21	95.42	CONCRETE. (MADE GROUND)	
		0.60	ES				Soft greenish grey CLAY with occasional brick gravel. (MADE GROUND)	
		0.70	D					
					0.90	94.73	End of Borehole at 0.90m	



Remarks:	1) Hand dug pit terminated at 0.90m bgl on concrete. 2) Backfilled with arisings.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445167E, 241361N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.14m OD

Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	ES		0.40	95.74		Soft orangish brown with pockets of grey gravelly sandy CLAY. Gravel is fine to coarse, subangular to angular sandstone, rare concrete and coal. (MADE GROUND)
		0.20	D					
		0.50	ES		1.30	94.84		Firm friable orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, subrounded to rounded sandstone, mudstone and quartz. (RIVER TERRACE DEPOSITS)
		1.00	ES					
		1.20	SPT	N=14 (2,1/2,3,3,6)	1.60	94.34		Firm greenish grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, subrounded to rounded quartz, and mudstone with a mild organic odour. (ALLUVIUM)
		1.20-1.65	D					
		2.00	SPT	N=4 (1,1/1,1,1,1)	2.20	93.94		Firm orange mottled grey slightly sandy slightly gravelly CLAY. Gravel is coarse, subrounded to rounded mudstone and quartz. (RIVER TERRACE DEPOSITS)
		2.00-2.45	D					
		2.20	D		2.80	93.34		Soft orange mottled grey sandy CLAY. (RIVER TERRACE DEPOSITS)
		3.00	SPT	N=4 (1,0/0,2,1,1)				
		3.00-3.45	D		4.30	91.84		Very loose to loose blueish grey slightly clayey SAND. (RIVER TERRACE DEPOSITS)
		3.80	D					
		4.00	SPT	N=7 (1,3/3,1,2,1)	5.00			Soft blueish grey CLAY. (CHARMOUTH MUDSTONE FORMATION)
		4.00-4.45	D					
		5.00	SPT	N=15 (4,2/2,3,4,6)	Continued on Next Sheet			

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Casing refusal at 4.50m bgl. 3) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS05

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445167E, 241361N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.14m OD

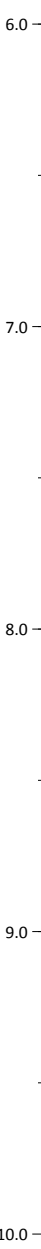
Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	90.69		End of Borehole at 5.45m



Remarks: 1) Hand dug pit to 1.20m bgl. 2) Casing refusal at 4.50m bgl. 3) Backfilled with arisings on completion.

Groundwater: None encountered.

B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed 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 **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445069E, 241356N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 97.38m OD

Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.30	97.08		Soft orangish brown sandy slightly gravelly CLAY. Gravel is fine to coarse, subrounded to subangular flint. (TOPSOIL)	
		0.10	ES						
		0.30-1.00	B						
		0.40	ES						
		1.10	ES						
		1.20	SPT						N=6 (1,1/1,1,2,2)
		1.20-1.65	D						
		1.70	D						
		2.00	SPT						N=12 (2,2/2,3,3,4)
		2.00-2.45	D						
		2.50	D						
		3.00	SPT						N=0 (0,0/0,0,0,0)
3.00-3.45	D								
3.50	D								
4.00	SPT	N=12 (2,2/1,3,4,4)							
4.00-4.45	D								
				4.50	92.88		End of Borehole at 4.50m		

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Casing refusal at 4.50m bgl, no recovery assumed, mudstone. 3) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS08

Sheet 1 of 1

Project Name: Kraft Phase 2

Co-ords: 445094E, 241419N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 95.95m OD

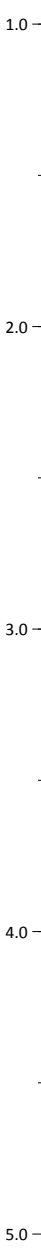
Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	ES		0.20	95.75		ASPHALT. (MADE GROUND)
					0.50	95.45		Yellow clayey sandy fine to coarse, subangular to angular limestone and sandstone GRAVEL. (MADE GROUND)
					End of Borehole at 0.50m			



Remarks:	1) Hand dug pit terminated at 0.50m bgl due to refusal. 2) Backfilled with arisings.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445014E, 241457N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.50m OD

Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES		0.18	96.32	CONCRETE. (MADE GROUND)	
							Grey slightly sandy fine to coarse, subangular to angular asphalt, limestone and sandstone GRAVEL. (MADE GROUND)	
		1.00	SPT	N=21 (2,2/4,5,6,6)	1.00	95.50		
		1.00-2.00	B				Stiff grey thinly laminated CLAY. (CHARMOUTH MUDSTONE FORMATION)	1.0
		1.10	ES					
		1.20-1.65	D					
		1.70	D		1.60	94.90	Very weak thinly laminated grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)	
		2.00	SPT	N=35 (5,8/12,10,7,6)				
		2.00-2.45	D				At 2.00m bgl: Abundant shell fragments.	2.0
		3.00	SPT	N=35 (3,5/6,8,9,12)				
	3.00-3.45	D						
	4.00	SPT	N=41 (3,7/9,10,10,12)					
	4.00-4.45	D						
	5.00	SPT	N≥50 (6,9/50 for 240mm)					
	5.00-5.45	D					Continued on Next Sheet	5.0

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.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

Perched groundwater encountered at 0.90m bgl.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS09

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445014E, 241457N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.50m OD

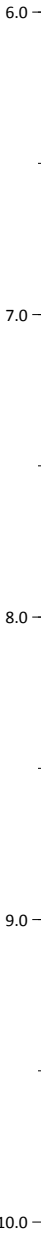
Scale:
1:25

Client: db symmetry

Date(s): 08/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.39	91.11		End of Borehole at 5.39m



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.

Groundwater: Perched groundwater encountered at 0.90m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed 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 **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445200E, 241435N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 02/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
Well					0.30	96.56		CONCRETE. (MADE GROUND)
		0.40	ES		0.60	96.26		Orange clayey fine to coarse, angular to subangular mudstone, concrete and sandstone GRAVEL. (MADE GROUND)
		0.80	ES					Firm orange sandy gravelly CLAY. Gravel is fine to coarse, subangular to angular ironstone and sandstone. (MADE GROUND)
		1.20	SPT	N=35 (4,10/7,8,8,12)				
		1.20-1.65	D					
		2.00	SPT	N=27 (5,7/8,8,6,5)				
		2.00-2.45	D					
		2.70	D		2.60	94.26		Firm grey gravelly CLAY with a mild organic odour. Gravel is fine to medium, subangular to angular flint. (ALLUVIUM)
		3.00	SPT	N=12 (1,1/2,3,3,4)	2.80	94.06		Firm orange gravelly CLAY. Gravel is fine to coarse, subangular to angular sandstone with some iron staining. (ALLUVIUM)
		3.00-3.45	D					
				3.90	92.96		Soft grey sandy CLAY with rare remnant reeds/grass/roots. (ALLUVIUM)	
				4.00	92.86		End of Borehole at 4.00m	

Remarks:

1) Hand dug pit to 1.20m bgl. 2) Collpase between 3.50m bgl to 4.00m bgl. 3) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

None encountered.

Logged: NT

Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445132E, 241444N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20	96.66	CONCRETE. (MADE GROUND)	
		0.30	ES				Orangish brown clayey sandy fine to coarse, subangular to angular limestone and rare concrete GRAVEL. (MADE GROUND)	
		0.50-1.30	B		0.50	96.36	Medium dense orangish brown sandy slightly clayey fine to coarse subangular to angular limestone, sandstone and limestone GRAVEL. (MADE GROUND)	
		0.60	ES					
		0.80	D					
		1.00	SPT	N=14 (3,3/3,4,3,4)				1.0
		1.00-1.45	D					
		1.40	D		1.30	95.56	Firm greenish grey CLAY with a mild organic odour and some remnant rootlets. (ALLUVIUM)	
		1.70	D					
		1.80			1.80	95.06	Firm brownish orange locally grey mottled sandy CLAY. (ALLUVIUM) <i>Between 1.80m and 2.10m bgl: Rare flint gravel.</i>	2.0
		2.00	SPT	N=11 (2,3/3,2,3,3)				
		2.00-2.45	D					
		3.00	SPT	N=6 (1,1/1,1,2,2)				3.0
		3.00-3.45	D		3.10	93.76	Soft light grey slightly sandy CLAY. (ALLUVIUM)	
					3.40	93.46	Very soft light grey CLAY. (ALLUVIUM)	
	4.00	SPT	N=3 (0,0/0,0,3)				4.0	
	4.00-4.45	D						
				4.60	92.26	Brown slightly gravelly SAND. Gravel is fine to coarse subangular to angular quartz. (RIVER TERRACE DEPOSITS)		
				4.80	92.06			
						Very soft grey CLAY. (CHARMOUTH MUDSTONE FORMATION)		
						Continued on Next Sheet	5.0	
		5.00	SPT	N=15 (1,0/2,3,4,6)				
		5.00-5.45	D					

Remarks: 1) Hand dug pit to 0.70m bgl. 2) Cased to 5.00m bgl. 3) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: Groundwater encountered at 3.94m bgl falling to 5.17m bgl after 20 minutes.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445132E, 241444N

Hole Type:
WLS

Location: Banbury

Project No:
C161279


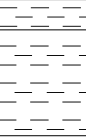
Ground Level: 96.86m OD

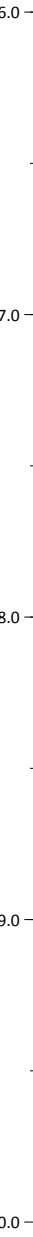
Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.10	91.76		Stiff grey CLAY with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)
					5.45	91.41		
							End of Borehole at 5.45m	



Remarks: 1) Hand dug pit to 0.70m bgl. 2) Cased to 5.00m bgl. 3) Backfilled with arisings on completion.

Legend:
 B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed Sample
 UT = Undisturbed Sample (Thin Wall)
 ES = Environmental Sample
 W = Water Sample
 PID = Photoionization Detector (ppm)
 SPT = Standard Penetration Test
 AB = Asbestos Bulk Sample

Groundwater: Groundwater encountered at 3.94m bgl falling to 5.17m bgl after 20 minutes.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445174E, 241491N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 02/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20-0.40	B		0.20	98.66	CONCRETE. (MADE GROUND)	
		0.30	ES				Orangish brown clayey sandy fine to coarse, subangular to angular limestone and sandstone GRAVEL. (MADE GROUND)	
		0.60	ES					
		0.80-1.20	B		0.80	98.06	Compact orangish brown sandy slightly clayey fine to coarse, subangular to angular limestone, sandstone and ironstone GRAVEL. (MADE GROUND)	
		1.20	SPT	N=24 (4,4/6,6,6,6)				
		1.50	D					
		2.00	SPT	N=10 (1,2/2,2,3,3)	2.00	96.86	Soft to firm dark grey slightly sandy CLAY with some remnant rootlets and a mild organic odour. (ALLUVIUM)	
		2.10	D					
					2.30	96.56	Firm locally soft orangish brown locally grey mottled slightly gravelly CLAY. Gravel is fine, angular limestone. (ALLUVIUM)	
		3.00	SPT	N=11 (2,1/2,2,3,4)				
		3.30	D					
					3.60	95.26	Orange clayey SAND. (ALLUVIUM)	
					3.70	95.16	Firm grey sandy CLAY. (ALLUVIUM)	
		4.00	SPT	N=3 (2,2/0,1,1,1)	3.90 4.00	94.96 94.86	Orange sandy fine to medium, angular to subangular flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		4.30	D		4.20	94.66	Orange clayey SAND. (RIVER TERRACE DEPOSITS)	
						Very soft grey CLAY with rare subrounded to rounded flint gravel. (RIVER TERRACE DEPOSITS)		
	4.90	D		4.80	94.06	Stiff grey CLAY with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)		
	5.00	SPT	N=19 (2,2/3,5,5,6)			Continued on Next Sheet		

Remarks:

1) Hand dug pit to 1.20m bgl. 2) Cased to 5.00m bgl. 3) Gas and groundwater pipe installed to 5.00m bgl. Response zone between 2.0m bgl and 5.0m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

Groundwater encountered at 4.60m bgl.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445174E, 241491N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

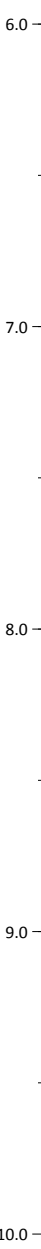
Scale:
1:25

Client: db symmetry

Date(s): 02/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	93.41	End of Borehole at 5.45m	



Remarks:

1) Hand dug pit to 1.20m bgl. 2) Cased to 5.00m bgl. 3) Gas and groundwater pipe installed to 5.00m bgl. Response zone between 2.0m bgl and 5.0m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

Groundwater encountered at 4.60m bgl.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445103E, 241472N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

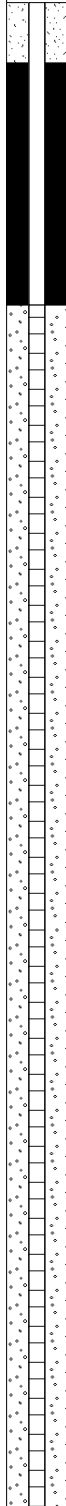


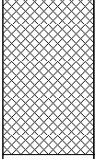
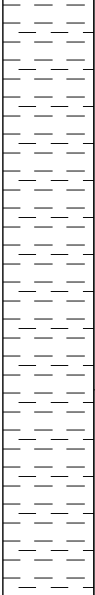
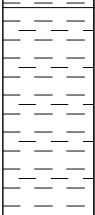
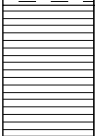


Ground Level: 98.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.17	98.69		CONCRETE. (MADE GROUND)	
					0.27	98.59		ASPHALT. (MADE GROUND)	
								Light brown slightly clayey slightly sandy coarse angular limestone and sandstone GRAVEL. (MADE GROUND)	
			0.90	ES		0.80	98.06		Stiff, brownish orange locally iron stained and grey mottled CLAY with rare fine to coarse subangular flint gravel. (ALLUVIUM)
			1.00	SPT	N=17 (3,3/3,4,5,5)				
			1.00-1.45	D					
			1.20	ES					
			1.20-2.00	B					
			2.00	SPT	N=12 (1,2/3,3,2,4)				From 2.10m bgl: Firm.
			2.00-2.45	D					
			2.50	D					
						2.80	96.06		Firm grey locally iron stained CLAY. (CHARMOUTH MUDSTONE FORMATION)
			3.00	SPT	N=23 (2,3/4,5,6,8)				
			3.00-3.45	D					
						3.50	95.36		Very weak locally iron stained MUDSTONE with rare silt sized selenite crystals and rare shell fragments. (CHARMOUTH MUDSTONE FORMATION)
		3.70	D						
		4.00	SPT	N=25 (2,3/5,5,7,8)					
		4.00-4.45	D						
		5.00	SPT	N=29 (4,4/5,6,9,9)				Continued on Next Sheet	
		5.00-5.45	D						

Remarks:

1) Hand dug pit to 0.70m bgl. 2) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.0m bgl and 5.0m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445103E, 241472N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

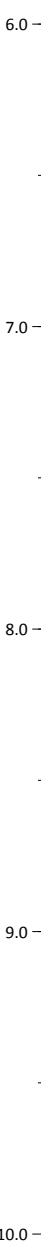
Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	93.41		End of Borehole at 5.45m



Remarks: 1) Hand dug pit to 0.70m bgl. 2) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.0m bgl and 5.0m bgl.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445089E, 241527N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
Well					0.22	98.64		CONCRETE. (MADE GROUND)
		0.30	ES		0.50	98.36		Brown sandy fine to coarse, subangular to angular limestone and concrete GRAVEL. (MADE GROUND)
		0.60	ES		0.90	97.96		Orangish brown gravelly SAND. Gravel is fine to coarse, subangular to angular mudstone and sandstone (RIVER TERRACE DEPOSITS)
		1.00	SPT	N=8 (1,2/1,2,2,3)				Firm grey locally iron stained CLAY. (CHARMOUTH MUDSTONE FORMATION)
		1.00-1.45	D					
		1.60	D					
		2.00	SPT	N=9 (1,1/1,2,2,4)				
		2.00-2.45	D		2.30	96.56		Stiff grey thinly laminated CLAY. (CHARMOUTH MUDSTONE FORMATION)
		2.40	D					
		3.00	SPT	N=11 (2,1/2,2,3,4)				Very weak grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)
	3.00-3.45	D						
	4.00	SPT	N=12 (1,2/2,4,4)					
	4.00-4.45	D						
	5.00	SPT	N=21 (2,2/4,4,6,7)					
	5.00-5.45	D					Continued on Next Sheet	

Remarks: 1) Hand dug pit to 0.65m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445089E, 241527N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

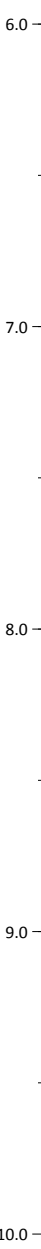
Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	93.41		End of Borehole at 5.45m



Remarks: 1) Hand dug pit to 0.65m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445044E, 241457N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	ES		0.26	98.60		CONCRETE. (MADE GROUND)
		0.70	ES		0.55	98.31		Brown clayey slightly sandy fine to coarse, subangular to angular limestone, sandstone and rare brick GRAVEL. (MADE GROUND)
		0.80	D					Stiff grey CLAY with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)
		1.00	SPT	N=15 (2,2/3,3,4,5)	1.10	97.76		At 1.00m bgl: Mudstone lithorelic with pyrite along fractures.
		1.00-1.45	D					Very weak thinly laminated grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)
		2.00	SPT	N=16 (2,1/2,4,4,6)				
		2.00-2.45	D					
		3.00	SPT	N=26 (4,4/6,6,7,7)				
		3.00-3.45	D					
		4.00	SPT	N=26 (3,3/5,6,6,9)				
4.00-4.45	D							
5.00	SPT	N=39 (4,6/7,9,11,12)						
5.00-5.45	D						Continued on Next Sheet	

Remarks: 1) Hand dug pit to 0.50m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS16

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445044E, 241457N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.86m OD

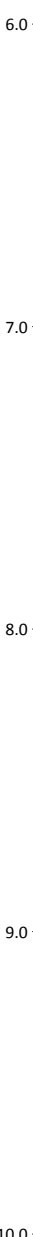
Scale:
1:25

Client: db symmetry

Date(s): 03/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	93.41		End of Borehole at 5.45m



Remarks:	1) Hand dug pit to 0.50m bgl. 2) Backfilled with arisings on completion.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	
Logged:	NT	Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445096E, 241545N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.69m OD

Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	ES		0.35	96.34		Soft friable very sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded chalk, brick fragments and concrete. (MADE GROUND)
								Soft friable very sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded chalk. (ALLUVIUM) <i>From 0.50m bgl: Becoming very sandy.</i>
		1.20	SPT	N=4 (0,0/1,1,1,1)	1.20	95.49		Firm locally soft brown mottled grey CLAY with occasional fine angular ironstone gravel. (RIVER TERRACE DEPOSITS)
		1.60	D					<i>Between 1.65m bgl and 1.75m bgl: Becoming very gravelly.</i>
		2.00	SPT	N=11 (1,2/3,2,3,3)	1.85	94.84		Stiff grey mottled brown gravelly CLAY. Gravel is fine to coarse, angular to subangular mudstone. (CHARMOUTH MUDSTONE FORMATION)
		2.60	D					<i>Between 2.30m and 2.40m: Very gravelly CLAY.</i>
		3.00	SPT	N=20 (2,2/4,4,5,7)				
		3.60	D		3.55	93.14		Very weak weathered grey mottled brownish grey MUDSTONE. (CHARMOUTH MUDSTONE FORMATION)
		4.00	SPT	N=20 (2,3/4,4,6,6)				
		4.60	D					
	5.00	SPT	N=21 (2,2/4,5,6,6)					
Continued on Next Sheet								5.0

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.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: WS Checked: SC

Windowless Sampler

Borehole No.
WS18

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445096E, 241545N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 96.69m OD

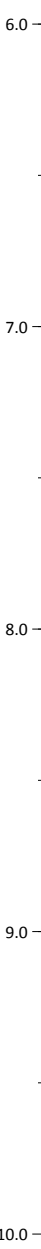
Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	91.24		End of Borehole at 5.45m



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.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

None encountered.

Logged: WS **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445047E, 241576N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 97.32m OD

Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-4.00	B		0.40	96.92		Firm friable brown very sandy gravelly CLAY with abundant rootlets. Gravel is fine to coarse, angular to subrounded concrete, flint, occasional brick and rare plastic. (MADE GROUND)
		0.30	D					
		0.30	ES					Firm friable light brown mottled grey sandy gravelly CLAY. Gravel is fine to coarse, angular to subrounded ironstone. (ALLUVIUM)
		0.40-1.00	B					
		0.50	D					
		0.50	ES					
		1.00	D		1.20	96.12		Firm brown slightly sandy CLAY with some relic rootlets. Mottled red along rootlets. (ALLUVIUM)
		1.00	ES					
		1.20	SPT	N=13 (1,2/3,3,3,4)				Soft locally very soft brown mottled grey very sandy slightly gravelly CLAY. (ALLUVIUM)
		1.50	D					
		1.80				1.80	95.52	<i>Between 1.60m bgl and 1.70m bgl: Becoming predominantly grey.</i>
		2.00	SPT	N=3 (0,0/1,1,0,1)		2.80	94.52	
	2.50	D						
	3.00	SPT	N=11 (1,2/1,2,4,4)		3.55	93.77		Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular weak mudstone. (CHARMOUTH MUDSTONE FORMATION)
	3.50	D						
	3.90	D			5.00			
	4.00	SPT	N=20 (2,3/4,4,5,7)					
	5.00	SPT	N=32 (4,5/6,8,9,9)					Continued on Next Sheet

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.

Groundwater: Groundwater encountered at 5.00m bgl.

Legend:
 B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed 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: WS **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445047E, 241576N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

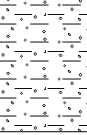
Ground Level: 97.32m OD

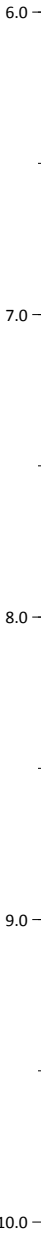
Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	91.87		End of Borehole at 5.45m



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.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

Groundwater encountered at 5.00m bgl.

Logged: WS **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445021E, 241585N

Hole Type:
WLS

Location: Banbury

Project No:
C161279
















Ground Level: 97.98m OD

Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.25	ES		0.30	97.68		Firm friable brown sandy gravelly CLAY with rootlets. Gravel is fine to coarse, angular to subrounded flint. (TOPSOIL)
		0.40	ES		0.50	97.48		Firm friable light brown slightly sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded flint. (ALLUVIUM)
		0.60	ES					Firm friable slightly sandy dark grey mottled brown CLAY. (ALLUVIUM)
		0.90	ES					
		1.20	SPT	N=9 (0,1/2,2,2,3)	1.40	96.58		
		1.70	D					Firm greenish greck locally speckled black CLAY with a mild organic odour. (ALLUVIUM)
		2.00	SPT	N=5 (0,1/1,1,2,1)	2.00	95.98		Firm dark brown mottled grey locally speckled black sandy CLAY. (ALLUVIUM)
					2.50	95.48		Soft light grey CLAY. (ALLUVIUM)
					2.60	95.38		Firm light brown mottled grey slightly silty CLAY. (CHARMOUTH MUDSTONE FORMATION)
		3.00	SPT	N=9 (1,1/2,2,2,3)				
		3.60	D					<i>Between 3.50 and 3.90m bgl: Weak mudstone gravel.</i>
		4.00	SPT	N=21 (2,3/5,7,7,8)	3.90	94.08		Stiff dark grey very gravelly CLAY. Gravel is fine to coarse, angular, very weak mudstone. (CHARMOUTH MUDSTONE FORMATION)
	4.60	D						
	5.00	SPT	N=27 (2,5/5,7,7,8)					
Continued on Next Sheet								

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: WS **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445021E, 241585N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

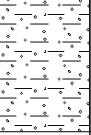
Ground Level: 97.98m OD

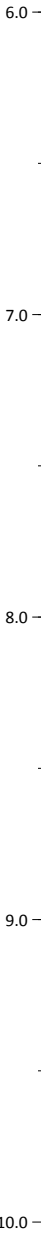
Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	92.53		<p>End of Borehole at 5.45m</p>



Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
 D = Disturbed Sample
 U = Undisturbed Sample
 UT = Undisturbed Sample (Thin Wall)
 ES = Environmental Sample
 W = Water Sample
 PID = Photoionization Detector (ppm)
 SPT = Standard Penetration Test
 AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: WS **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 444987E, 241555N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.76m OD

Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.40	98.36	Firm friable brown sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded flint. (TOPSOIL)		
		0.70	ES		0.80	97.96	Soft friable brown sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded flint. (RIVER TERRACE DEPOSITS) <i>Between 0.40m bgl and 0.80m bgl: Roots and occasional brick fragments and concrete.</i>		
		1.00	ES				Firm light brown mottled light grey sandy gravelly CLAY. Gravel is fine to coarse, angular to subrounded flint. (RIVER TERRACE DEPOSITS)	1.0	
		1.20	SPT	N=7 (1,1/2,1,2,2)	1.20	97.56	Firm grey mottled brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to subrounded ironstone. (RIVER TERRACE DEPOSITS) <i>From 1.30m bgl: Relic roots present. From 1.50m bgl: Fine to medium shell fragments present. From 1.60m bgl: Becoming slightly sandy.</i>		
		1.50	D		1.80	96.96	Stiff friable grey CLAY. (CHARMOUTH MUDSTONE FORMATION) <i>Between 1.80m bgl and 2.50m bgl: Soft.</i>	2.0	
		2.40	D						
		3.00	SPT	N=20 (2,2/4,5,6)				<i>From 3.30m bgl: Becoming stiff and grey.</i>	3.0
		3.65	D						
		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)					5.0	
Continued on Next Sheet									

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: WS **Checked:** SC

Windowless Sampler

Borehole No.
WS21

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 444987E, 241555N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 98.76m OD

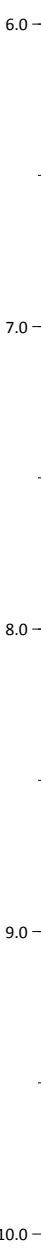
Scale:
1:25

Client: db symmetry

Date(s): 09/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	93.31		End of Borehole at 5.45m



Remarks:	1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: WS Checked: SC

Project Name: Kraft Phase 2

Co-ords: 445003E, 241523N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 99.72m OD

Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
Well	Water Strikes				0.05	99.67	Legend	ASPHALT. (MADE GROUND)
					0.30	99.42		Yellowish slightly sandy fine to coarse, subangular to angular sandstone and concrete GRAVEL. (MADE GROUND)
		0.40	ES					Firm orange locally grey mottled CLAY with some iron staining. (RIVER TERRACE DEPOSITS)
		0.70	ES					From 0.80m bgl: Stiff.
		1.20	SPT	N=17 (2,2/3,4,5,5)				
		1.20-1.65	D					
		1.80	D		1.80	97.92		
		2.00	SPT	N=24 (2,4/5,6,7,6)				
		2.00-2.45	D					
		2.40	D					
			2.65	97.07			Very stiff grey CLAY with abundant iron staining and silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
			3.00					Very weak thinly laminated grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)
			3.00-3.45					
			3.90					
			4.00	SPT	N=27 (3,2/4,6,5,12)			
			4.00-4.45	D				
			5.00	SPT	N=21 (2,2/4,5,5,7)			
			5.00-5.45	D				
Continued on Next Sheet								

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: Groundwater encountered at 4.00m bgl.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.

WS22

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445003E, 241523N

Hole Type:

WLS

Location: Banbury

Project No:
C161279

Ground Level: 99.72m OD

Scale:

1:25

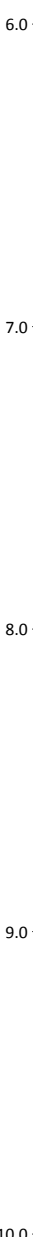
Client: db symmetry

Date(s): 06/06/16

Hole Diameter:

110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	94.27		End of Borehole at 5.45m



Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: Groundwater encountered at 4.00m bgl.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 444987E, 241467N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 101.65m OD

Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05			101.60		ASPHALT. (MADE GROUND)	
		0.20	ES				Yellowish brown sandy fine to coarse, subangular to angular sandstone and concrete GRAVEL. (MADE GROUND)	
		0.70	ES				Firm grey mottled orange CLAY with some iron staining. (RIVER TERRACE DEPOSITS)	
		0.90			100.75			
		1.20	SPT	N=17 (2,3/3,5,4,5)				
		1.20-1.65	D					
		1.50	D					
		2.00	SPT	N=27 (2,4/5,6,7,9)				
		2.00-2.45	D				Between 2.0m bgl and 2.20m bgl: Abundant iron staining.	
		2.50	D					
		2.70			98.95			
		3.00	SPT	N=27 (4,7/6,7,7,7)				
	3.00-3.45	D			Stiff grey CLAY, locally iron stained with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)			
	3.50	D						
	4.00	SPT	N=21 (2,2/4,4,6,7)					
	4.00-4.45	D			Very weak grey MUDSTONE with some shell fragments. (CHARMOUTH MUDSTONE FORMATION)			
	4.50			97.15				
	5.00	SPT	N=28 (3,5/6,6,7,9)					
	5.00-5.45	D			Continued on Next Sheet			

Remarks: 1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS23

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 444987E, 241467N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 101.65m OD

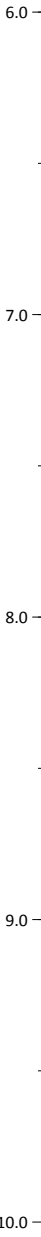
Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	96.20		End of Borehole at 5.45m



Remarks:	1) Hand dug pit to 1.20m bgl. 2) Backfilled with arisings on completion.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC

Project Name: Kraft Phase 2

Co-ords: 444943E, 241473N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 102.68m OD

Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.30	102.38		Brown gravelly SAND. Gravel is fine to coarse, subangular to angular concrete, flint, brick and very rare asphalt gravel. (MADE GROUND)	
		0.30-0.80	B						
		0.40	ES						
					0.80	101.88		Brownish orange sandy gravelly CLAY. Gravel is fine to coarse, subangular to angular quartz, sandstone and mudstone. (RIVER TERRACE DEPOSITS)	
			1.20	SPT	N=10 (1,2/2,2,3,3)	2.10	100.58		Firm orange locally grey mottled CLAY with some iron staining and rare mudstone gravel. (RIVER TERRACE DEPOSITS)
			1.20-1.65	D					
			1.20-2.00	B					
			1.40	D					
			2.00	SPT	N=13 (2,1/2,3,4,4)	2.10	100.58		Stiff blueish grey CLAY with some iron staining. (CHARMOUTH MUDSTONE FORMATION) <i>Between 2.20m bgl and 2.70m bgl: Abundant iron staining.</i>
			2.00-2.45	D					
		2.00-3.00	B						
		2.80	D		2.90	99.78		Very weak grey MUDSTONE with abundant iron staining. (CHARMOUTH MUDSTONE FORMATION)	
		3.00	SPT	N=21 (3,4/5,4,6,6)					
		3.00-3.45	D						
		3.00-4.00	B		3.90	98.78		Very weak grey MUDSTONE with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
		4.00	SPT	N=30 (3,5/6,7,8,9)					
		4.00-4.45	D						
		4.00-5.00	B		5.00	98.78		Very weak grey MUDSTONE with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
		5.00	SPT	N=30 (3,4/6,6,8,10)					
		5.00-5.45	D		Continued on Next Sheet				

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.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
	Groundwater: None encountered.	

Project Name: Kraft Phase 2

Co-ords: 444943E, 241473N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 102.68m OD

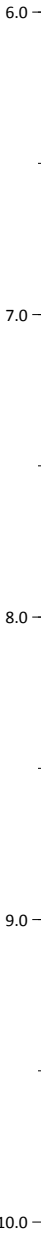
Scale:
1:25

Client: db symmetry

Date(s): 07/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	97.23	End of Borehole at 5.45m	



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.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater:

None encountered.

Logged: NT **Checked:** SC

Project Name: Kraft Phase 2

Co-ords: 445008E, 241406N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 100.15m OD

Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.05			0.05	100.10		ASPHALT. (MADE GROUND)
		0.20	ES					Yellowish brown sandy fine to coarse, subangular to angular sandstone and concrete GRAVEL. (MADE GROUND)
		0.40-0.60	B		0.40	99.75		
		0.50	ES					Firm grey locally orange mottled CLAY with some iron staining and very rare limestone gravel. (RIVER TERRACE DEPOSITS)
		0.80	D					
		0.80-1.00	B					
		1.20	SPT	N=9 (2,1/2,1,3,3)				
		1.20-1.65	D					
		1.20-2.00	B					
		2.00	SPT	N=15 (2,1/2,4,4,5)				
		2.00-2.45	D					
		3.00	SPT	N=22 (3,4/5,5,5,7)				
	3.00-3.45	D						
	4.00	SPT	N=8 (2,2/2,1,2,3)					
	4.00-4.45	D		4.20	95.95		Very weak grey MUDSTONE with some silt sized selenite crystals. (CHARMOUTH MUDSTONE FORMATION)	
	4.80	D						
	5.00	SPT	N=31 (2,3/6,6,8,11)					
	5.00-5.45	D					Continued on Next Sheet	

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.

B = Bulk Sample
D = Disturbed Sample
U = Undisturbed Sample
UT = Undisturbed Sample (Thin Wall)
ES = Environmental Sample
W = Water Sample
PID = Photoionization Detector (ppm)
SPT = Standard Penetration Test
AB = Asbestos Bulk Sample

Groundwater: None encountered.

Logged: NT **Checked:** SC

Windowless Sampler

Borehole No.
WS26

Sheet 2 of 2

Project Name: Kraft Phase 2

Co-ords: 445008E, 241406N

Hole Type:
WLS

Location: Banbury

Project No:
C161279

Ground Level: 100.15m OD

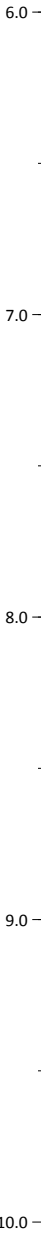
Scale:
1:25

Client: db symmetry

Date(s): 06/06/16

Hole Diameter:
110mm

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m OD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					5.45	94.70		End of Borehole at 5.45m



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.	B = Bulk Sample D = Disturbed Sample U = Undisturbed Sample UT = Undisturbed Sample (Thin Wall) ES = Environmental Sample W = Water Sample PID = Photoionization Detector (ppm) SPT = Standard Penetration Test AB = Asbestos Bulk Sample
Groundwater:	None encountered.	Logged: NT Checked: SC



Appendix C

Geotechnical Test Results and SPT Depth plots



TEST CERTIFICATE

Determination of Moisture Content

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



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

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: 02.07,08/06/2016
Date Received: 21/06/2016
Date Tested: 07/05/2016
Sampled By: Not Given

Test results

Laboratory Reference	Sample Reference	Location	Depth Top [m]	Depth Base [m]	Sample Type	Description	Moisture Content [%]
591033	B	WS01	1.2	1.9	B	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	B	WS07	0.3	1	B	Brown slightly gravelly sandy CLAY	17
591039	B	WS07	2	3	B	Yellowish brown slightly sandy silty CLAY	22
591040	D	WS07	3.5	Not Given	D	Yellowish brown to grey silty CLAY	29
591041	B	WS09	1.2	2	B	Greyish brown CLAY	19
591042	D	WS11	1.2	1.65	B	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:

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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Determination of Moisture Content

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



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

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: 02,03,06/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
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	B	WS14	1.2	2	B	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:

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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Determination of Moisture Content

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



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

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

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:

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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Determination of Moisture Content

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



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

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: 31/05,02,06,07/06/2016
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 [%]
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	B	BH02	0.5	0.8	B	Brown gravelly sandy CLAY	28
591089	B	BH03	8	8.4	B	Grey CLAY	22
591093	B	BH04	0.7	Not Given	B	Brown gravelly slightly sandy silty CLAY	23
591094	B	BH04	1.2	Not Given	B	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	C	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
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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Determination of Moisture Content

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



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

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: 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	C	BH04	9	9.4	U	Greyish brown CLAY	21
591099	C	BH04	12	12.4	U	Greyish brown silty CLAY	17
591100	C	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: *Mirosława Pytlik*

Signed: *Terry Stafford*

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 591033

Sample Reference: B

Description: Yellowish brown slightly gravelly CLAY

Sample Type: B

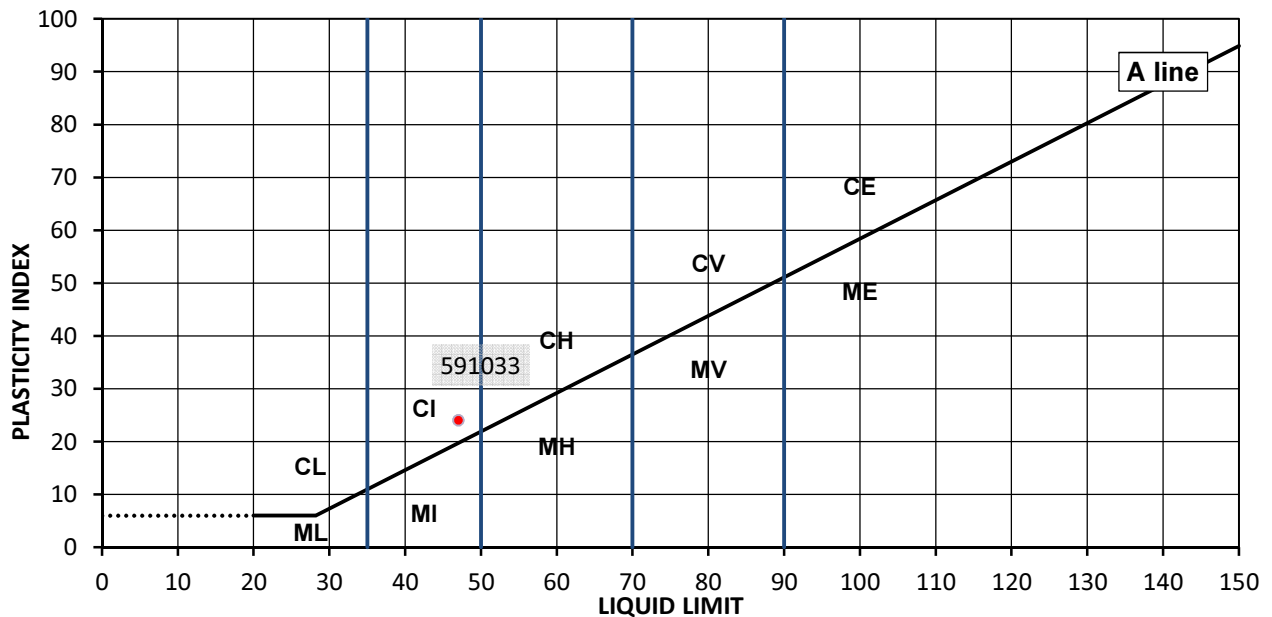
Location: WS01

Depth Top [m]: 1.2

Sample Preparation: Tested after >425um removed by hand

Depth Base [m]: 1.9

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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

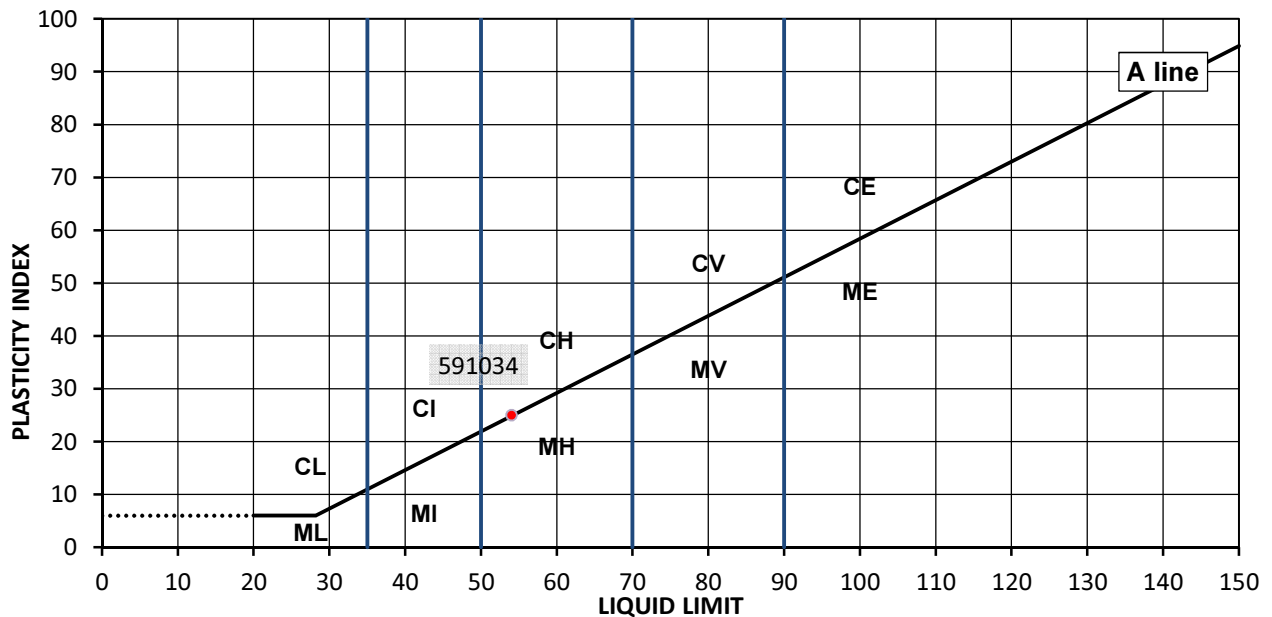
TEST RESULTS

Laboratory Reference: 591034
Sample Reference: D

Description: Greyish brown silty CLAY
Location: WS01
Sample Preparation: Tested in natural condition

Sample Type: D
Depth Top [m]: 3
Depth Base [m]: 3.45

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
24	54	29	25	100



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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

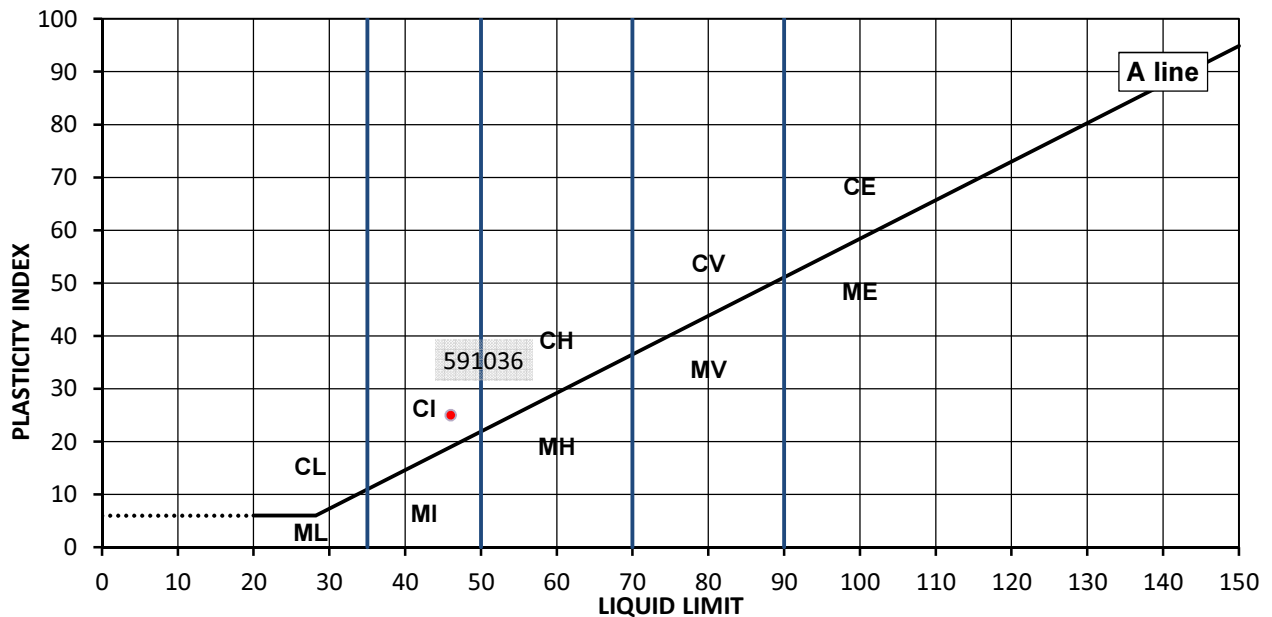
TEST RESULTS

Laboratory Reference: 591036
Sample Reference: D

Description: Greyish brown slightly gravelly CLAY
Location: WS03
Sample Preparation: Tested after >425um removed by hand

Sample Type: D
Depth Top [m]: 4
Depth Base [m]: 4.45

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 591037

Sample Reference: D

Description: Yellowish brown to grey slightly gravelly slightly sandy silty CLAY

Sample Type: D

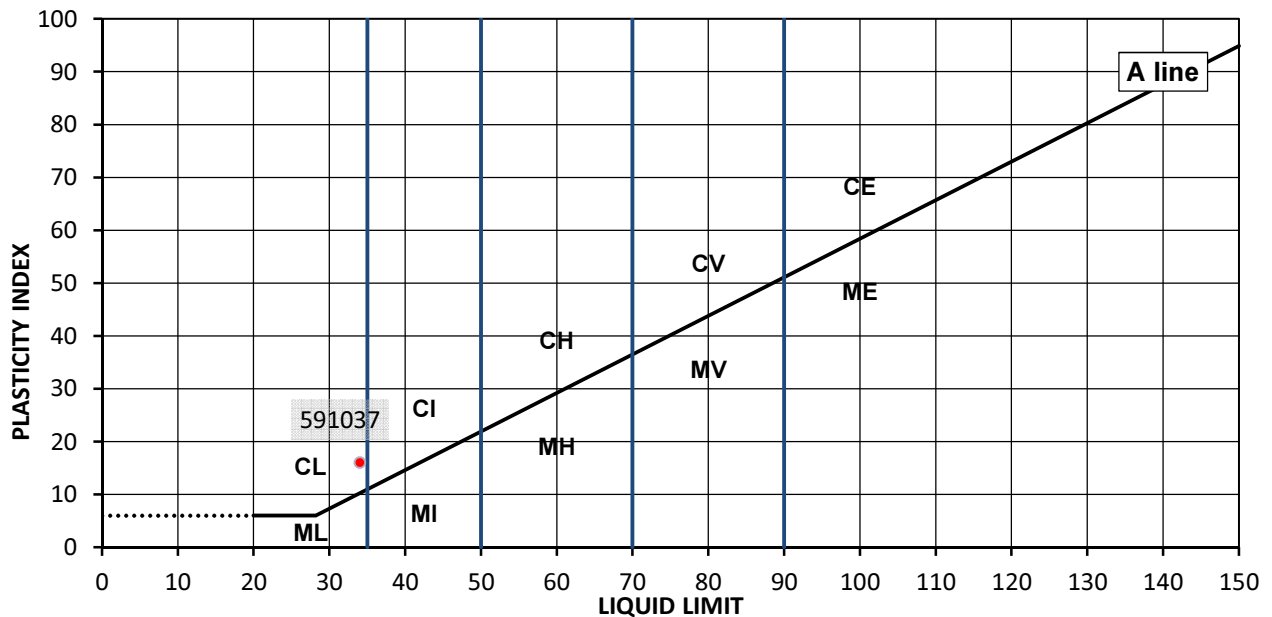
Location: WS05

Depth Top [m]: 2.2

Sample Preparation: Tested after >425um removed by hand

Depth Base [m]: Not Given

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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

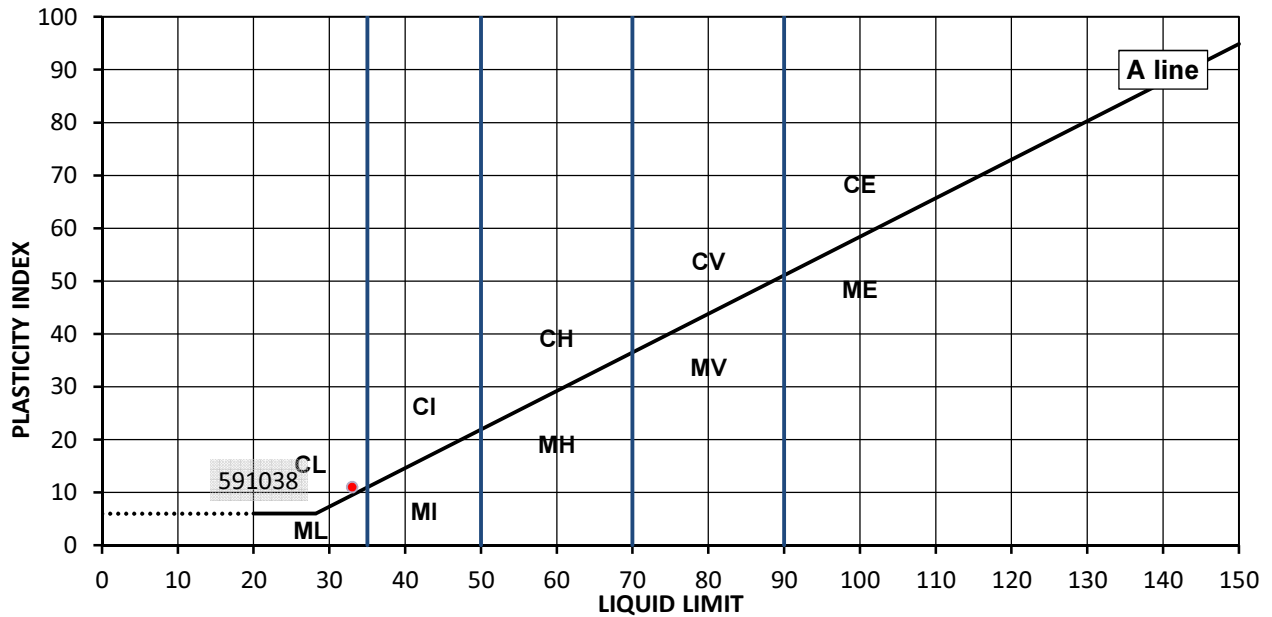
TEST RESULTS

Laboratory Reference: 591038
Sample Reference: B

Description: Brown slightly gravelly sandy CLAY
Location: WS07
Sample Preparation: Tested after >425um removed by hand

Sample Type: B
Depth Top [m]: 0.3
Depth Base [m]: 1

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
17	33	22	11	77



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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

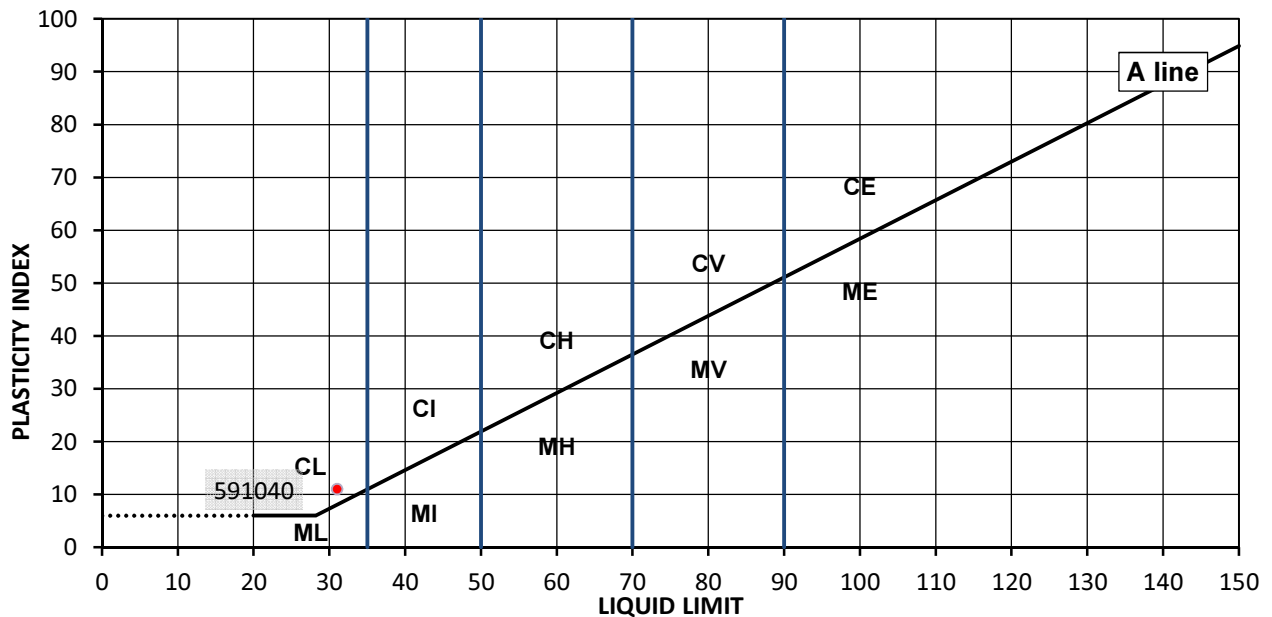
TEST RESULTS

Laboratory Reference: 591040
Sample Reference: D

Description: Yellowish brown to grey silty CLAY
Location: WS07
Sample Preparation: Tested in natural condition

Sample Type: D
Depth Top [m]: 3.5
Depth Base [m]: Not Given

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 591042

Sample Reference: D

Description: Orange slightly gravelly slightly sandy CLAY

Sample Type: B

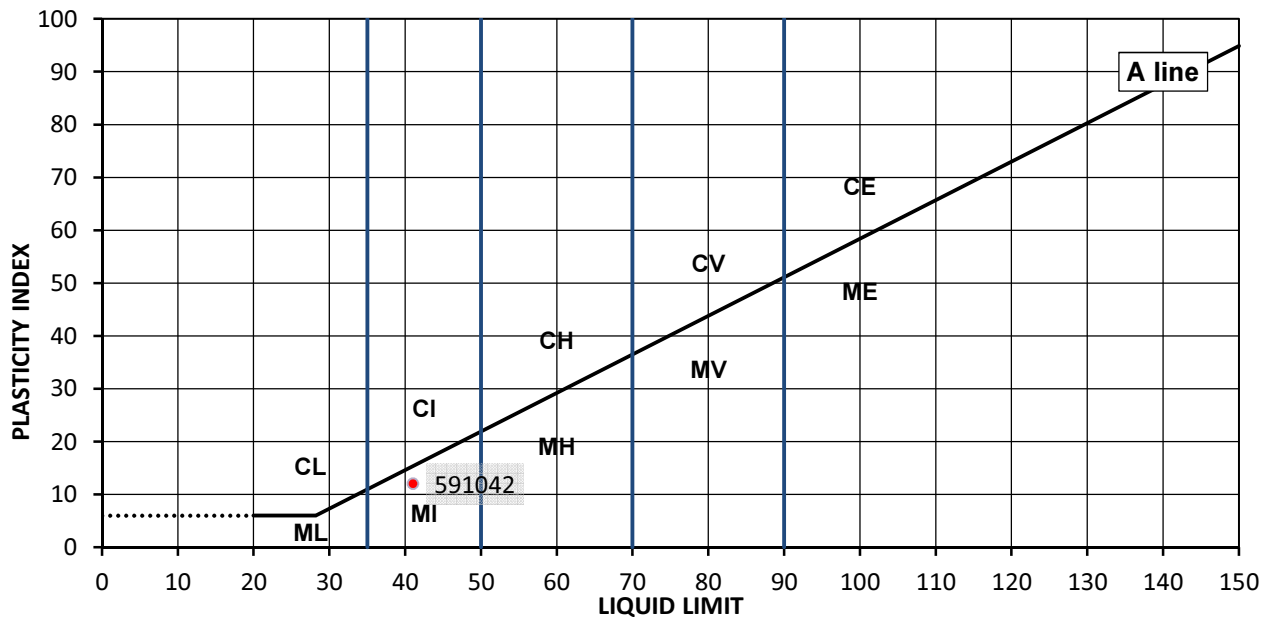
Location: WS11

Depth Top [m]: 1.2

Sample Preparation: Tested after >425um removed by hand

Depth Base [m]: 1.65

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
22	41	29	12	62



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 591047

Sample Reference: D

Description: Yellowish brown to grey slightly gravelly CLAY

Sample Type: D

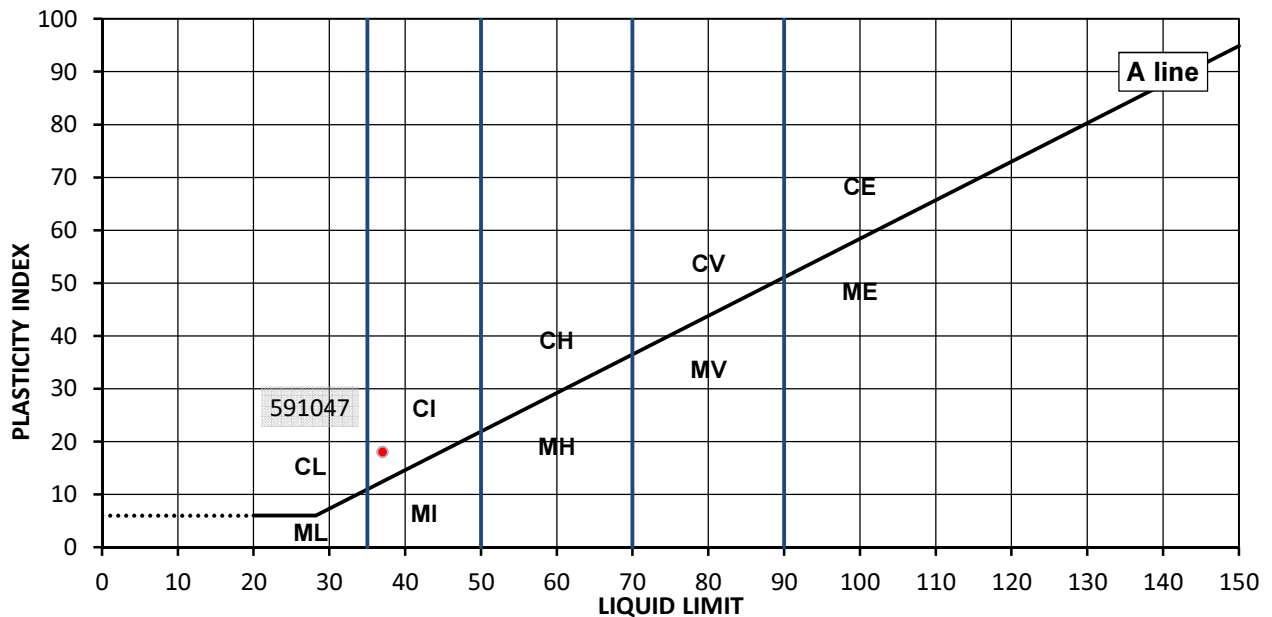
Location: WS13

Depth Top [m]: 3.3

Sample Preparation: Tested in natural condition

Depth Base [m]: Not Given

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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

Description: Yellowish brown slightly gravelly slightly sandy CLAY

Sample Type: B

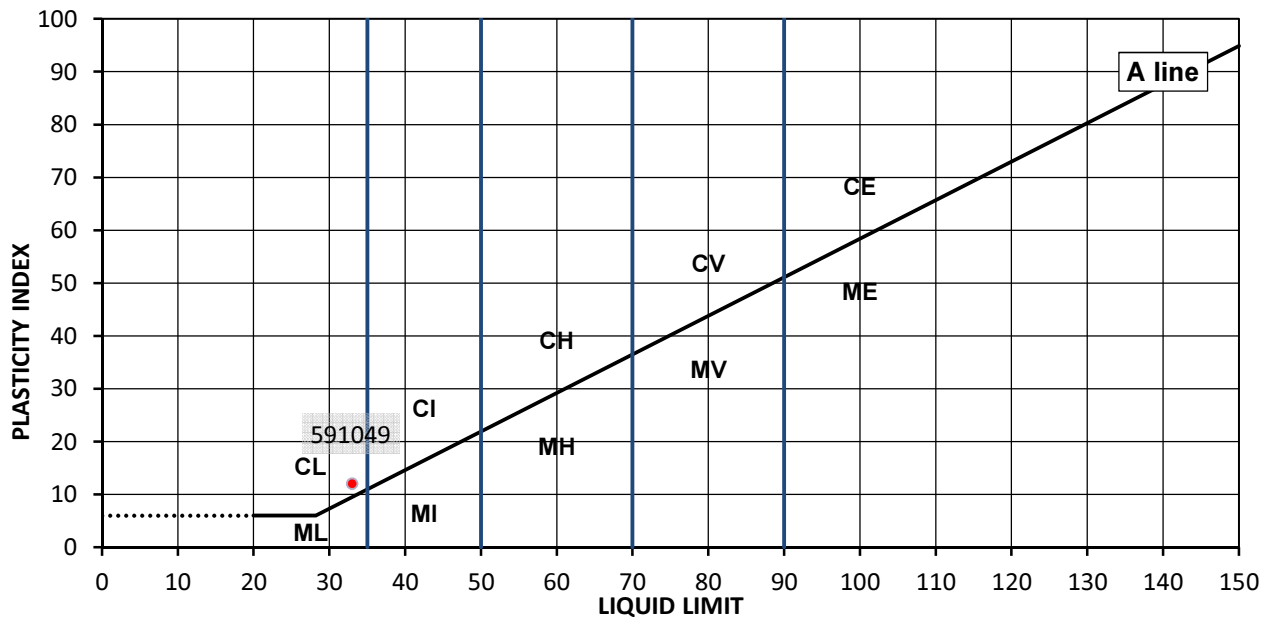
Location: WS14

Depth Top [m]: 1.2

Sample Preparation: Tested after >425um removed by hand

Depth Base [m]: 2

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279
Job Number: 16-20746
Date Sampled: 03/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

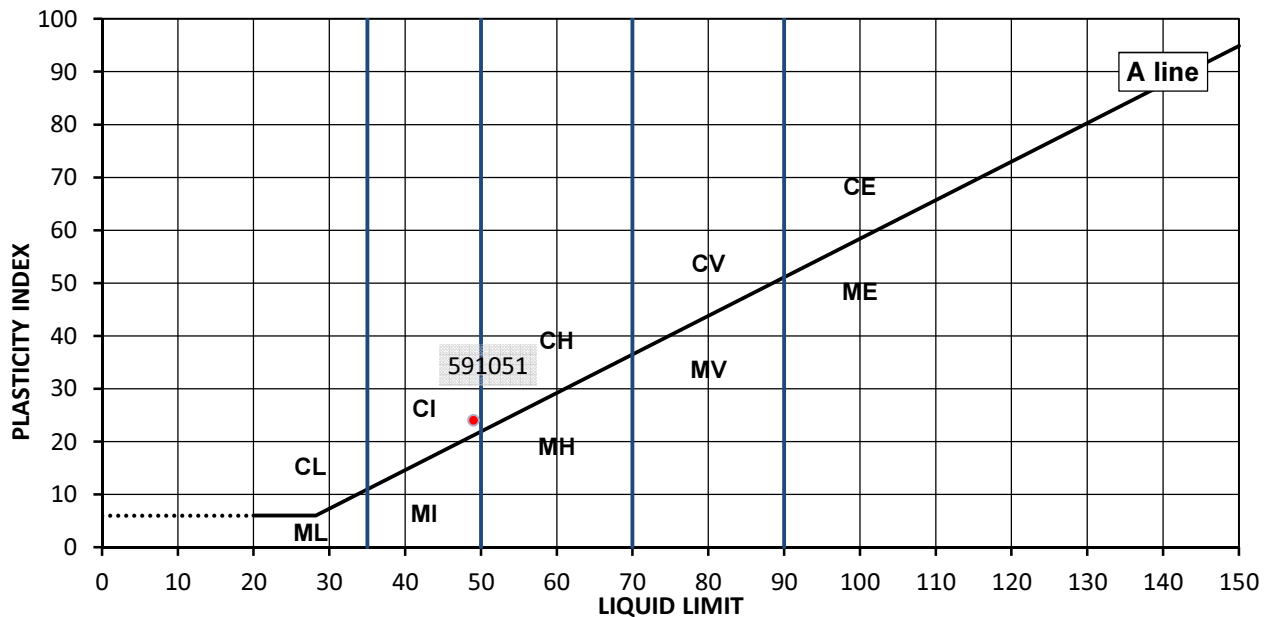
TEST RESULTS

Laboratory Reference: 591051
Sample Reference: D

Description: Greyish brown silty CLAY
Location: WS20
Sample Preparation: Tested in natural condition

Sample Type: D
Depth Top [m]: 4
Depth Base [m]: 4.45

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

TEST RESULTS

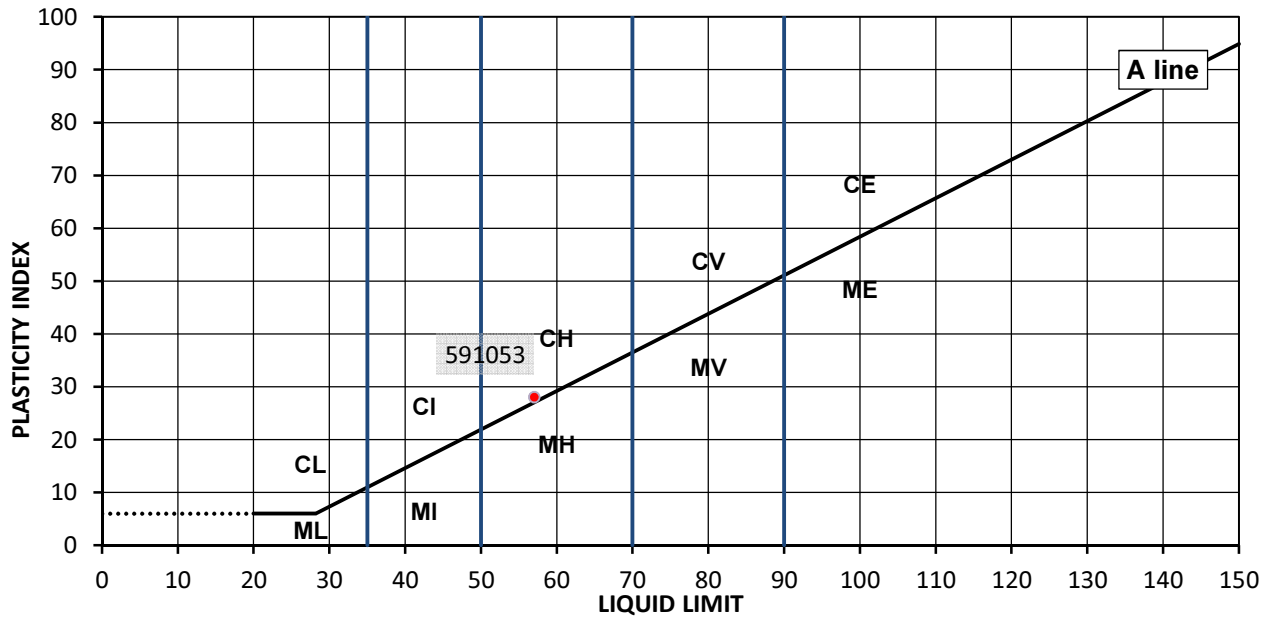
Laboratory Reference: 591053

Sample Reference: D

Description: Yellowish brown to brownish grey silty CLAY
Location: WS15
Sample Preparation: Tested in natural condition

Sample Type: D
Depth Top [m]: 2
Depth Base [m]: 2.45

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
29	57	29	28	100



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279
Job Number: 16-20746
Date Sampled: 03/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

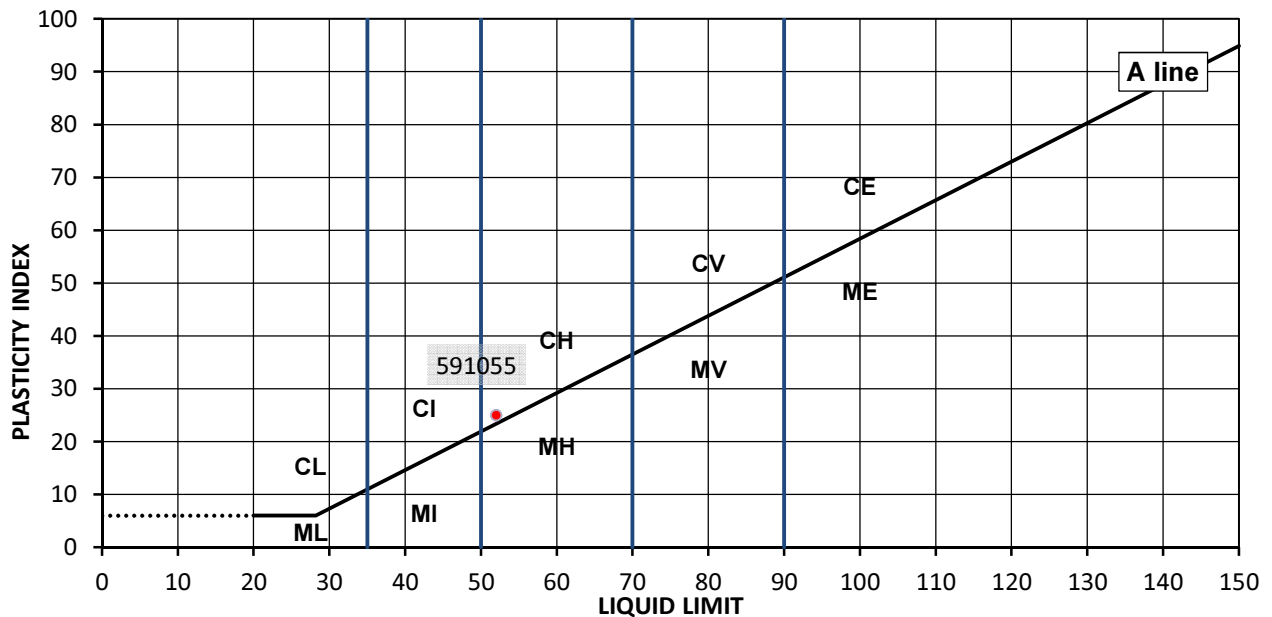
TEST RESULTS

Laboratory Reference: 591055
Sample Reference: D

Description: Brownish grey slightly gravelly silty CLAY
Location: WS16
Sample Preparation: Tested after >425um removed by hand

Sample Type: D
Depth Top [m]: 0.8
Depth Base [m]: Not Given

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
24	52	27	25	96



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279
Job Number: 16-20746
Date Sampled: 09/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591057

Sample Reference: D

Description: Yellowish brown to brown slightly gravelly silty CLAY

Sample Type: D

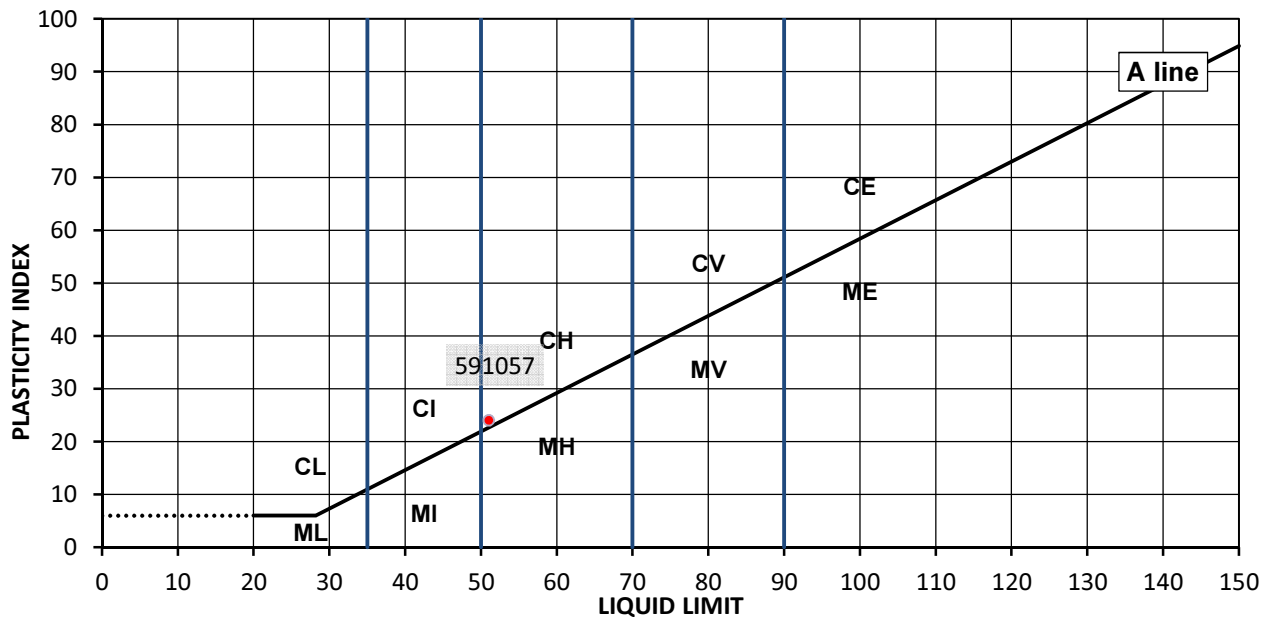
Location: WS18

Depth Top [m]: 1.6

Sample Preparation: Tested after washing to remove >425um

Depth Base [m]: Not Given

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
25	51	27	24	73



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

TEST RESULTS

Laboratory Reference: 591063

Sample Reference: D

Description: Yellowish brown to grey slightly gravelly silty CLAY

Sample Type: D

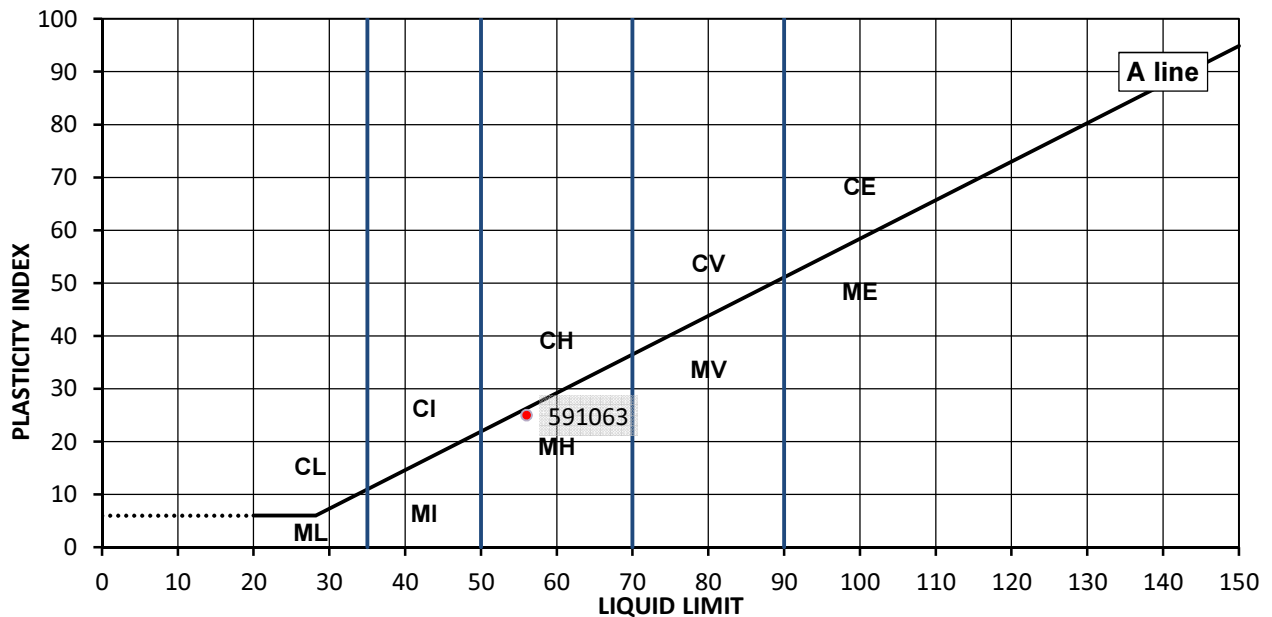
Location: WS22

Depth Top [m]: 1.2

Sample Preparation: Tested after >425um removed by hand

Depth Base [m]: 1.65

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
25	56	31	25	98



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

Client Reference: C161279
Job Number: 16-20746
Date Sampled: 31/05/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

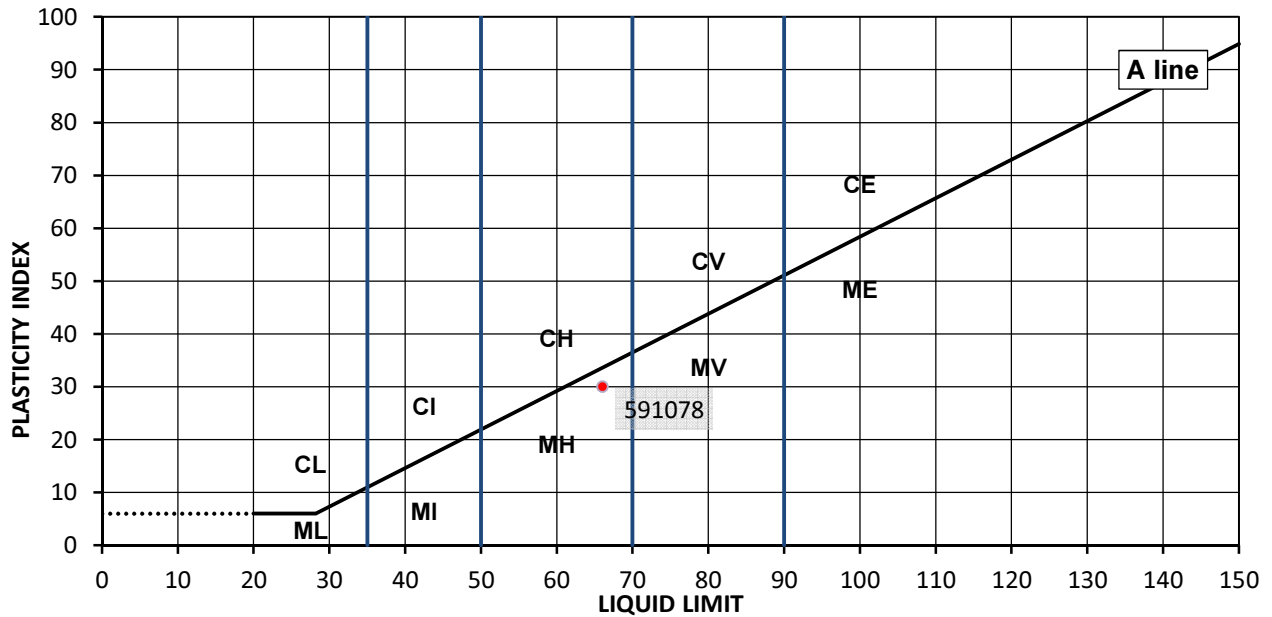
TEST RESULTS

Laboratory Reference: 591078
Sample Reference: D

Description: Brown slightly sandy CLAY with roottlets
Location: BH02
Sample Preparation: Tested after >425um removed by hand

Sample Type: D
Depth Top [m]: 1.3
Depth Base [m]: Not Given

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

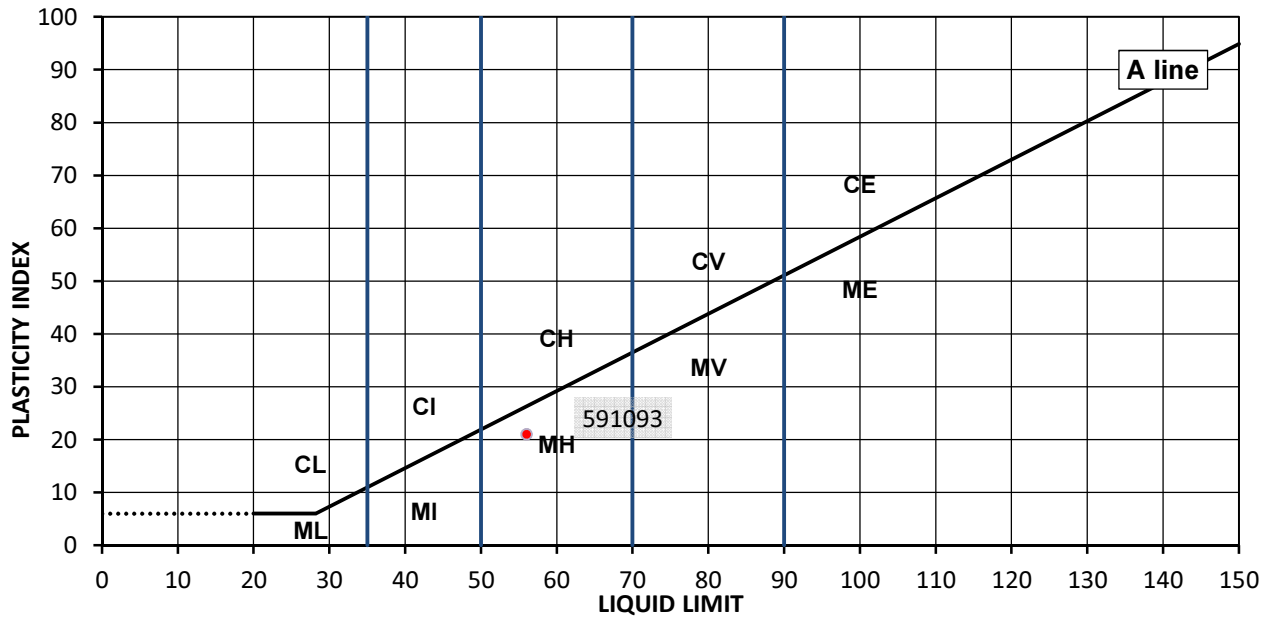
TEST RESULTS

Laboratory Reference: 591093
Sample Reference: B

Description: Brown gravelly slightly sandy silty CLAY
Location: BH04
Sample Preparation: Tested after >425um removed by hand

Sample Type: B
Depth Top [m]: 0.7
Depth Base [m]: Not Given

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
23	56	35	21	79



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

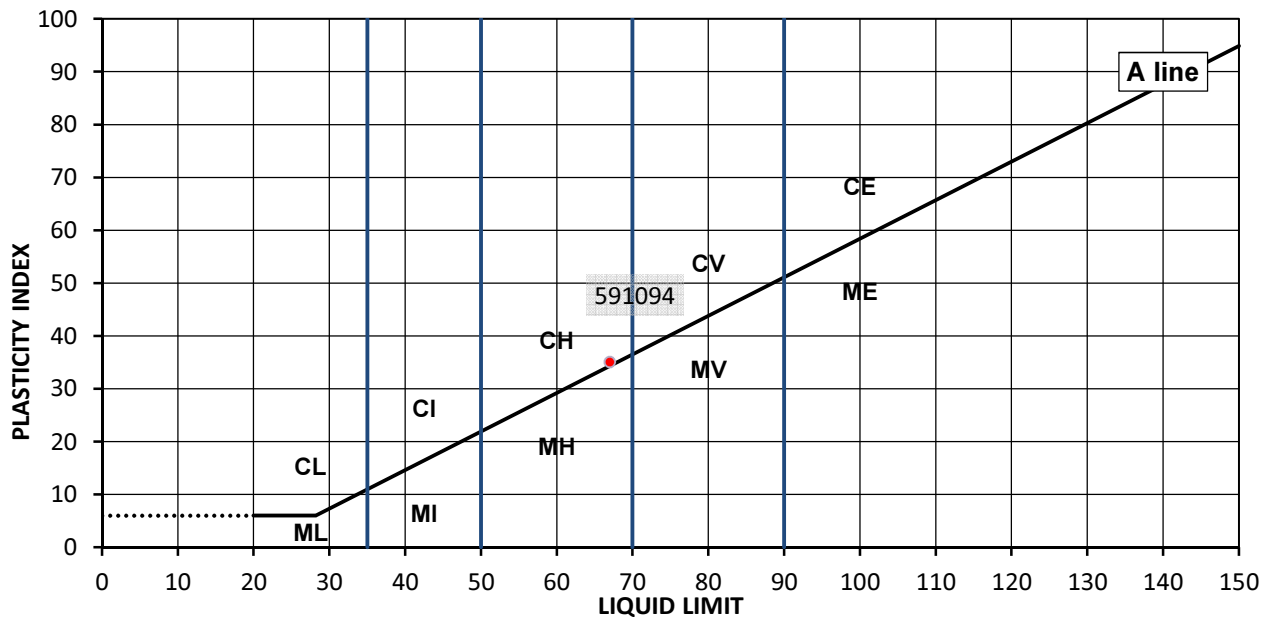
TEST RESULTS

Laboratory Reference: 591094
Sample Reference: B

Description: Yellowish brown to grey silty CLAY
Location: BH04
Sample Preparation: Tested in natural condition

Sample Type: B
Depth Top [m]: 1.2
Depth Base [m]: Not Given

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

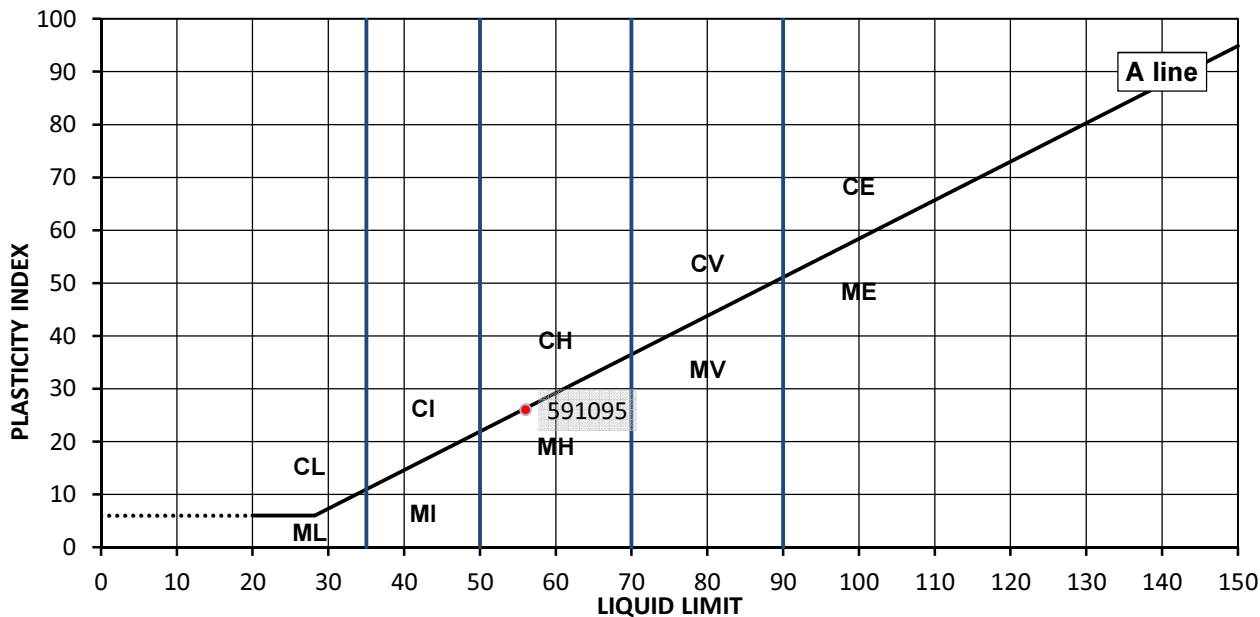
TEST RESULTS

Laboratory Reference: 591095
Sample Reference: U

Description: Yellowish brown to grey silty CLAY
Location: BH04
Sample Preparation: Tested in natural condition

Sample Type: U
Depth Top [m]: 2
Depth Base [m]: 2.45

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

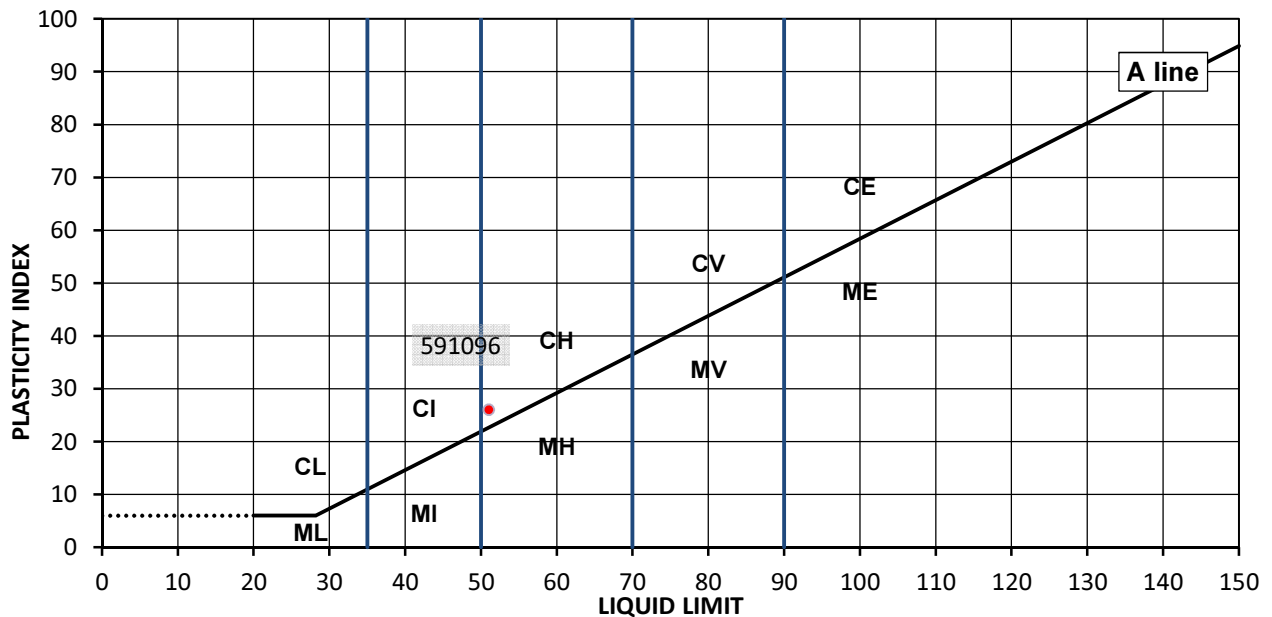
TEST RESULTS

Laboratory Reference: 591096
Sample Reference: U

Description: Greyish brown silty CLAY
Location: BH04
Sample Preparation: Tested in natural condition

Sample Type: U
Depth Top [m]: 4
Depth Base [m]: 4.45

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



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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
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: 30/06/2016
Sampled By: Not Given

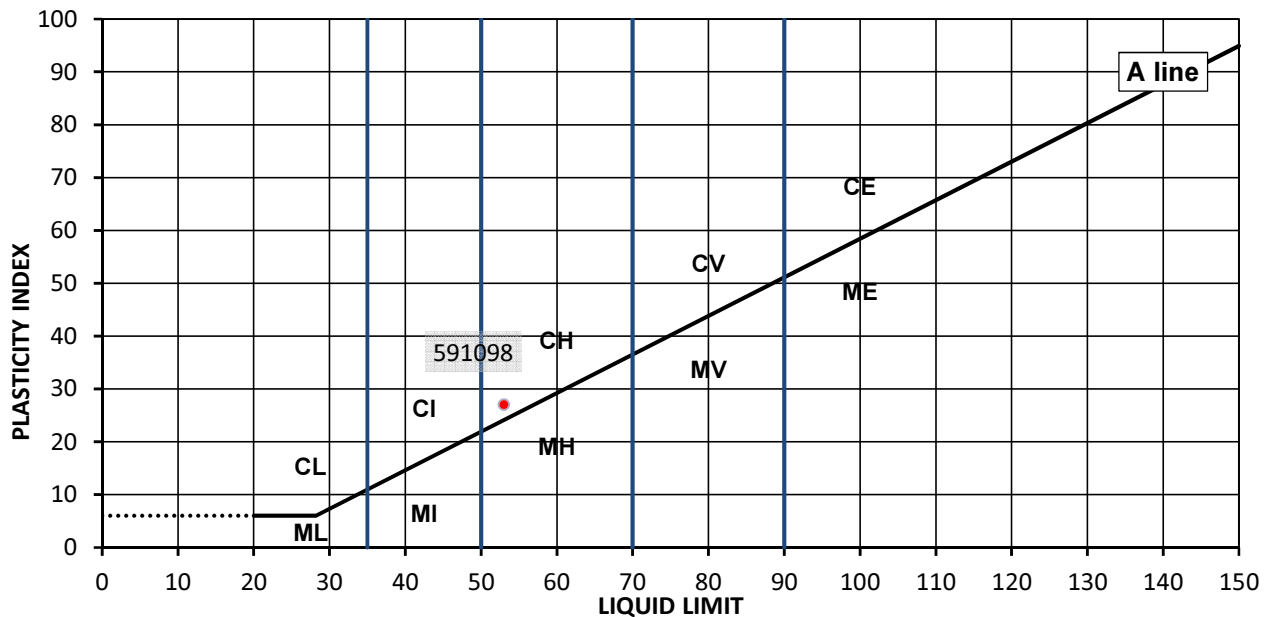
TEST RESULTS

Laboratory Reference: 591098
Sample Reference: C

Description: Greyish brown CLAY
Location: BH04
Sample Preparation: Tested in natural condition

Sample Type: U
Depth Top [m]: 9
Depth Base [m]: 9.4

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
21	53	26	27	100



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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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
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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Summary of Liquid and Plastic Limits

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



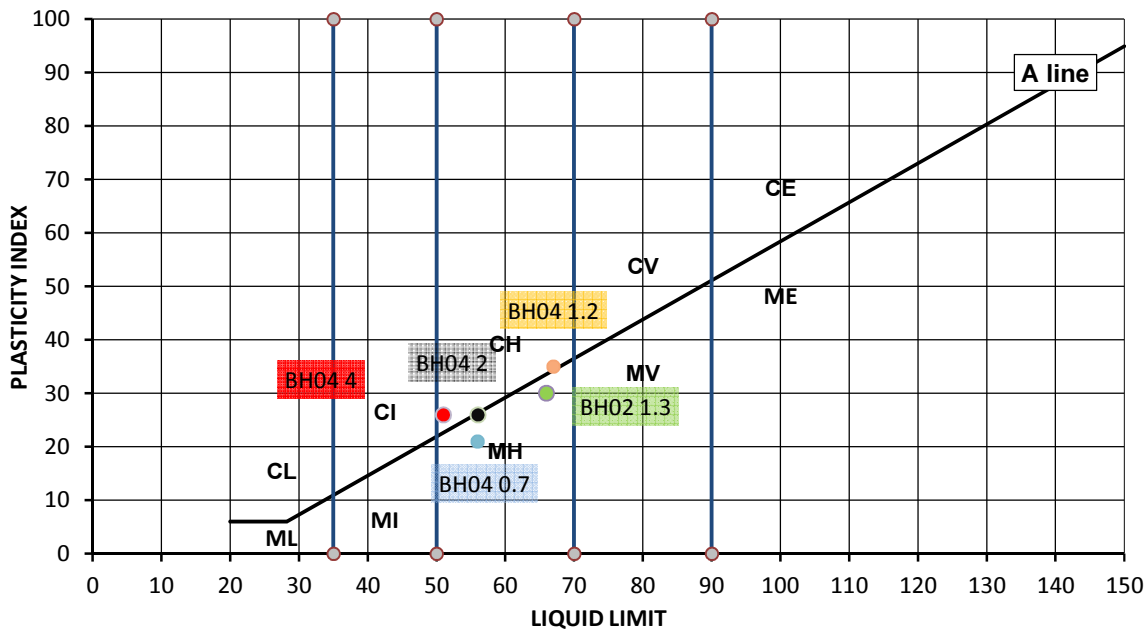
Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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 Pytlak
PL Head of Geotechnical section

Signed: Terry Stafford
Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

"Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Summary of Liquid and Plastic Limits

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



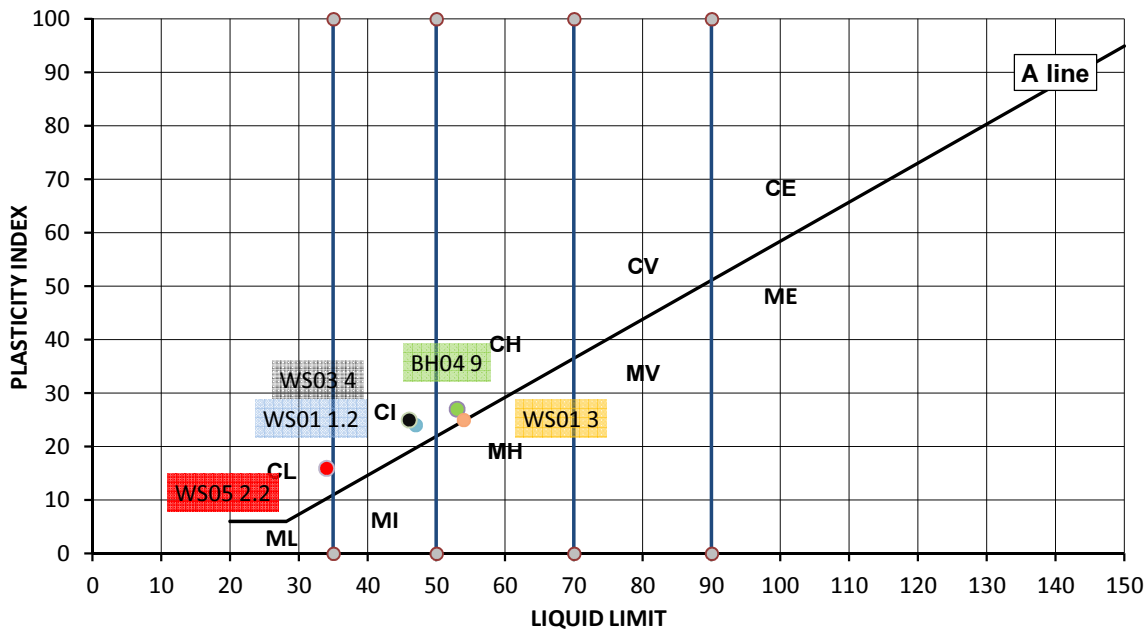
Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

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: 06,07,08/06/2016
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
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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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 Pytlík
PL Head of Geotechnical section

Signed: Terry Stafford
Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

"Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Summary of Liquid and Plastic Limits

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



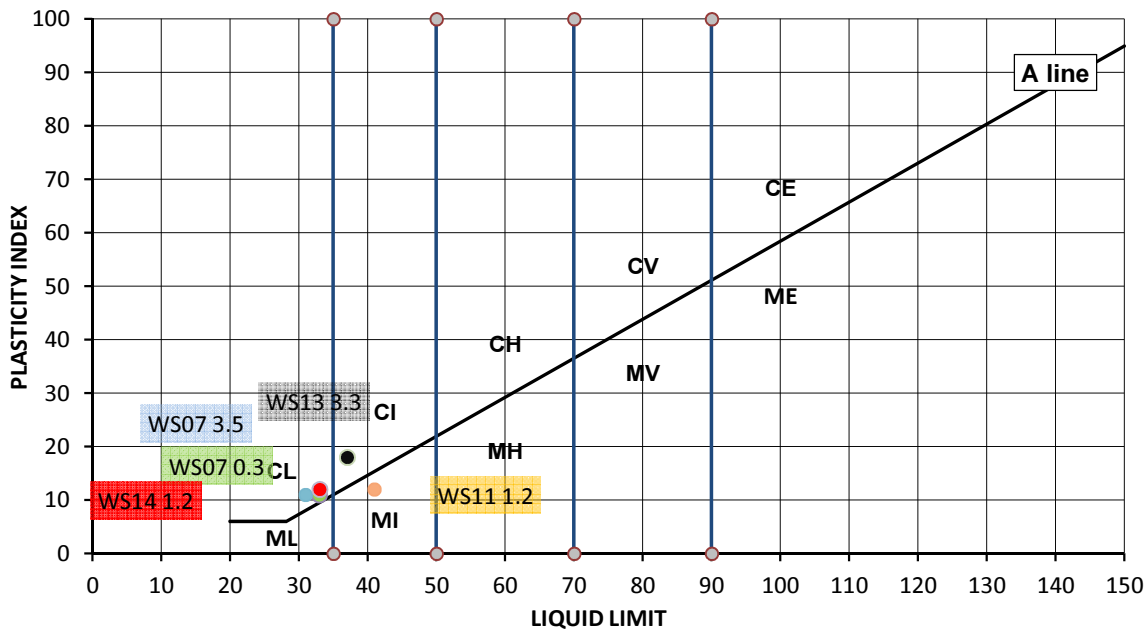
Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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 Pytlík
PL Head of Geotechnical section

Signed: Terry Stafford
Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

"Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

Summary of Liquid and Plastic Limits

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



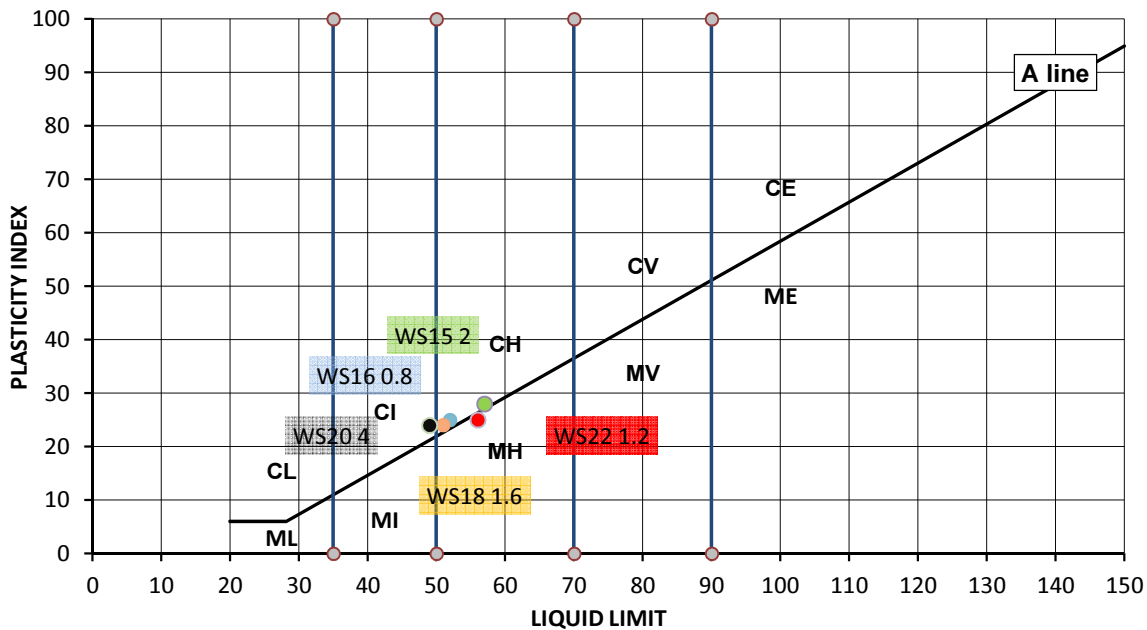
Tested in Accordance with BS1377-2: 1990: Clauses 4.4 & 5: One Point Method

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	0.8	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

C	Clay	L	Low	Liquid Limit	below 35
M	Silt	I	Medium		35 to 50
		H	High		50 to 70
		V	Very high		70 to 90
		E	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 Pytlík
PL Head of Geotechnical section

Signed: Terry Stafford
Geotechnical Manager

Date Reported: 12/07/2016

for and on behalf of i2 Analytical Ltd

"Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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."



TEST CERTIFICATE

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



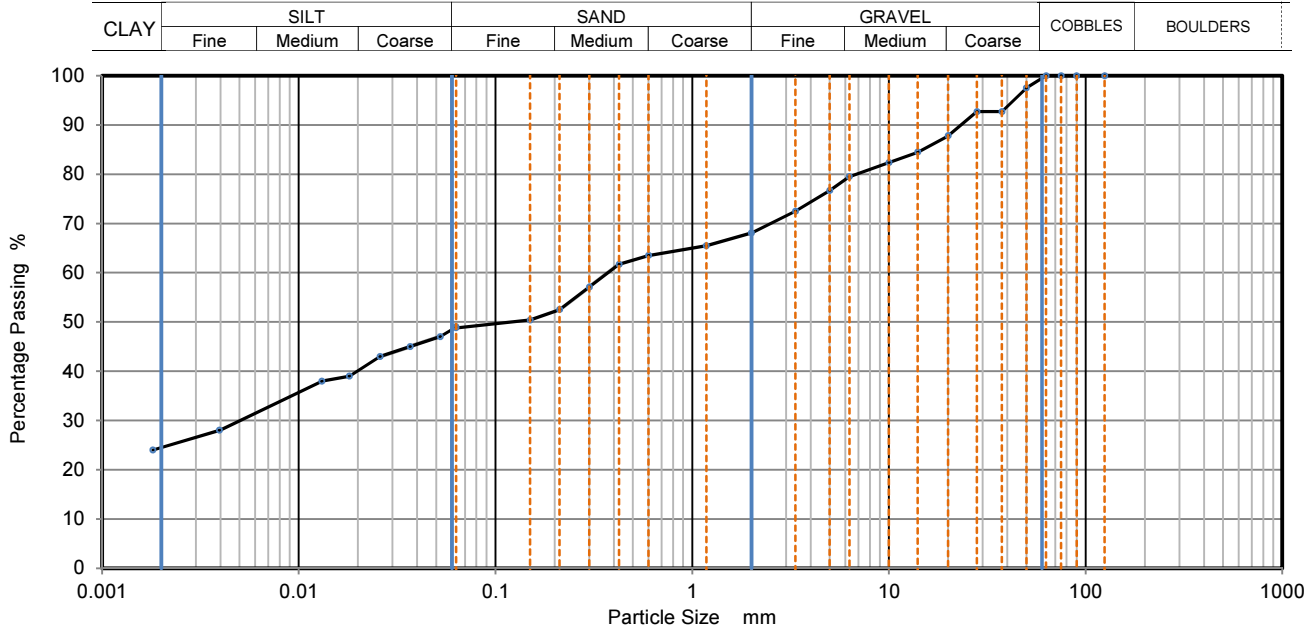
Determination of Particle Size Distribution

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: 591033 Sample Reference: B
Sample description: Yellowish brown slightly gravelly CLAY Sample Type: B
Location: WS01 Depth Top [m]: 1.2
Supplier: Not Given Depth Base [m]: 1.9



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

Signed: *Terry Stafford*
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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



TEST CERTIFICATE

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



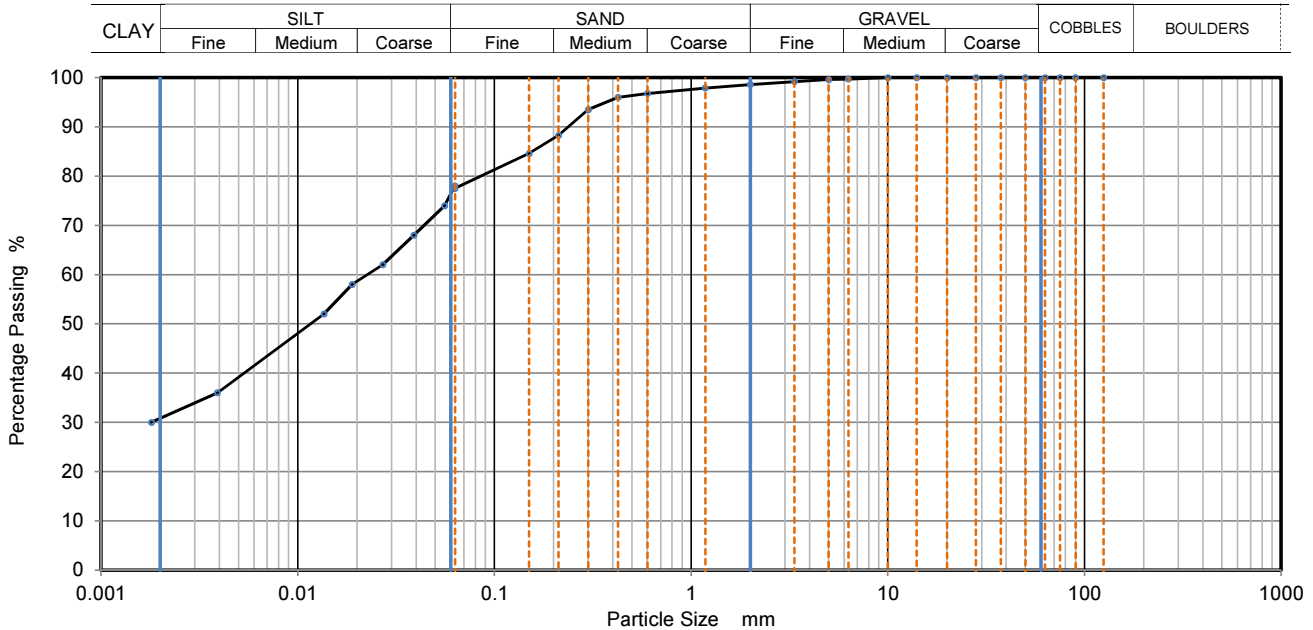
Determination of Particle Size Distribution

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: 08/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591039 Sample Reference: B
Sample description: Yellowish brown slightly sandy silty CLAY Sample Type: B
Location: WS07 Depth Top [m]: 2
Supplier: Not Given Depth Base [m]: 3



Sieving		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		
0.425	96	Particle density (assumed) 2.65 Mg/m3	
0.3	94		
0.212	88		
0.15	85		
0.063	78		

Dry Mass of sample [g]: 1057

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		

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

Signed: *Terry Stafford*
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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE**Determination of Particle Size Distribution**

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

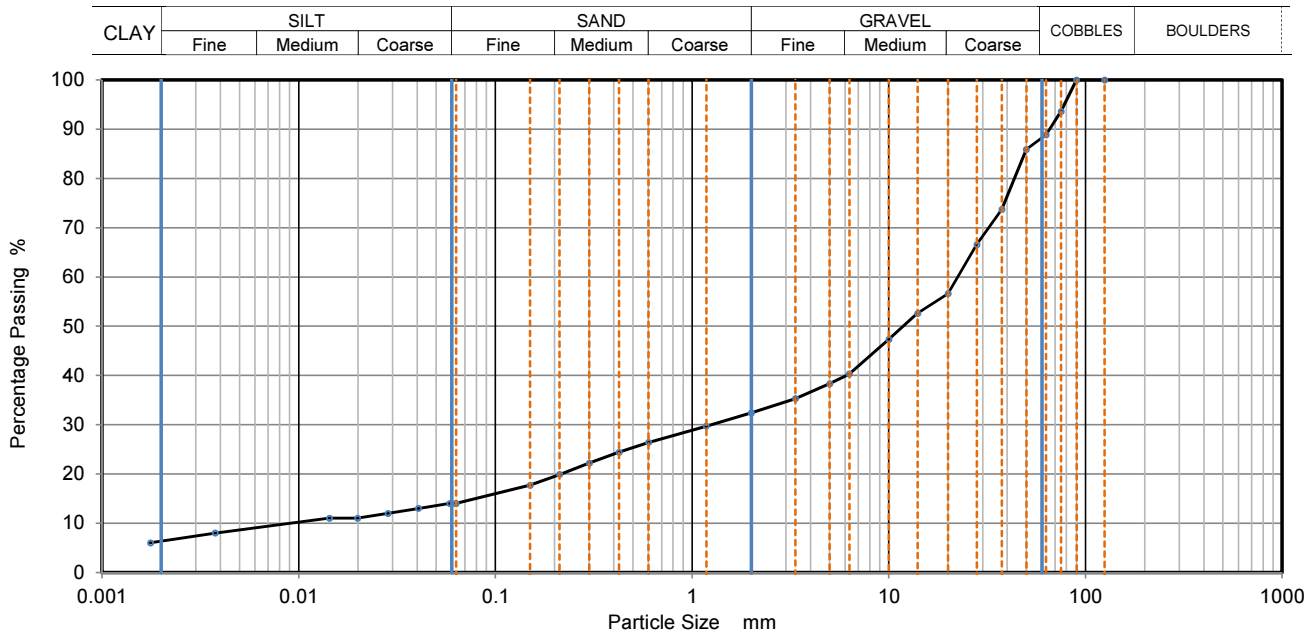


Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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: 02/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591046 Sample Reference: B
Sample description: Yellowish brown sandy clayey fine to coarse GRAVEL Sample Type: B
Location: WS13 Depth Top [m]: 0.5
Supplier: Not Given Depth Base [m]: 1.3



Sieving		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/m ³
0.3	22		
0.212	20		
0.15	18		
0.063	14		

Dry Mass of sample [g]: 9192

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

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE**Determination of Particle Size Distribution**

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

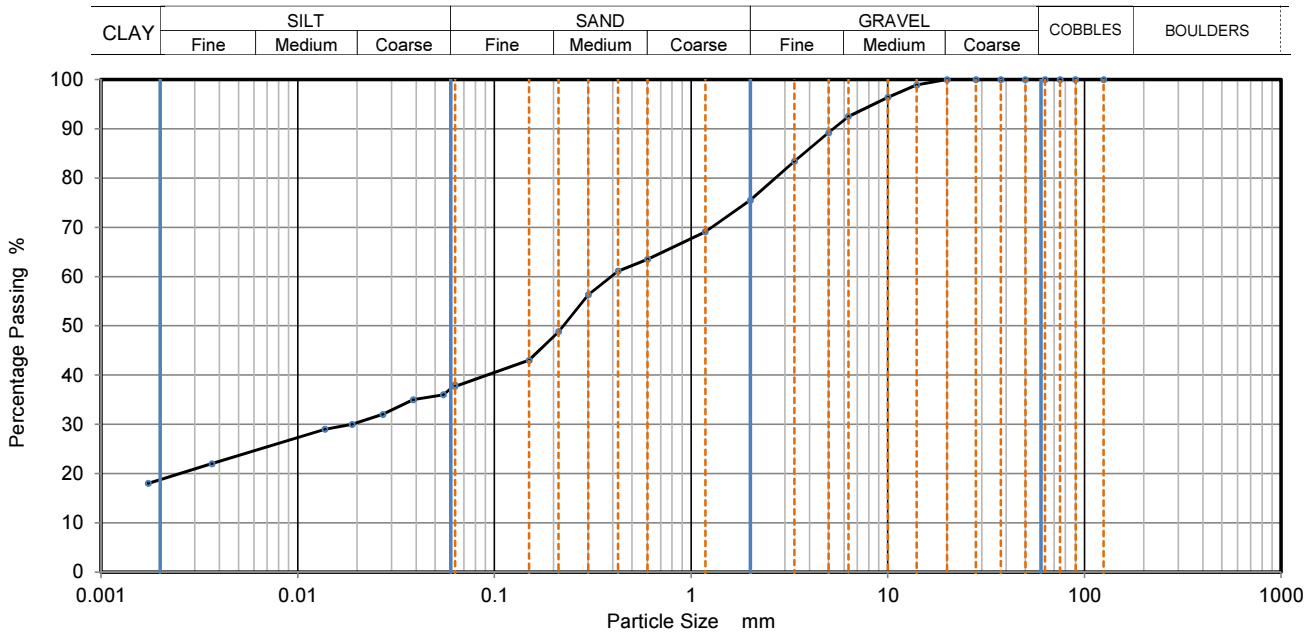


Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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: 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
Sample description: Yellowish brown slightly gravelly slightly sandy CLAY Sample Type: B
Location: WS14 Depth Top [m]: 1.2
Supplier: Not Given Depth Base [m]: 2



Sieving		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		

Dry Mass of sample [g]: 1159

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:

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

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE**Determination of Particle Size Distribution**

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

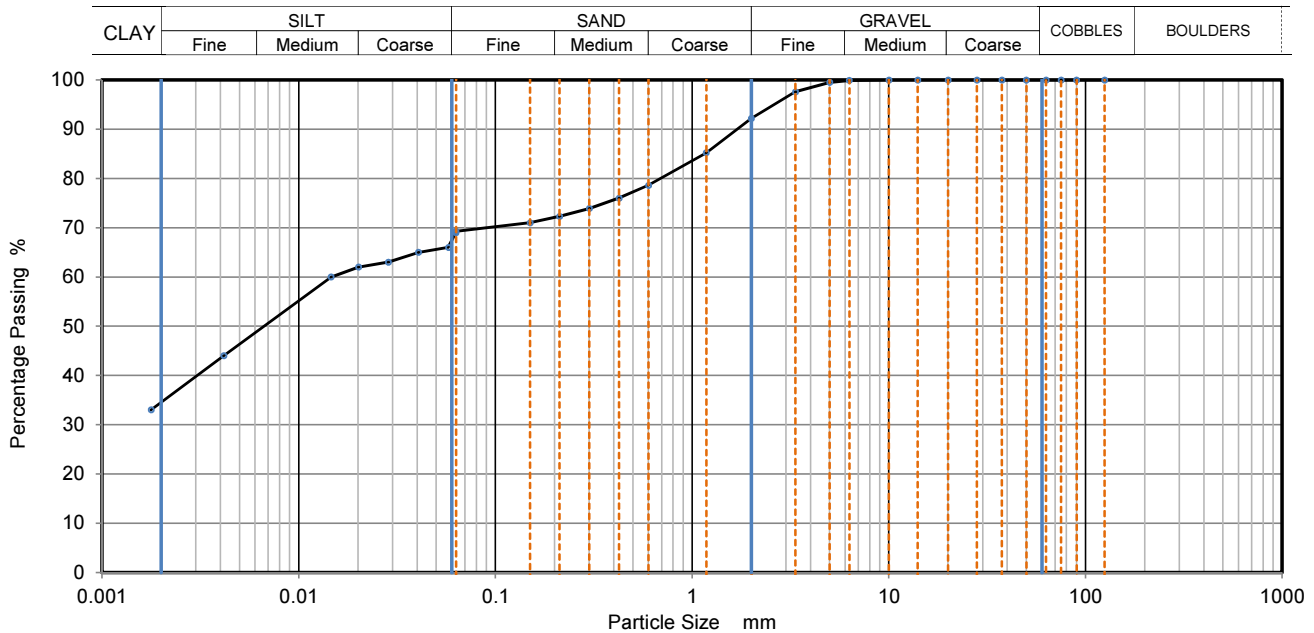


Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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: 07/01/2016
Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591067 Sample Reference: D
Sample description: Yellowish brown slightly gravelly slightly sandy Sample Type: D
CLAY
Location: WS25 Depth Top [m]: 1
Supplier: Not Given Depth Base [m]: 2



Sieving		Sedimentation	
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		
2	92		
1.18	85		
0.6	79	Particle density (assumed)	
0.425	76	2.65	Mg/m ³
0.3	74		
0.212	72		
0.15	71		
0.063	69		

Dry Mass of sample [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
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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE**Determination of Particle Size Distribution**

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

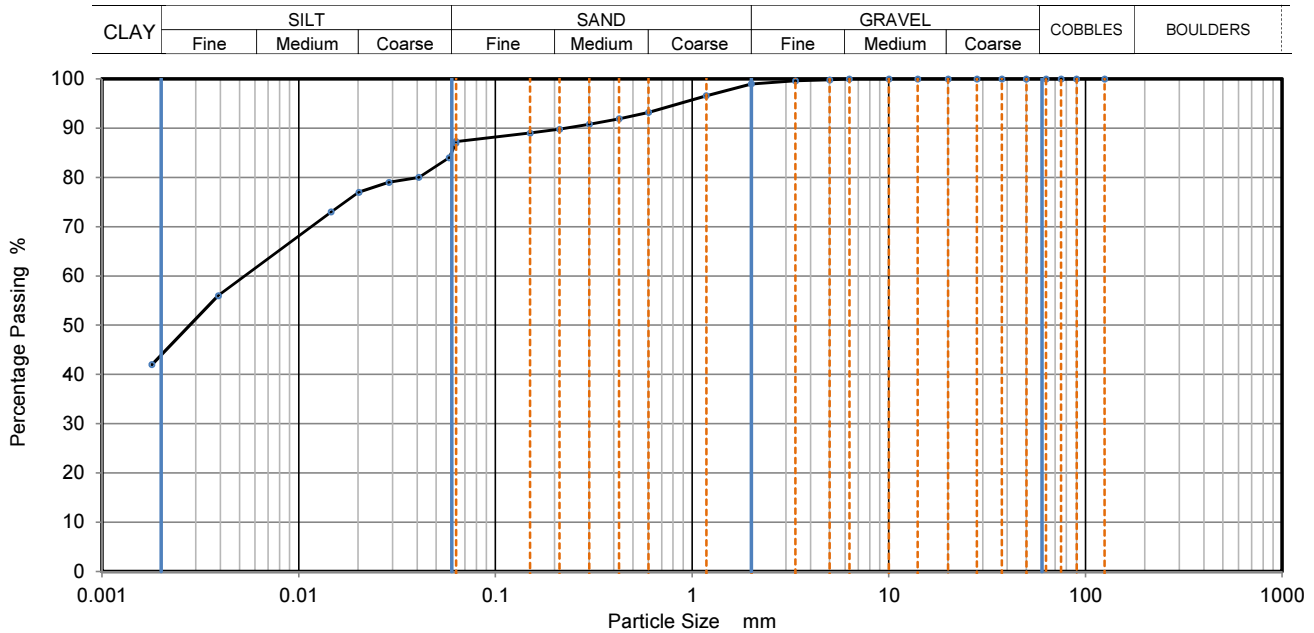


Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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 CLAY Sample Type: B
Location: WS25 Depth Top [m]: 2
Supplier: Not Given Depth Base [m]: 3



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
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		
0.425	92	Particle density (assumed)	
0.3	91	2.65	Mg/m ³
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:

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

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE**Determination of Particle Size Distribution**

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

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

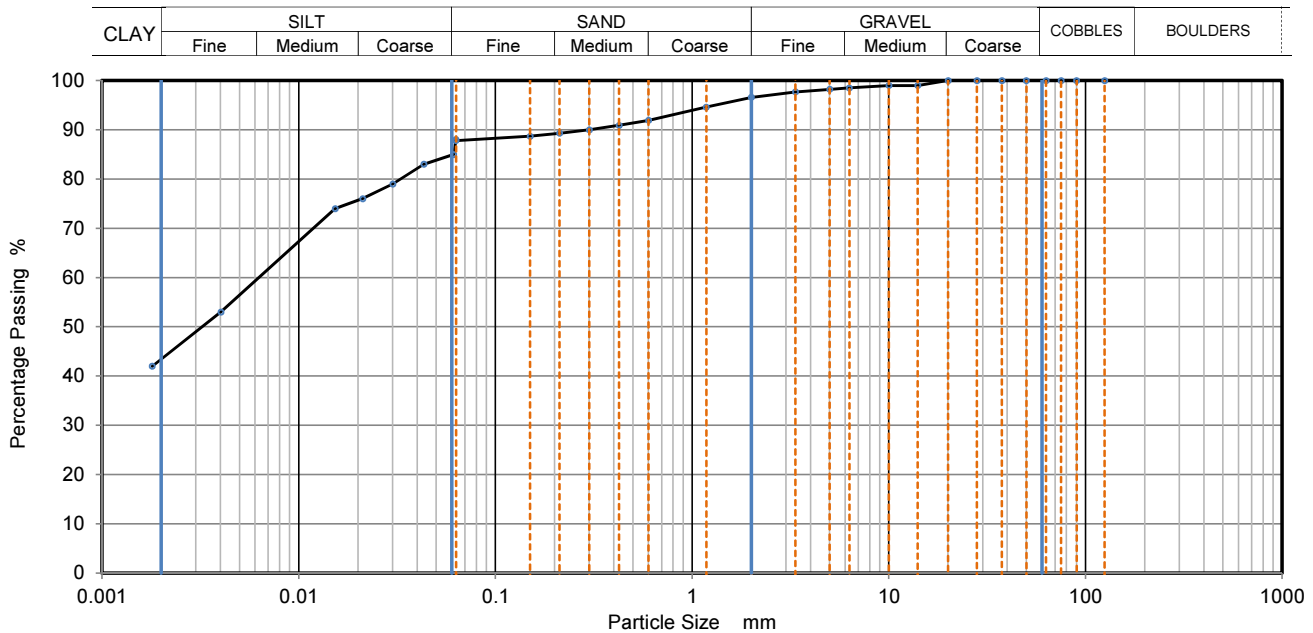


Environmental Science

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

TEST RESULTS Laboratory Reference: 591069 Sample Reference: B
Sample description: Greyish brown CLAY with thin laminae of orangish sand Sample Type: B
Location: WS25 Depth Top [m]: 3
Supplier: Not Given Depth 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/m ³
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:

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

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



4041

TEST CERTIFICATE

Determination of Particle Size Distribution

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

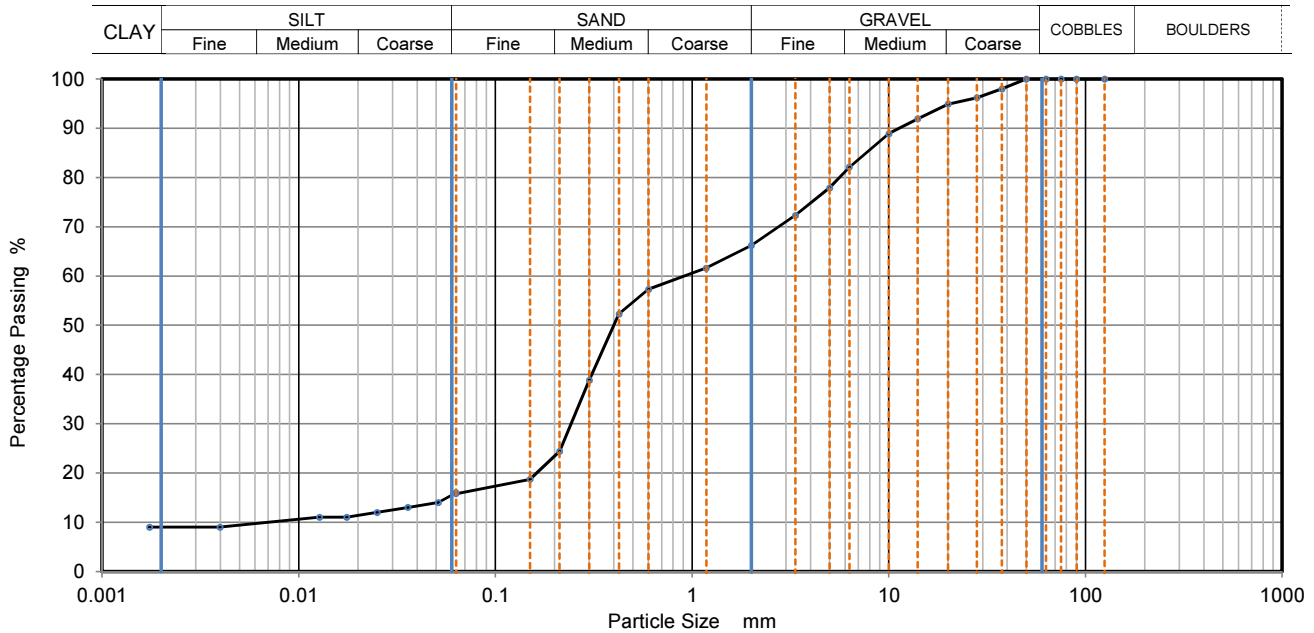


Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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: 31/05/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591081 Sample Reference: B
Sample description: Yellowish brown very gravelly clayey fine to coarse SAND Sample Type: B
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 Mass of sample [g]: 6117

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

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



TEST CERTIFICATE

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



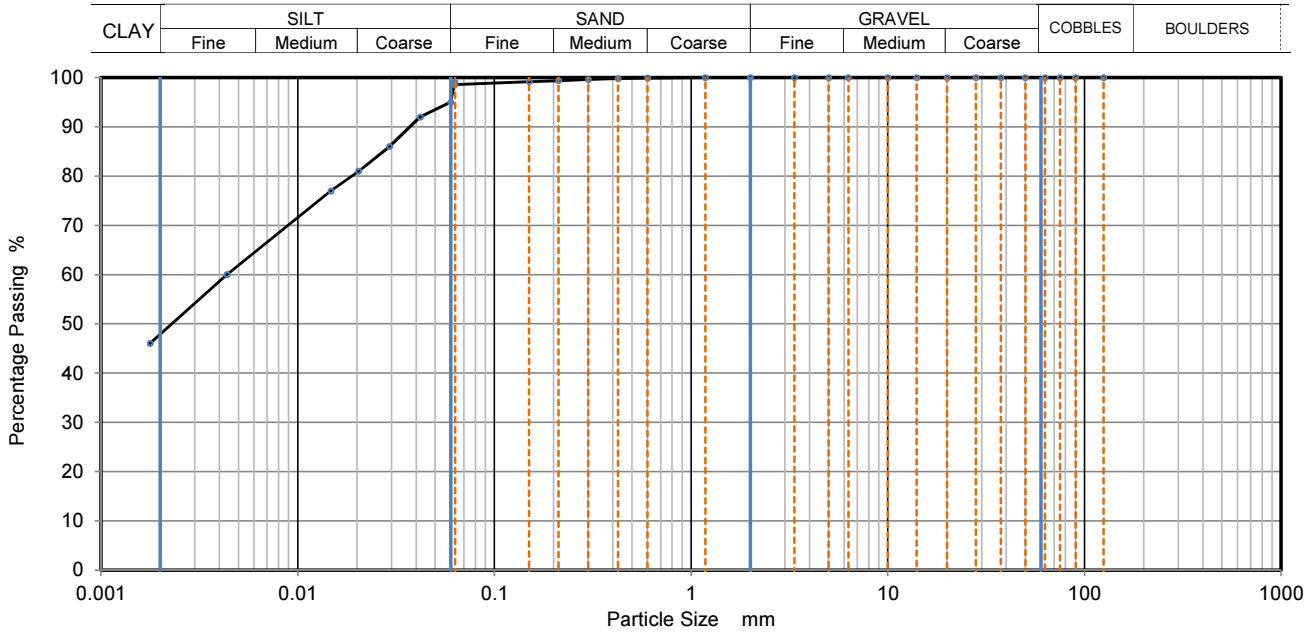
Determination of Particle Size Distribution

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: 02/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

TEST RESULTS Laboratory Reference: 591089 Sample Reference: B
Sample description: Grey CLAY Sample Type: B
Location: BH03 Depth Top [m]: 8
Supplier: Not Given Depth Base [m]: 8.4



Sieving		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		
0.425	100	Particle density (assumed) 2.65 Mg/m3	
0.3	100		
0.212	99		
0.15	99		
0.063	99		

Dry Mass of sample [g]: 1281

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		

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

Signed: *Terry Stafford*
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.
This report may not be reproduced other than in full without the prior written approval of the issuing laboratory.
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.



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

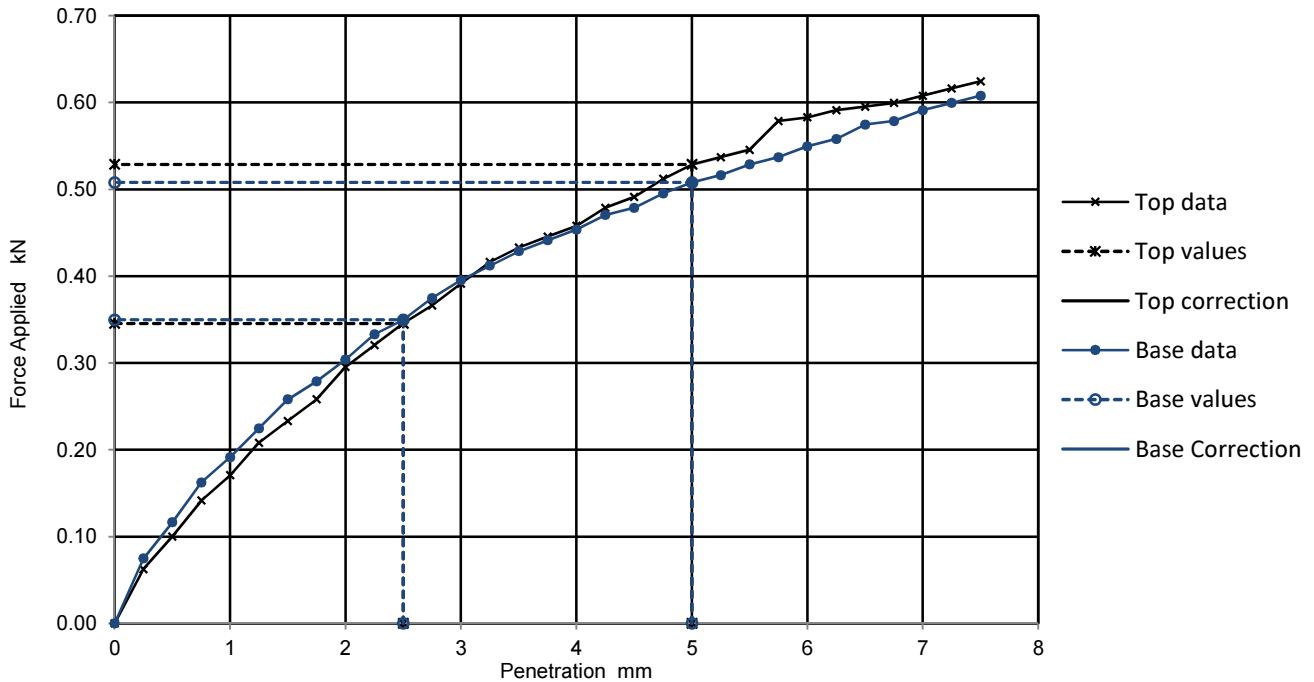
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 07/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591035 Sample Type: B
Sample Reference: B Depth Top [m]: 0.8
Location: WS03 Depth Base [m]: 1.5

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Brown gravelly sandy CLAY with rootlets	Time to surface	days
Material retained on 20mm sieve removed	10 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 2.02 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.63 Mg/m3	Surcharge applied	8 kg
	Moisture content 24.1 %		4.85 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	No	2.6	2.6	2.6	23.6
BASE	No	2.6	2.5	2.6	
					23.0

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

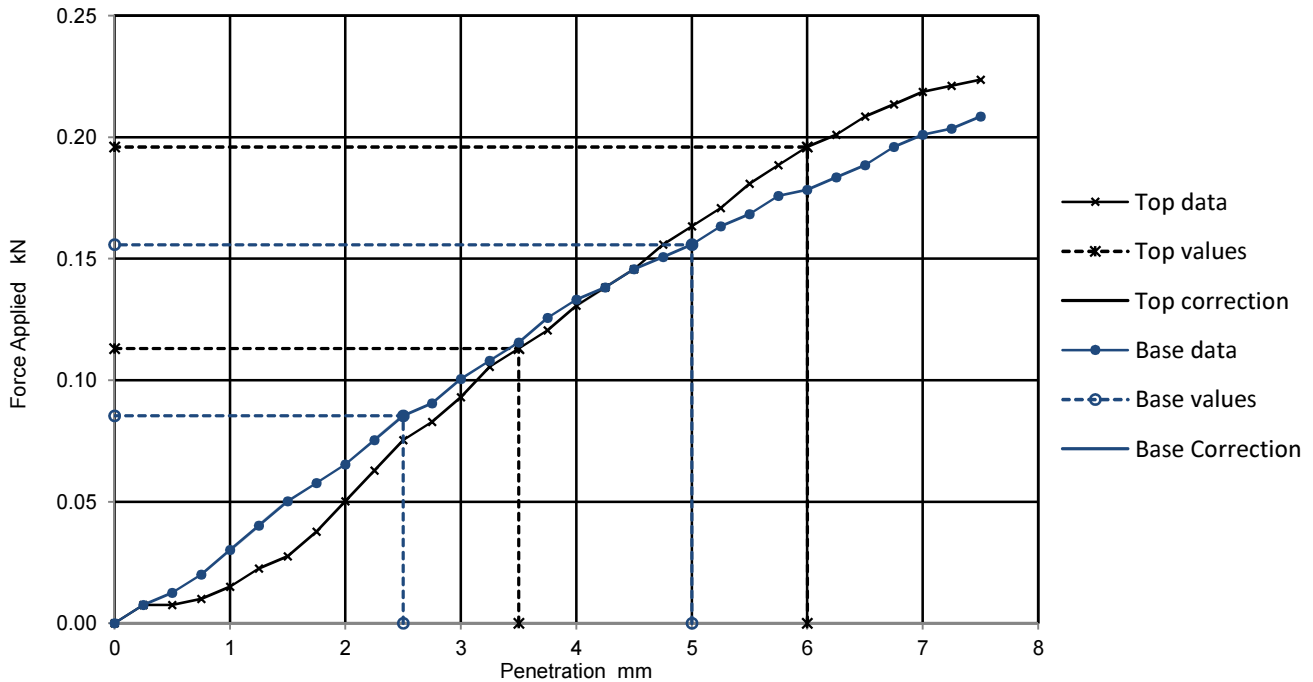
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 08/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591038 Sample Type: B
Sample Reference: B Depth Top [m]: 0.3
Location: WS07 Depth Base [m]: 1

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Brown slightly gravelly sandy CLAY	Time to surface	days
Material retained on 20mm sieve removed	5 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 2.02 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.64 Mg/m3	Surcharge applied	8 kg
	Moisture content 23.1 %		4.86 kPa

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	Yes	0.9	1.0	1.0		26.1
BASE	No	0.7	0.8	0.8		20.0

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

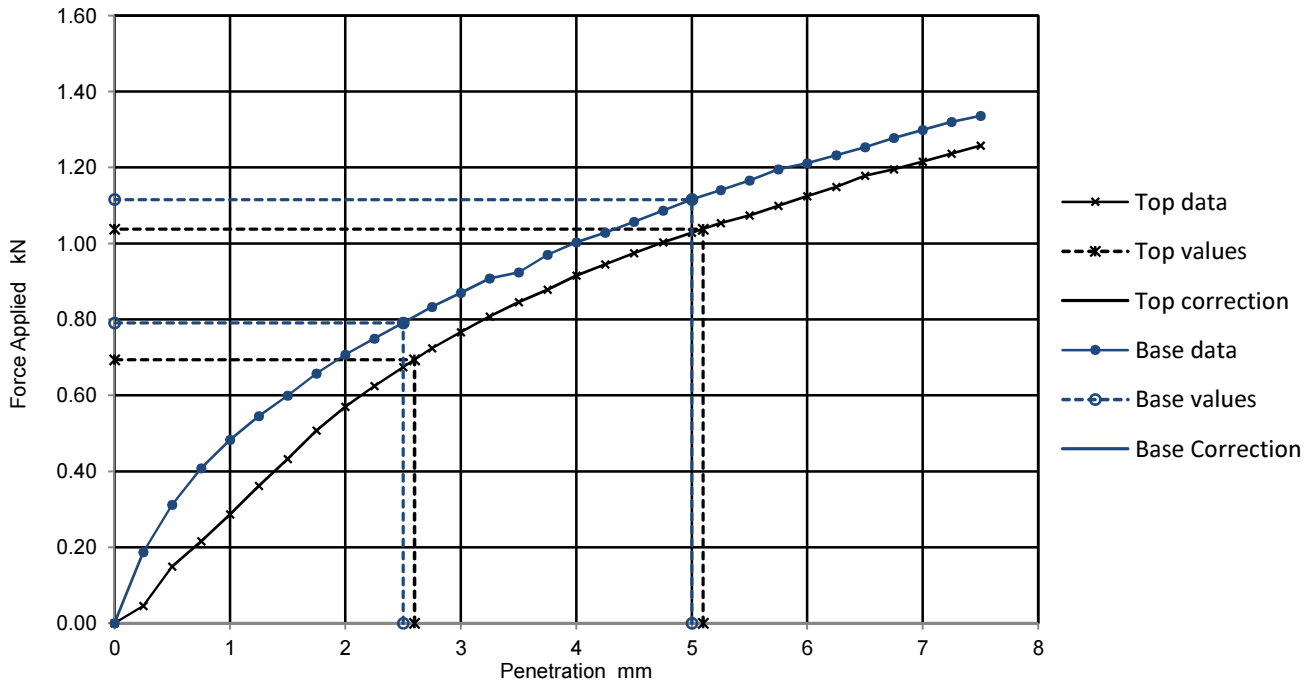
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 08/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591041 Sample Type: B
Sample Reference: B Depth Top [m]: 1.2
Location: WS09 Depth Base [m]: 2

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Greyish brown CLAY	Time to surface	days
Material retained on 20mm sieve removed	2 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 1.98 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.68 Mg/m3	Surcharge applied	8 kg
	Moisture content 17.9 %		4.86 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	5.3	5.2	5.3	5.6	20.8
BASE	6.0	5.6	6.0		21.2

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



4041

TEST CERTIFICATE

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

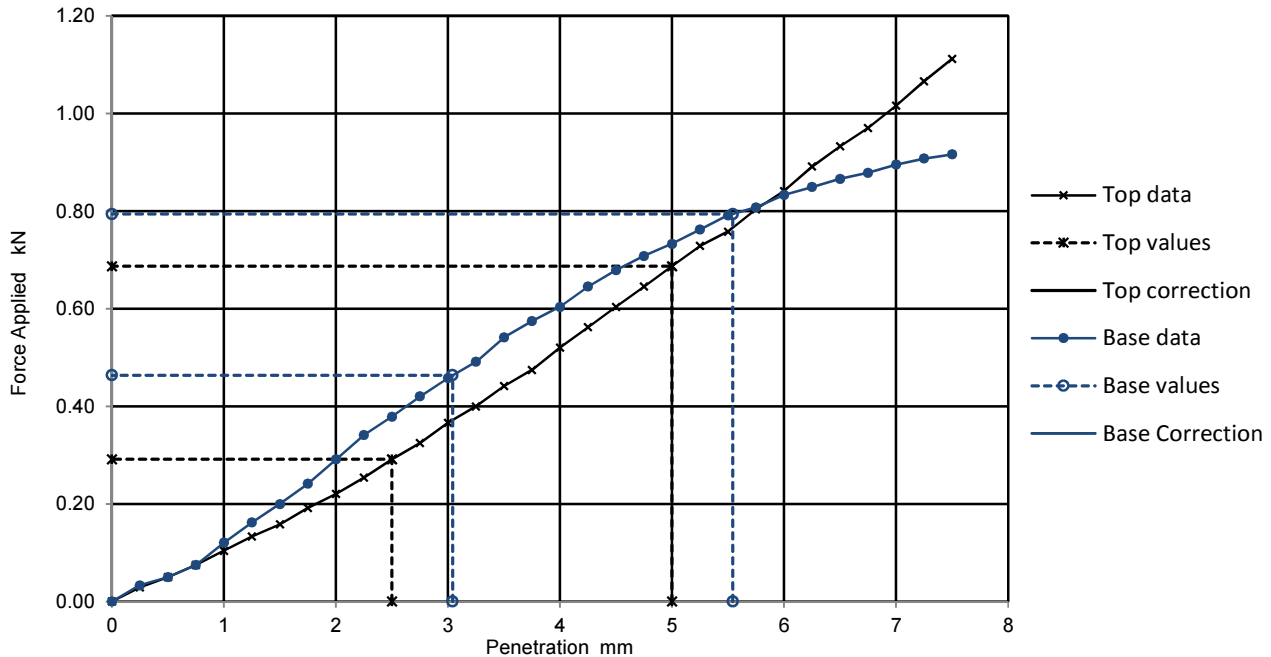
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 02/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591046 Sample Type: B
Sample Reference: B Depth Top [m]: 0.5
Location: WS13 Depth Base [m]: 1.3

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Yellowish brown sandy clayey fine to coarse GRAVEL	Time to surface	days
Material retained on 20mm sieve removed	36 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 1.46 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.18 Mg/m3	Surcharge applied	8 kg
	Moisture content 24.0 %		3.26 kPa

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	2.2	3.4	3.4	3.7	24.1
BASE	Yes	3.5	4.0	4.0		24.4

General Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2
Re-issue 1 - Format of Point Load Strength Index results changed as per client request
Test/ Specimen specific remarks:

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

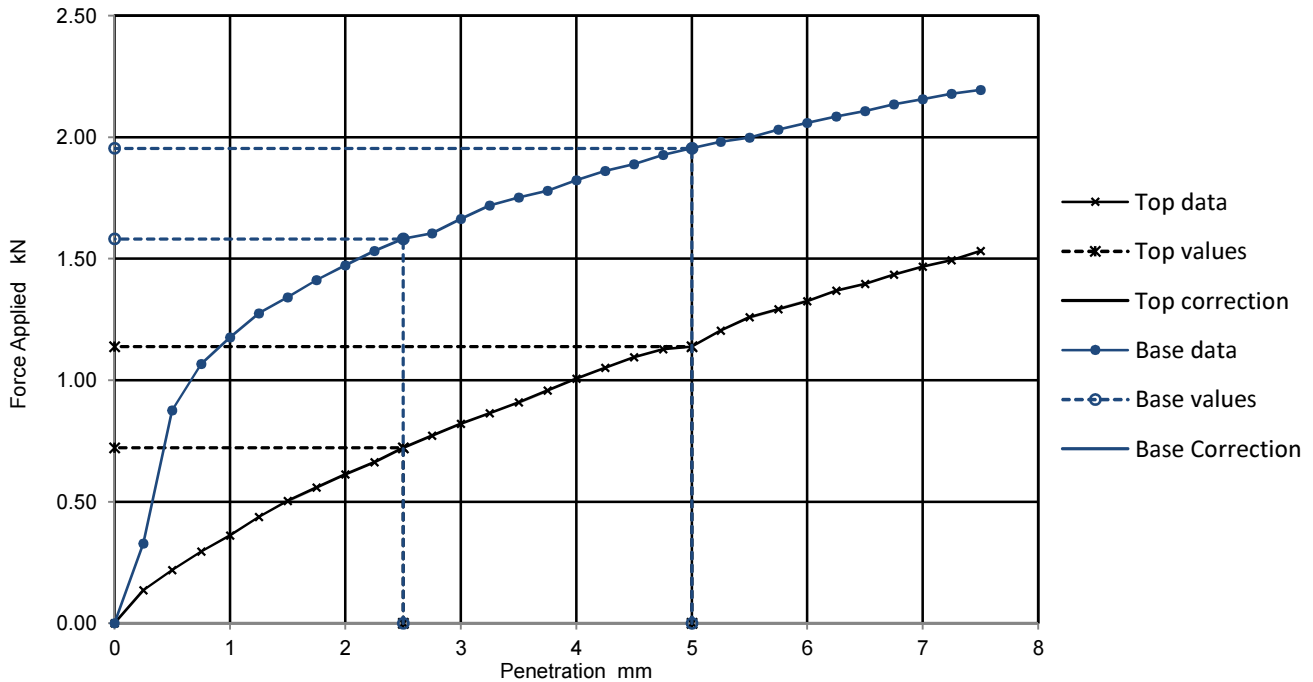
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 02/06/2016
Date Received: 21/06/2016
Date Tested: 30/06/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591049 Sample Type: B
Sample Reference: B Depth Top [m]: 1.2
Location: WS14 Depth Base [m]: 2

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Yellowish brown slightly gravelly slightly sandy CLAY	Time to surface	days
Material retained on 20mm sieve removed	0 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 2.09 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.80 Mg/m3	Surcharge applied	8 kg
	Moisture content 16.1 %		4.86 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	5.5	5.7	5.7		17.4
BASE	12.0	9.8	12.0		13.8

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

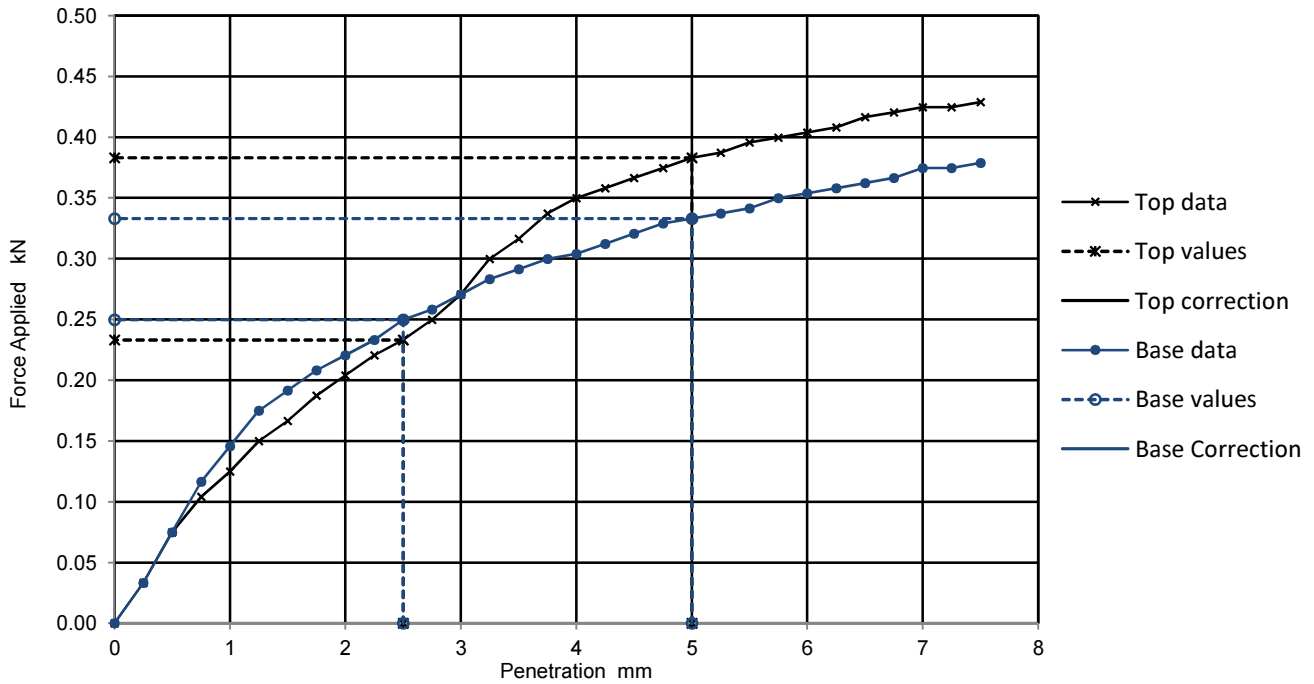
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 07/06/2016
Date Received: 21/06/2016
Date Tested: 01/07/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591067 Sample Type: D
Sample Reference: D Depth Top [m]: 1
Location: WS25 Depth Base [m]: 2

Specimen Preparation

Condition Remoulded Soaking details Not soaked
Details Recompacted with specified standard effort using 2.5kg rammer Period of soaking days
Time to surface days
Sample Description: Yellowish brown slightly gravelly slightly 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 1.92 Mg/m3 Surcharge applied 8 kg
Dry density 1.53 Mg/m3 4.86 kPa
Moisture content 25.4 %

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	No	1.8	1.9	1.9	29.4
BASE	No	1.9	1.7	1.9	
					29.1

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

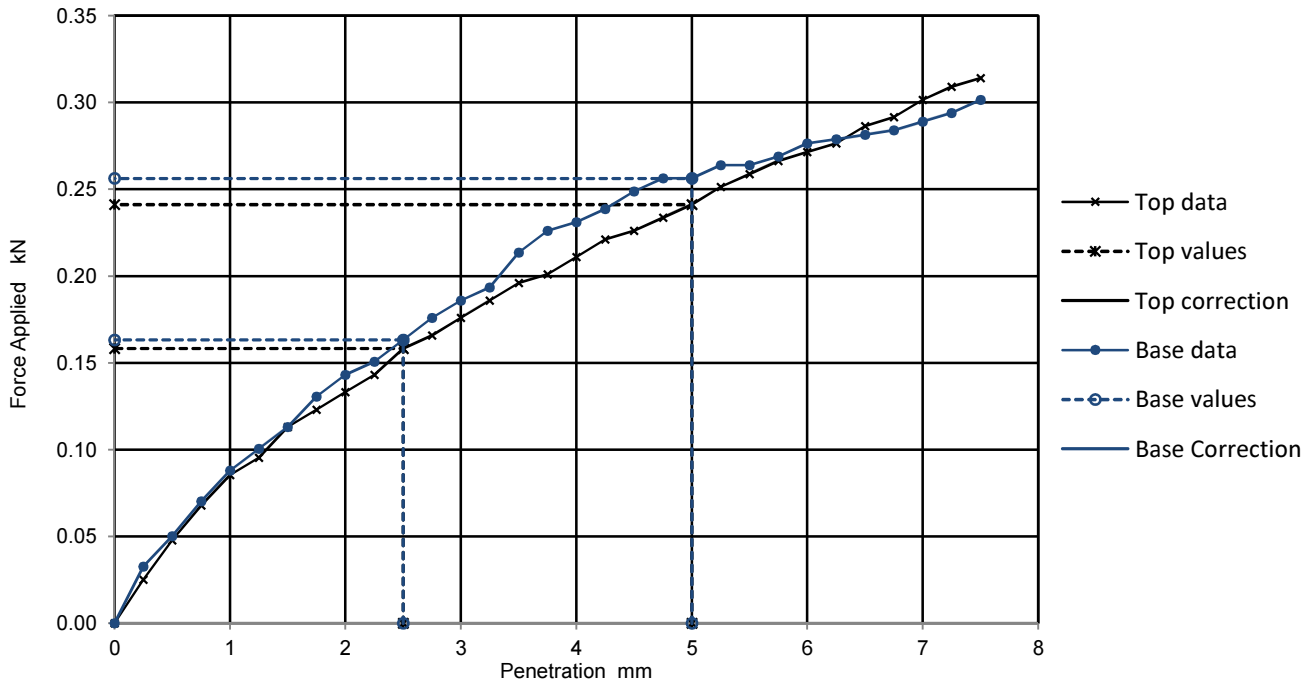
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 06/06/2016
Date Received: 21/06/2016
Date Tested: 01/07/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591070 Sample Type: B
Sample Reference: B Depth Top [m]: 0.4
Location: WS26 Depth Base [m]: 0.6

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Brown gravelly sandy CLAY with rootlets	Time to surface	days
Material retained on 20mm sieve removed	2 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 1.98 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.50 Mg/m3	Surcharge applied	8 kg
	Moisture content 32.0 %		4.84 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	No	1.2	1.2	1.2	27.3
BASE	No	1.2	1.3	1.3	

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

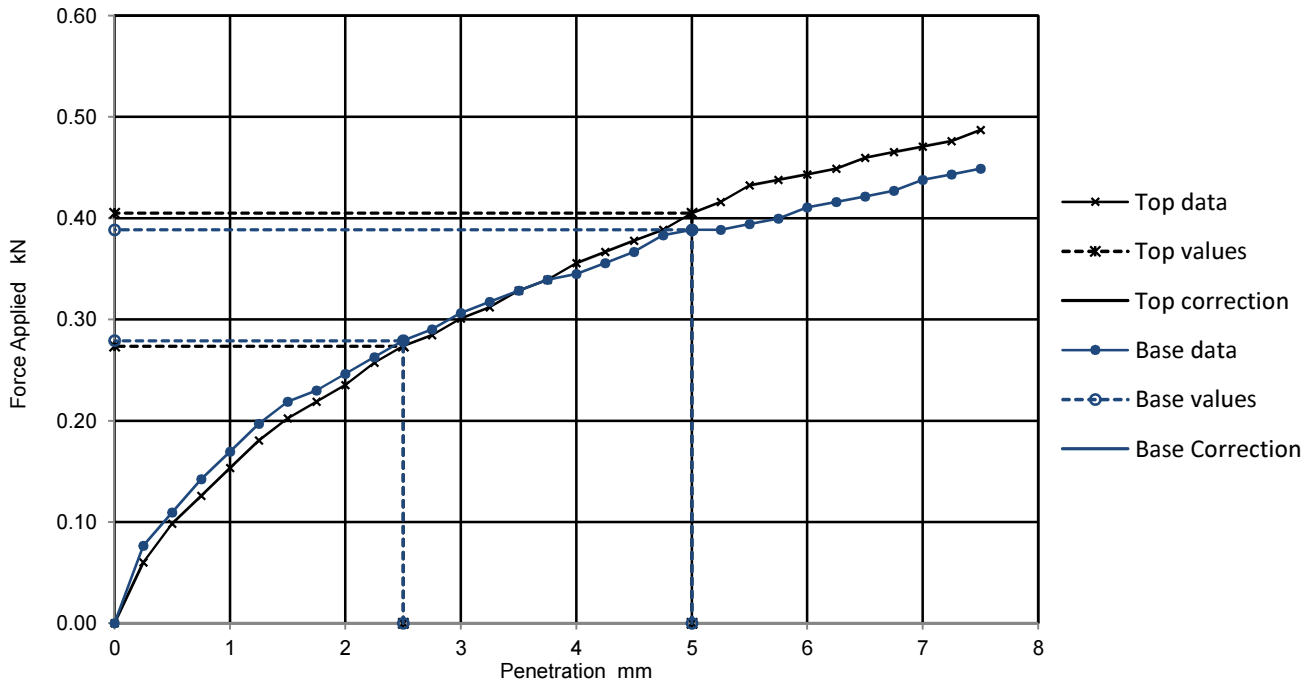
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 06/06/2016
Date Received: 21/06/2016
Date Tested: 01/07/2016
Sampled By: Not Given

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 rammer	Period of soaking	days
Sample Description:	Yellowish brown sandy CLAY	Time to surface	days
Material retained on 20mm sieve removed	0 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 1.93 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.50 Mg/m3	Surcharge applied	8 kg
	Moisture content 28.3 %		4.86 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	No	2.1	2.0	2.1	30.9
BASE	No	2.1	1.9	2.1	

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

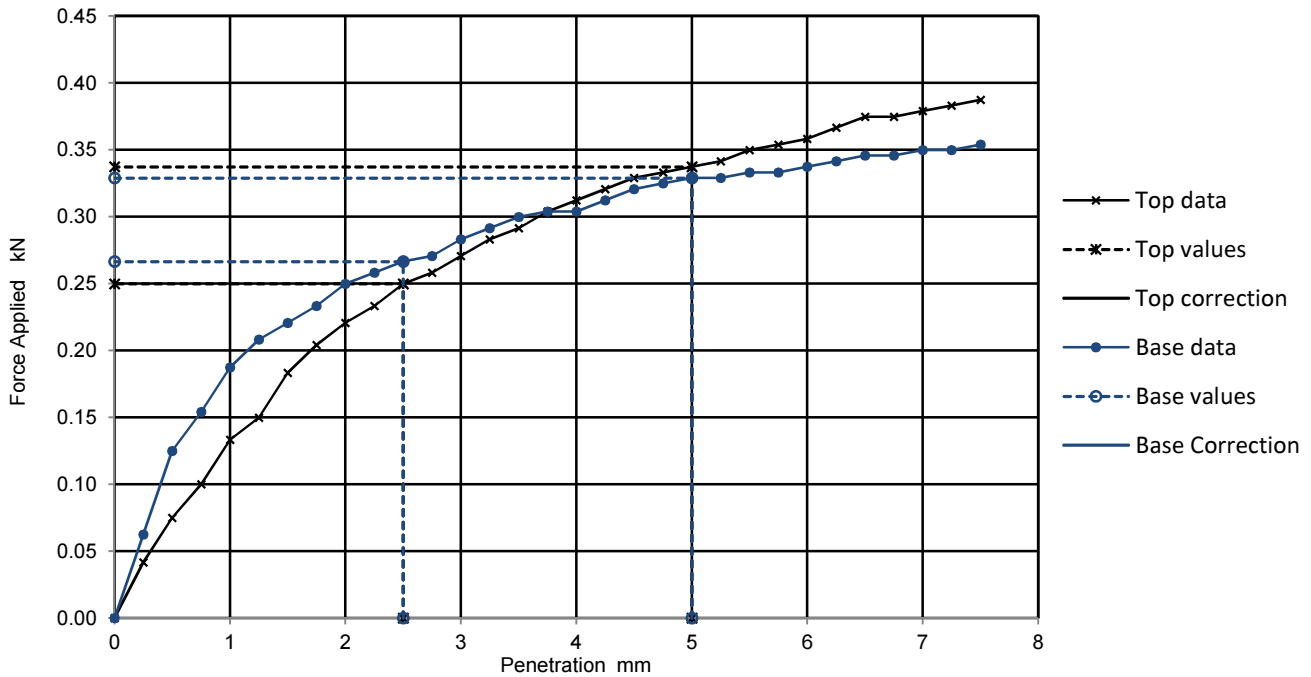
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 31/05/2016
Date Received: 21/06/2016
Date Tested: 04/07/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591080 Sample Type: B
Sample Reference: B Depth Top [m]: 2.6
Location: BH02 Depth Base [m]:

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
Sample Description:	Brown slightly gravelly slightly sandy CLAY with thin laminae of grey clay and rootlets	Amount of swell recorded	mm
Material retained on 20mm sieve removed	0 %	Dry density after soaking	Mg/m3
Initial Specimen details	Bulk density 1.91 Mg/m3	Surcharge applied	8 kg
	Dry density 1.42 Mg/m3		4.84 kPa
	Moisture content 34.3 %		

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.9	1.7	1.9	2.0	34.1
BASE	No	2.0	1.6	2.0		32.1

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

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



Determination of California Bearing Ratio

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

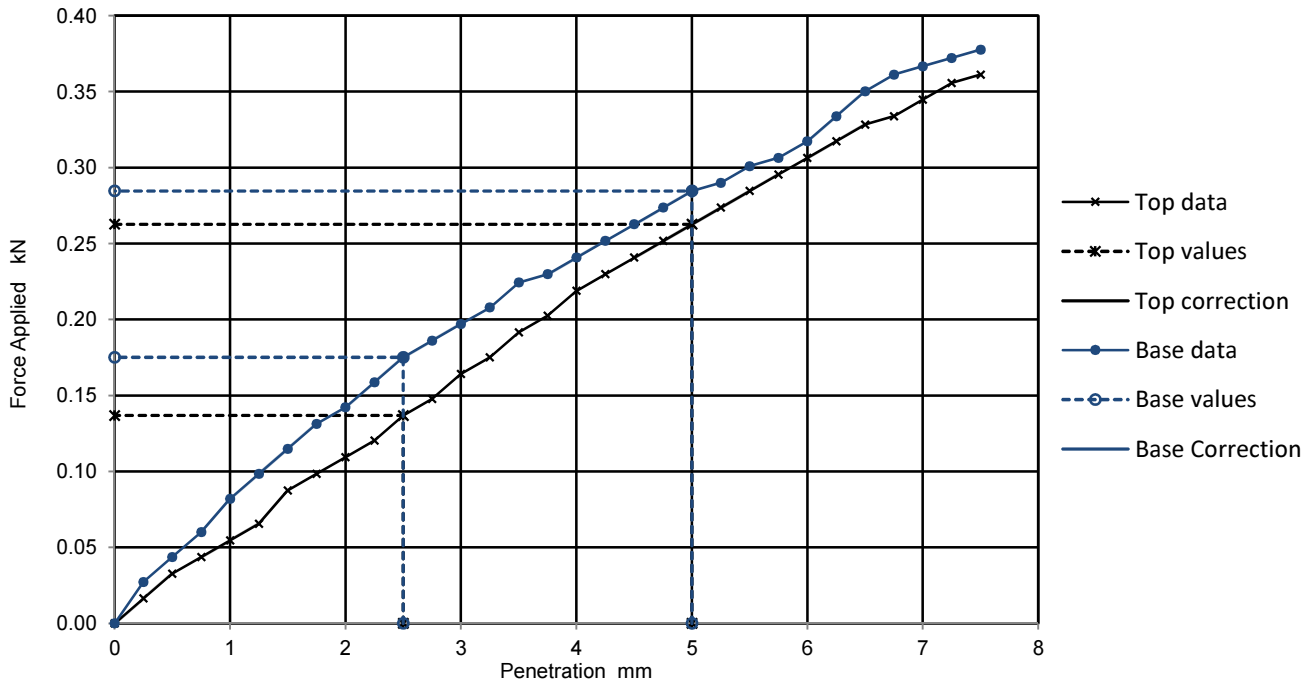
Client Reference: C161279
Job Number: 16-20746
Date Sampled: 02/06/2016
Date Received: 21/06/2016
Date Tested: 04/07/2016
Sampled By: Not Given

Test Results: Laboratory Reference: 591085 Sample Type: B
Sample Reference: B Depth Top [m]: 0.5
Location: BH02 Depth Base [m]: 0.8

Specimen Preparation

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
Sample Description:	Brown gravelly sandy CLAY	Time to surface	days
Material retained on 20mm sieve removed	2 %	Amount of swell recorded	mm
Initial Specimen details	Bulk density 1.89 Mg/m3	Dry density after soaking	Mg/m3
	Dry density 1.45 Mg/m3	Surcharge applied	8 kg
	Moisture content 30.5 %		4.86 kPa

Force v Penetration Plots



Results

Curve correction applied	CBR Values, %				Moisture Content %
	2.5mm	5mm	Highest	Average	
TOP	No	1.0	1.3	1.3	29.9
BASE	No	1.3	1.4	1.4	
					31.2

General Remarks: Re-issue 1 - Format of Point Load Strength Index results changed as per client request Test/ Specimen specific remarks:

Approved:

Mirosława Pytlik

Signed:

Terry Stafford

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

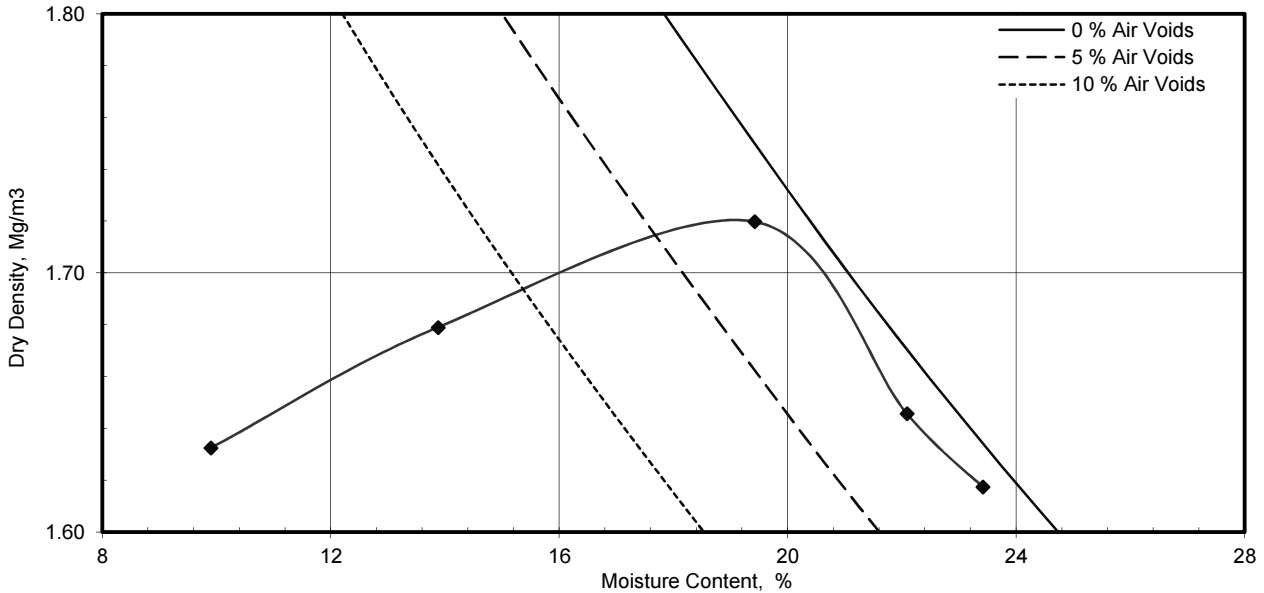
Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road
Spratton, Northampton
NN6 8LD

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

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Laboratory Reference: 591038
Sample Reference: B
Location: WS07
Sample Description: Brown slightly gravelly sandy CLAY
Depth Top [m]: 0.3
Depth Base [m]: 1
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	%	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

Approved: *Mirosława Pytlík*

Signed: *Terry Stafford*

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

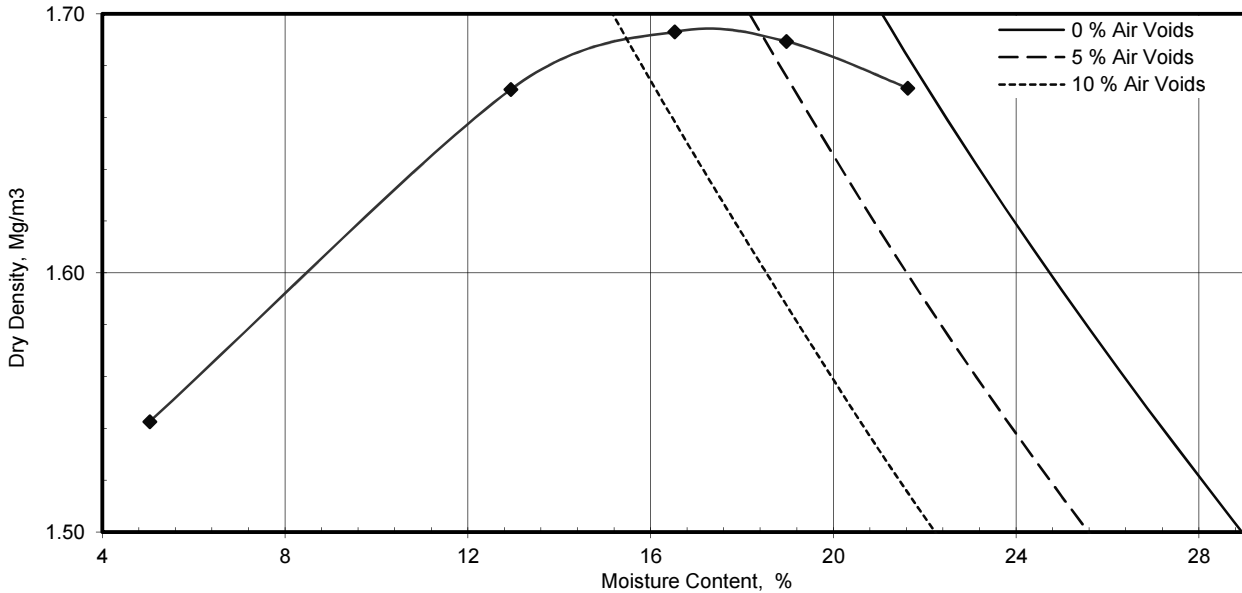
Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road
Spratton, Northampton
NN6 8LD

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

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Laboratory Reference:	591041	Depth Top [m]:	1.2
Sample Reference:	B	Depth Base [m]:	2
Location:	WS09	Sample Type:	B
Sample Description:	Greyish brown CLAY		



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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

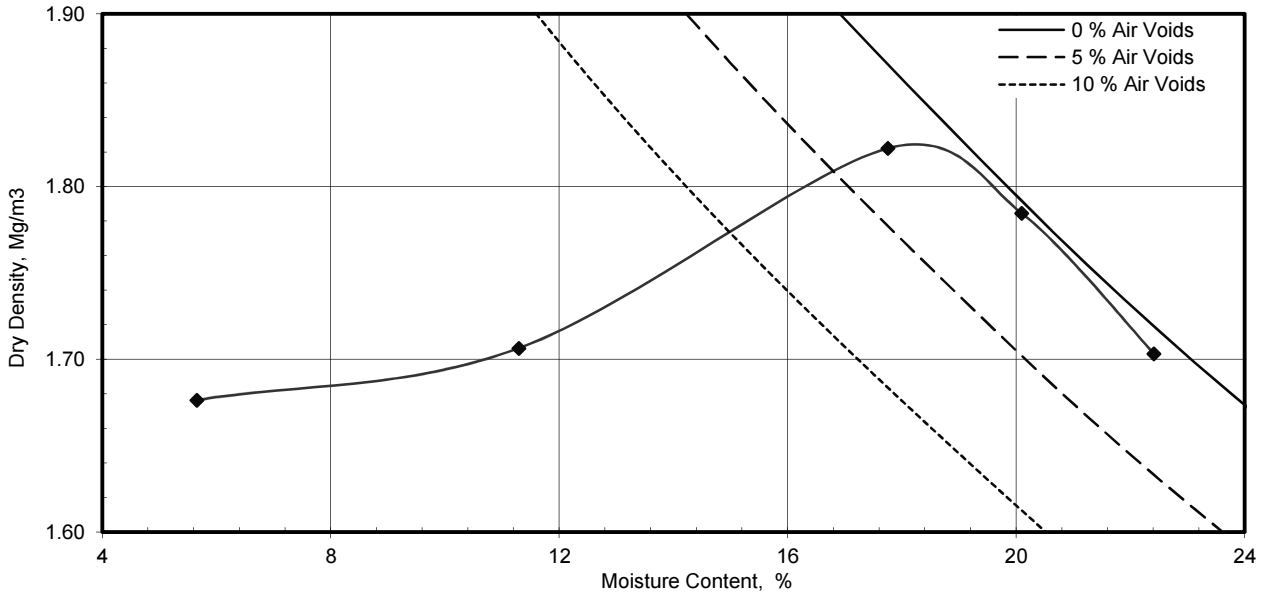
Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road
Spratton, Northampton
NN6 8LD

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

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: 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/m ³	2.80

Maximum Dry Density	Mg/m ³	1.82
----------------------------	-------------------	-------------

Optimum Moisture Content	%	18
---------------------------------	---	-----------

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

Approved:

Mirosława Pytlík

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

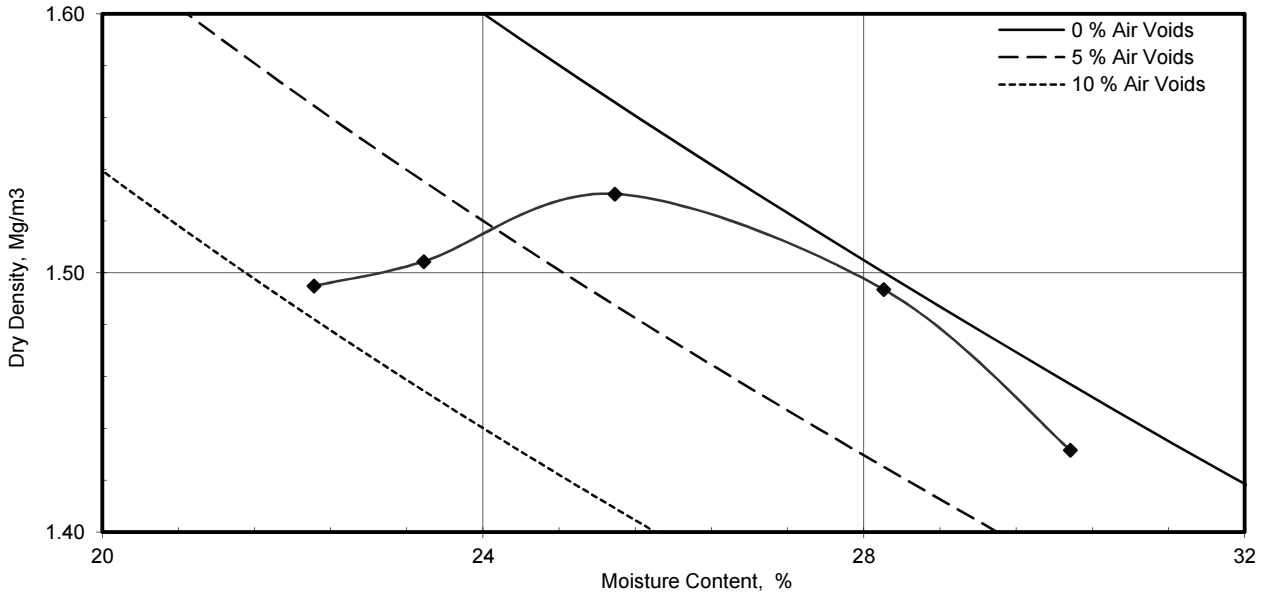
Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road
Spratton, Northampton
NN6 8LD

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

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

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

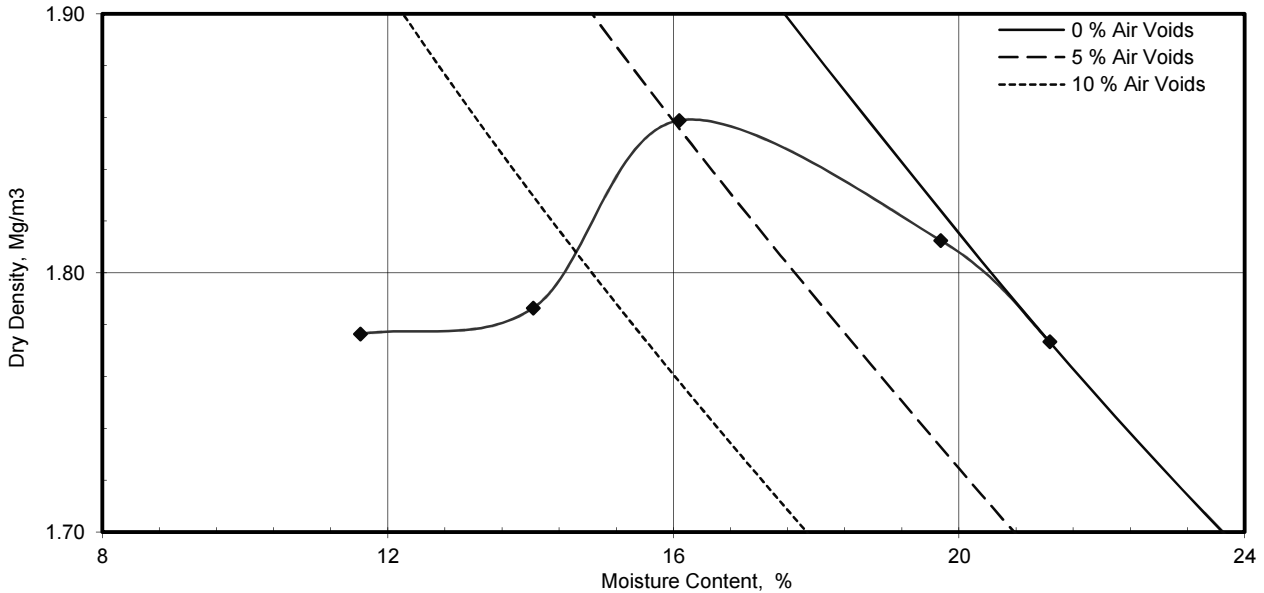
Client Reference: C161279
Job Number: 16-20746
Date Sampled: Not Given
Date Received: 21/06/2016
Date Tested: 01/07/2016
Sampled By: Not Given

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Laboratory Reference: 592608
Sample Reference: Not Given
Location: WS01
Sample Description: Yellowish brown slightly sandy clayey GRAVEL with glass

Depth Top [m]: 2
Depth Base [m]: 3
Sample 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

Approved:

Mirosława Pytlík

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

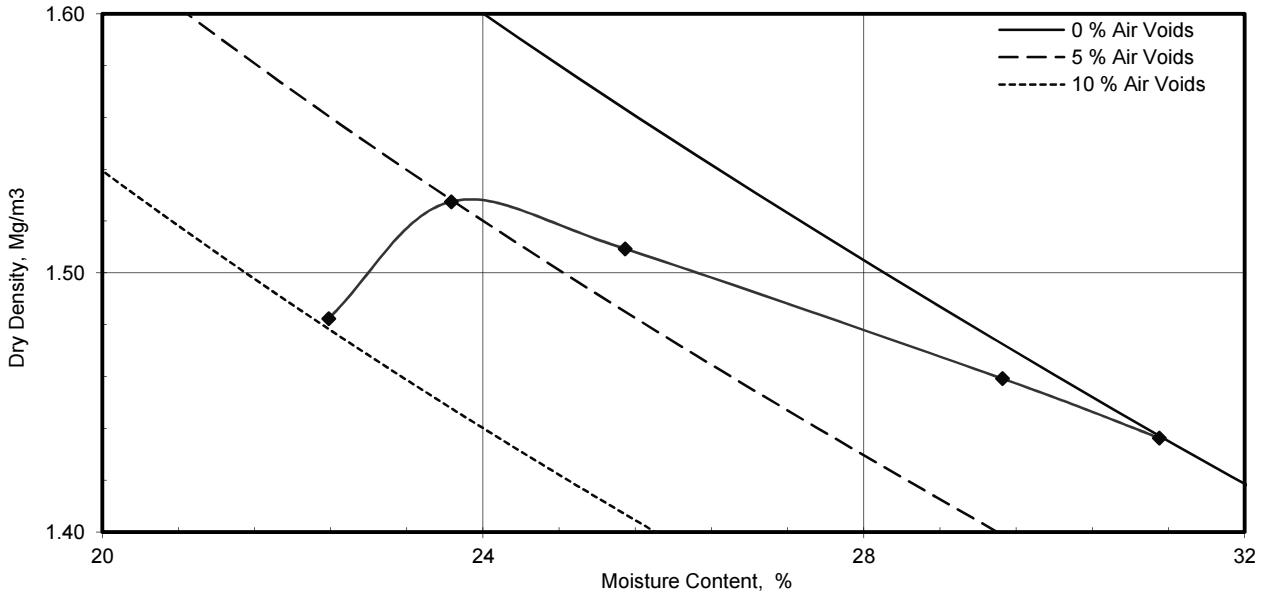
Client: Hydrock Consultants Ltd
Client Address: 2-4 Hawthorne Park
Holdenby Road
Spratton, Northampton
NN6 8LD

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

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Laboratory Reference: 592609
Sample Reference: Not Given
Location: WS18
Sample Description: Greyish brown sandy CLAY
Depth Top [m]: 0.5
Depth Base [m]: 1
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 - 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

Approved:

Mirosława Pytlík

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. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."



TEST CERTIFICATE

Dry Density / Moisture Content Relationship Light Compaction

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

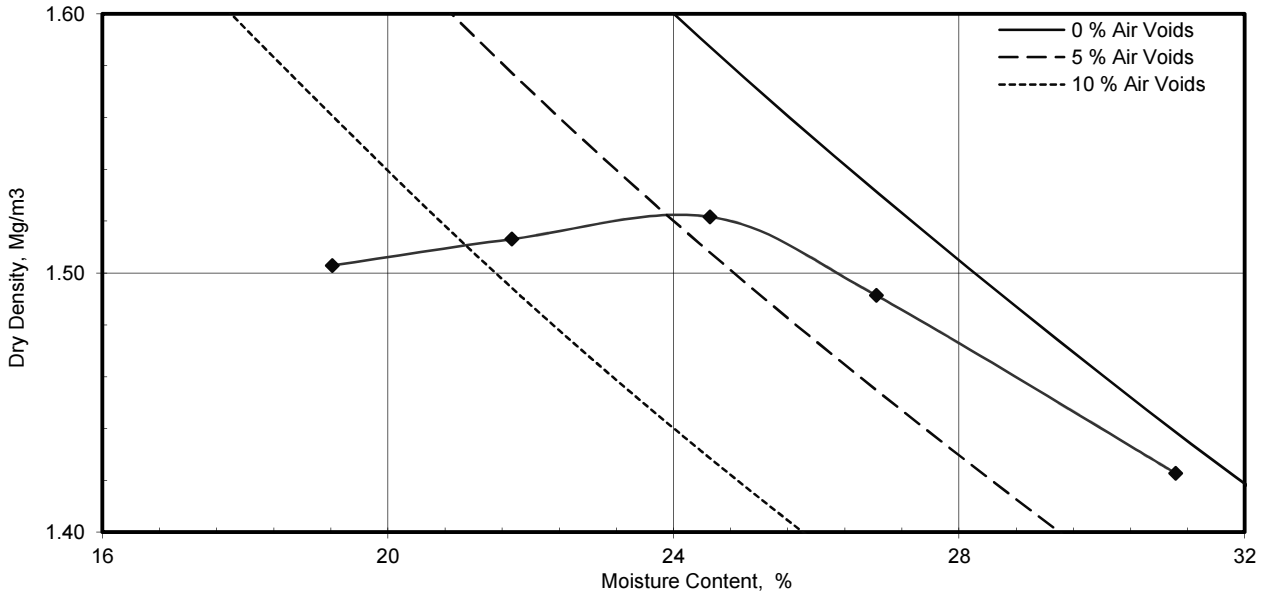
Client Reference: C161279
Job Number: 16-20746
Date Sampled: Not Given
Date Received: 21/06/2016
Date Tested: 01/07/2016
Sampled By: Not Given

Contact: Nathan Thompson / Adam Cheers
Site Name: Kraft Phase 2
Site Address: Not Given

TEST RESULTS

Laboratory Reference: 592610
Sample Reference: Not Given
Location: WS25
Sample Description: Brown gravelly sandy CLAY with grass and rootlets

Depth Top [m]: 0.3
Depth Base [m]: 0.85
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

Approved:

Mirosława Pytlík

PL Head of Geotechnical section

Date Reported: 12/07/2016

Signed:

Terry Stafford

Geotechnical Manager

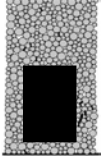
for and on behalf of i2 Analytical Ltd

"Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. 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."

Total Stress Triaxial Compression

Unconsolidated Undrained (Single Stage)

Summary Report

Sample Details  <i>sketch showing specimen location in original sample</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Depth</td> <td colspan="3">2.00-2.45</td> </tr> <tr> <td>Description</td> <td colspan="3">Brown slightly sandy CLAY</td> </tr> <tr> <td>Type</td> <td colspan="3">U</td> </tr> <tr> <td>Initial Sample Length</td> <td>L_0</td> <td>(mm)</td> <td>139.6</td> </tr> <tr> <td>Initial Sample Diameter</td> <td>D_0</td> <td>(mm)</td> <td>69.3</td> </tr> <tr> <td>Initial Sample Weight</td> <td>W_0</td> <td>(gr)</td> <td>971.1</td> </tr> <tr> <td>Bulk Density</td> <td>ρ_0</td> <td>(Mg/m³)</td> <td>1.84</td> </tr> <tr> <td>Particle Density</td> <td>ρ_s</td> <td>(Mg/m³)</td> <td>2.65</td> </tr> </table>	Depth	2.00-2.45			Description	Brown slightly sandy CLAY			Type	U			Initial Sample Length	L_0	(mm)	139.6	Initial Sample Diameter	D_0	(mm)	69.3	Initial Sample Weight	W_0	(gr)	971.1	Bulk Density	ρ_0	(Mg/m ³)	1.84	Particle Density	ρ_s	(Mg/m ³)	2.65
Depth	2.00-2.45																																
Description	Brown slightly sandy CLAY																																
Type	U																																
Initial Sample Length	L_0	(mm)	139.6																														
Initial Sample Diameter	D_0	(mm)	69.3																														
Initial Sample Weight	W_0	(gr)	971.1																														
Bulk Density	ρ_0	(Mg/m ³)	1.84																														
Particle Density	ρ_s	(Mg/m ³)	2.65																														


Initial Conditions			
Initial Cell Pressure	σ_3	(kPa)	40
Strain Rate	$\dot{\epsilon}_s$	(mm/min)	2.79220
Membrane Thickness	m_b	(mm)	0.21
Displacement Input	L_{IP}	(mm)	CH 2
Load Input	N_{IP}	(N)	CH 1
Initial Moisture	$\omega_i\%$	(%)	23
Initial Dry Density	ρ_{d0}	(Mg/m ³)	1.49
Initial Voids Ratio	e_0	.	0.77
Initial Degree of Saturation	S_o	(%)	80

Final Conditions			
Max Deviator Stress	$(\sigma_1 - \sigma_3)_f$	(kPa)	152
Membrane Correction	m_c	(kPa)	1.145
Strain At Max Stress	$\epsilon_f\%$	(%)	13.95
Shear Strength	c_u	(kPa)	76
Final Moisture	$\omega_f\%$	(%)	23
Final Dry Density	ρ_{df}	(Mg/m ³)	1.49
Final Voids Ratio	e_f	.	0.77
Final Degree of Saturation	S_f	(%)	80.3



Failure Sketch
(surface inclination)

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

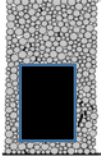
	Test Method	BS1377-7 : 1900 Clause 8	Test Name	591079	
	Database:	.\SQLEXPRESS \ 6171-I2 Analytical	Test Date	02/07/2016	
	Site Reference	Kraft Phase 2	Borehole	BH02	
	Jobfile	16-20746	Sample	591079	
Client	Hydrock Consultants	Depth	2.00-2.45		
Operator	bielatowicz	Checked	pytlikm	Approved	pytlikm

*i2 Analytical Limited, 7 Woodshots Meadow, Croxley Green Business Park, Herts WD18 8YS
i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland*

Total Stress Triaxial Compression

Unconsolidated Undrained (Single Stage)

Summary Report

<p>Sample Details</p>  <p><i>sketch showing specimen location in original sample</i></p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Depth</td> <td colspan="3">2.00-2.40</td> </tr> <tr> <td>Description</td> <td colspan="3">Yellowish brown silty CLAY</td> </tr> <tr> <td>Type</td> <td colspan="3">U</td> </tr> <tr> <td>Initial Sample Length</td> <td>L_0</td> <td>(mm)</td> <td>139.9</td> </tr> <tr> <td>Initial Sample Diameter</td> <td>D_0</td> <td>(mm)</td> <td>68.9</td> </tr> <tr> <td>Initial Sample Weight</td> <td>W_0</td> <td>(gr)</td> <td>1112.0</td> </tr> <tr> <td>Bulk Density</td> <td>ρ_0</td> <td>(Mg/m³)</td> <td>2.13</td> </tr> <tr> <td>Particle Density</td> <td>ρ_s</td> <td>(Mg/m³)</td> <td>2.65</td> </tr> </table>	Depth	2.00-2.40			Description	Yellowish brown silty CLAY			Type	U			Initial Sample Length	L_0	(mm)	139.9	Initial Sample Diameter	D_0	(mm)	68.9	Initial Sample Weight	W_0	(gr)	1112.0	Bulk Density	ρ_0	(Mg/m ³)	2.13	Particle Density	ρ_s	(Mg/m ³)	2.65
Depth	2.00-2.40																																
Description	Yellowish brown silty CLAY																																
Type	U																																
Initial Sample Length	L_0	(mm)	139.9																														
Initial Sample Diameter	D_0	(mm)	68.9																														
Initial Sample Weight	W_0	(gr)	1112.0																														
Bulk Density	ρ_0	(Mg/m ³)	2.13																														
Particle Density	ρ_s	(Mg/m ³)	2.65																														


Initial Conditions			
Initial Cell Pressure	σ_3	(kPa)	40
Strain Rate	$\dot{\epsilon}_s$	(mm/min)	2.79700
Membrane Thickness	m_b	(mm)	0.28
Displacement Input	L_{IP}	(mm)	CH 2
Load Input	N_{IP}	(N)	CH 4
Initial Moisture	$\omega_i\%$	(%)	30
Initial Dry Density	ρ_{d0}	(Mg/m ³)	1.64
Initial Voids Ratio	e_0	.	0.62
Initial Degree of Saturation	S_o	(%)	100

Final Conditions			
Max Deviator Stress	$(\sigma_1 - \sigma_3)_f$	(kPa)	168
Membrane Correction	m_c	(kPa)	1.536
Strain At Max Stress	$\epsilon_f\%$	(%)	18.25
Shear Strength	c_u	(kPa)	84
Final Moisture	$\omega_f\%$	(%)	30
Final Dry Density	ρ_{df}	(Mg/m ³)	1.64
Final Voids Ratio	e_f	.	0.62
Final Degree of Saturation	S_f	(%)	100.0



Failure Sketch
(surface inclination)

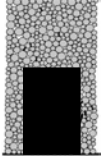
Re-issue 1 - Format of Point Load Strength Index results changed as per client request

	Test Method	BS1377-7 : 1900 Clause 8	Test Name	591086	
	Database:	.\SQLEXPRESS \ 6171-I2 Analytical	Test Date	04/07/2016	
	Site Reference	Kraft Phase 2	Borehole	BH03	
	Jobfile	16-20746	Sample	591086	
Client	Hydrock Consultants	Depth	2.00-2.40		
Operator	bielatowicz	Checked	pytlikm	Approved	pytlikm

Total Stress Triaxial Compression

Unconsolidated Undrained (Single Stage)

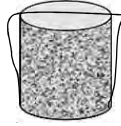
Summary Report


<p>Sample Details</p>  <p><i>sketch showing specimen location in original sample</i></p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Depth</td> <td colspan="3">4.00-4.40</td> </tr> <tr> <td>Description</td> <td colspan="3">Yellowish brown CLAY</td> </tr> <tr> <td>Type</td> <td colspan="3">U</td> </tr> <tr> <td>Initial Sample Length</td> <td>L_0</td> <td>(mm)</td> <td>139.2</td> </tr> <tr> <td>Initial Sample Diameter</td> <td>D_0</td> <td>(mm)</td> <td>69.1</td> </tr> <tr> <td>Initial Sample Weight</td> <td>W_0</td> <td>(gr)</td> <td>1053.3</td> </tr> <tr> <td>Bulk Density</td> <td>ρ_0</td> <td>(Mg/m³)</td> <td>2.02</td> </tr> <tr> <td>Particle Density</td> <td>ρ_s</td> <td>(Mg/m³)</td> <td>2.65</td> </tr> </table>	Depth	4.00-4.40			Description	Yellowish brown CLAY			Type	U			Initial Sample Length	L_0	(mm)	139.2	Initial Sample Diameter	D_0	(mm)	69.1	Initial Sample Weight	W_0	(gr)	1053.3	Bulk Density	ρ_0	(Mg/m ³)	2.02	Particle Density	ρ_s	(Mg/m ³)	2.65
Depth	4.00-4.40																																
Description	Yellowish brown CLAY																																
Type	U																																
Initial Sample Length	L_0	(mm)	139.2																														
Initial Sample Diameter	D_0	(mm)	69.1																														
Initial Sample Weight	W_0	(gr)	1053.3																														
Bulk Density	ρ_0	(Mg/m ³)	2.02																														
Particle Density	ρ_s	(Mg/m ³)	2.65																														

Initial Conditions			
Initial Cell Pressure	σ_3	(kPa)	80
Strain Rate	$\dot{\epsilon}_s$	(mm/min)	2.78320
Membrane Thickness	m_b	(mm)	0.28
Displacement Input	L_{IP}	(mm)	CH 2
Load Input	N_{IP}	(N)	CH 4
Initial Moisture	$\omega_i\%$	(%)	25
Initial Dry Density	ρ_{d0}	(Mg/m ³)	1.61
Initial Voids Ratio	e_0	.	0.64
Initial Degree of Saturation	S_o	(%)	100

Final Conditions			
Max Deviator Stress	$(\sigma_1 - \sigma_3)_f$	(kPa)	74
Membrane Correction	m_c	(kPa)	1.532
Strain At Max Stress	$\epsilon_f\%$	(%)	19.95
Shear Strength	c_u	(kPa)	37
Final Moisture	$\omega_f\%$	(%)	25
Final Dry Density	ρ_{df}	(Mg/m ³)	1.61
Final Voids Ratio	e_f	.	0.64
Final Degree of Saturation	S_f	(%)	100.0



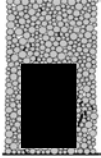
Notes	 <p>Failure Sketch (surface inclination)</p>
Re-issue 1 - Format of Point Load Strength Index results changed as per client request	

	Test Method	BS1377-7 : 1900 Clause 8	Test Name	591087	
	Database:	.\SQLEXPRESS \ 6171-I2 Analytical	Test Date	04/07/2016	
	Site Reference	Kraft Phase 2	Borehole	BH03	
	Jobfile	16-20746	Sample	591087	
Client	Hydrock Consultants	Depth	4.00-4.40		
Operator	bielatowicz	Checked	pytlikm	Approved	pytlikm

Total Stress Triaxial Compression

Unconsolidated Undrained (Single Stage)


Summary Report


<p>Sample Details</p>  <p style="font-size: small;">sketch showing specimen location in original sample</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Depth</td> <td colspan="3">2.00-2.45</td> </tr> <tr> <td>Description</td> <td colspan="3">Yellowish brown to grey silty CLAY</td> </tr> <tr> <td>Type</td> <td colspan="3">U</td> </tr> <tr> <td>Initial Sample Length</td> <td>L_0</td> <td>(mm)</td> <td>139.7</td> </tr> <tr> <td>Initial Sample Diameter</td> <td>D_0</td> <td>(mm)</td> <td>69.6</td> </tr> <tr> <td>Initial Sample Weight</td> <td>W_0</td> <td>(gr)</td> <td>1032.7</td> </tr> <tr> <td>Bulk Density</td> <td>ρ_0</td> <td>(Mg/m³)</td> <td>1.94</td> </tr> <tr> <td>Particle Density</td> <td>ρ_s</td> <td>(Mg/m³)</td> <td>2.65</td> </tr> </table>	Depth	2.00-2.45			Description	Yellowish brown to grey silty CLAY			Type	U			Initial Sample Length	L_0	(mm)	139.7	Initial Sample Diameter	D_0	(mm)	69.6	Initial Sample Weight	W_0	(gr)	1032.7	Bulk Density	ρ_0	(Mg/m ³)	1.94	Particle Density	ρ_s	(Mg/m ³)	2.65
Depth	2.00-2.45																																
Description	Yellowish brown to grey silty CLAY																																
Type	U																																
Initial Sample Length	L_0	(mm)	139.7																														
Initial Sample Diameter	D_0	(mm)	69.6																														
Initial Sample Weight	W_0	(gr)	1032.7																														
Bulk Density	ρ_0	(Mg/m ³)	1.94																														
Particle Density	ρ_s	(Mg/m ³)	2.65																														

Initial Conditions			
Initial Cell Pressure	σ_3	(kPa)	40
Strain Rate	$\dot{\epsilon}_s$	(mm/min)	2.79480
Membrane Thickness	m_b	(mm)	0.25
Displacement Input	L_{IP}	(mm)	CH 2
Load Input	N_{IP}	(N)	CH 4
Initial Moisture	$\omega_i\%$	(%)	27
Initial Dry Density	ρ_{d0}	(Mg/m ³)	1.52
Initial Voids Ratio	e_0	.	0.74
Initial Degree of Saturation	S_o	(%)	99

Final Conditions			
Max Deviator Stress	$(\sigma_1 - \sigma_3)_f$	(kPa)	169
Membrane Correction	m_c	(kPa)	0.932
Strain At Max Stress	$\epsilon_f\%$	(%)	9.31
Shear Strength	c_u	(kPa)	85
Final Moisture	$\omega_f\%$	(%)	27
Final Dry Density	ρ_{df}	(Mg/m ³)	1.52
Final Voids Ratio	e_f	.	0.74
Final Degree of Saturation	S_f	(%)	98.5



Notes	 <p>Failure Sketch (surface inclination)</p>
Re-issue 1 - Format of Point Load Strength Index results changed as per client request	

	Test Method	BS1377-7 : 1900 Clause 8	Test Name	591095	
	Database:	.\SQLEXPRESS \ 6171-I2 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		
Operator	bielatowicz	Checked	pytlikm	Approved	pytlikm