APPENDIX E

SOIL ENGINEERING TEST DATA

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with BS1377:Part 2:1990 & B.R.E. IP 4/93 (soil suction values)

BH / TP / WS Number	Type	Depth From (m)	Depth To (m)	Moisture Content (%)	Bulk Density (Mg/m^3)	Dry Density (Mg/m^3)	Shear Strength (kN/m^2)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425micron (%)	Soil Classification	Description / Remarks
BH1	BD	0.50	0.50	6.4	-	-	-	-	-	-	-	-	
BH1	BD	1.50	1.50	11	-	-	-	-	-	-	-	NP	Very silty very sandy GRAVEL. (see PSD result sheet)
BH1	BD	2.50	2.50	5.7	-	-	-	-	-	-	-	-	Very silty sandy GRAVEL. (see PSD result sheet)
BH5	BD	0.50	0.50	8.8	-	-	-	-	-	-	-	-	
BH5	BD	1.50	1.50	11	-	-	-	-	-	-	-	NP	Very silty very sandy GRAVEL. (see PSD result sheet)
BH5	BD	2.50	2.50	17	-	-	-	-	-	-	-	-	Very silty very sandy GRAVEL. (see PSD result sheet)
BH5	BD	3.50	3.50	17	-	-	-	-	-	-	-	-	Very silty very sandy GRAVEL. (see PSD result sheet)
BH5	BD	4.50	4.50	15	-	-	-	46	21	25	87	CI	
BH6	BD	0.50	0.50	13	-	-	-	50	23	27	49	CI / CH	
BH6	BD	1.50	1.50	11	-	-	-	-	-	-	-	-	
BH6	BD	2.50	2.50	9.1	-	-	-	-	-	-	-	-	Very sandy slightly silty GRAVEL. (see PSD result sheet)
BH6	BD	3.50	3.50	24	-	-	-	-	-	-	-	-	
BH6	BD	4.50	4.50	11	-	-	-	-	-	-	-	-	
BH6	BD	5.50	5.50	19	-	-	-	-	-	-	-	-	Very sandy silty GRAVEL. (see PSD result sheet)

SITE: FOULSTONE & WOMBWELL

CLIENT: BARNSLEY MBC

DATE: Sep-06

SHEET: 1 of 1

CC Geotechnical

Telephone: (0151) 523 0202

Key:- BD = Bulk Disturbed; SD = Small Disturbed; U100 = Undisturbed 100mm

CL = Low Plasticity; CI = Intermediate; CH = High; CV = Very high; CE = Extremely high; NP = Non-plastic

(* Denotes Hand Shear Vane test result)

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with BS1377:Part 2:1990 & B.R.E. IP 4/93 (soil suction values)

BH / TP / WS Number	Type	Depth From (m)	Depth To (m)	Moisture Content (%)	Bulk Density (Mg/m^3)	Dry Density (Mg/m^3)	Shear Strength (kN/m^2)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425micron (%)	Soil Classification	Description / Remarks
BH7	BD	0.50	0.50	11	-	-	-	-	-	-	-	-	Very silty very gravelly SAND. (see PSD result sheet)
BH7	BD	1.50	1.50	7.9	-	-	-	-	-	-	-	-	Very sandy silty GRAVEL. (see PSD result sheet)
BH7	BD	2.50	2.50	28	-	-	-	51	25	26	99	CH	
BH7	BD	3.50	3.50	14	-	-	-	36	16	20	67	CI	
BH7	BD	4.50	4.50	15	-	-	-	36	17	19	64	CI	
BH7	BD	5.50	5.50	11	-	-	-	-	-	-	-	-	Very sandy silty GRAVEL. (see PSD result sheet)
BH8	BD	0.50	0.50	17	-	-	-	-	-	-	-	-	Very silty very cobbly SAND and GRAVEL. (see PSD result sheet)
BH8	BD	1.50	1.50	16	-	-	-	-	-	-	-	-	Very silty SAND and GRAVEL. (see PSD result sheet)
BH8	BD	2.50	2.50	32	-	-	-	37	19	18	97	CI	Very sandy slightly gravelly CLAY. (see PSD result sheet)
BH8	BD	3.50	3.50	24	-	-	-	-	-	-	-	-	Very sandy CLAY. (see PSD result sheet)
BH8	BD	5.50	5.50	16	-	-	-	36	21	15	99	CI	Very sandy silty GRAVEL. (see PSD result sheet)

SITE: FOULSTONE & WOMBWELL

CLIENT: BARNSLEY MBC

DATE: Oct-06

SHEET: 2 of 2

CC Geotechnical

Telephone: (0151) 523 0202

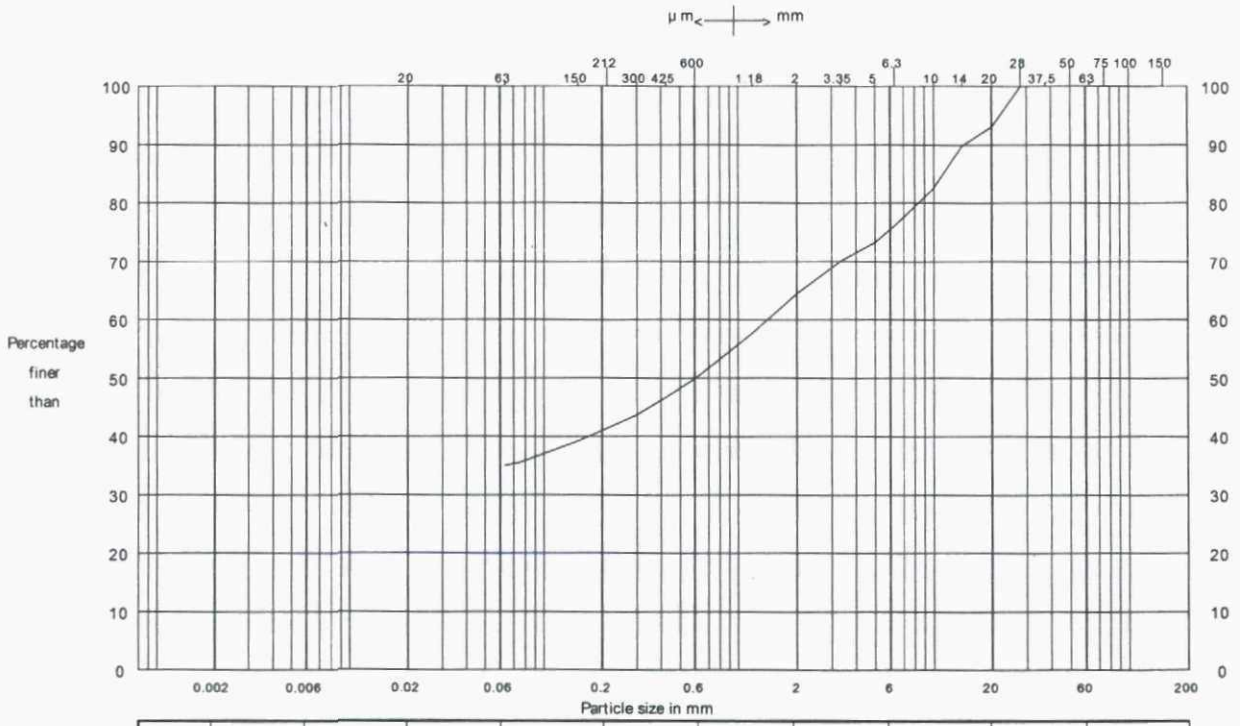
Key:- BD = Bulk Disturbed; SD = Small Disturbed; U100 = Undisturbed 100mm

CL = Low Plasticity; CI = Intermediate; CH = High; CV = Very high; CE = Extremely high; NP = Non-plastic

(* Denotes Hand Shear Vane test result)

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH1
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 1.50 - 1.50		SAMPLE REF 2	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	35	35	39	41	44	47	50	58	64	70	73	76	82	90	93	100	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			29			36			0

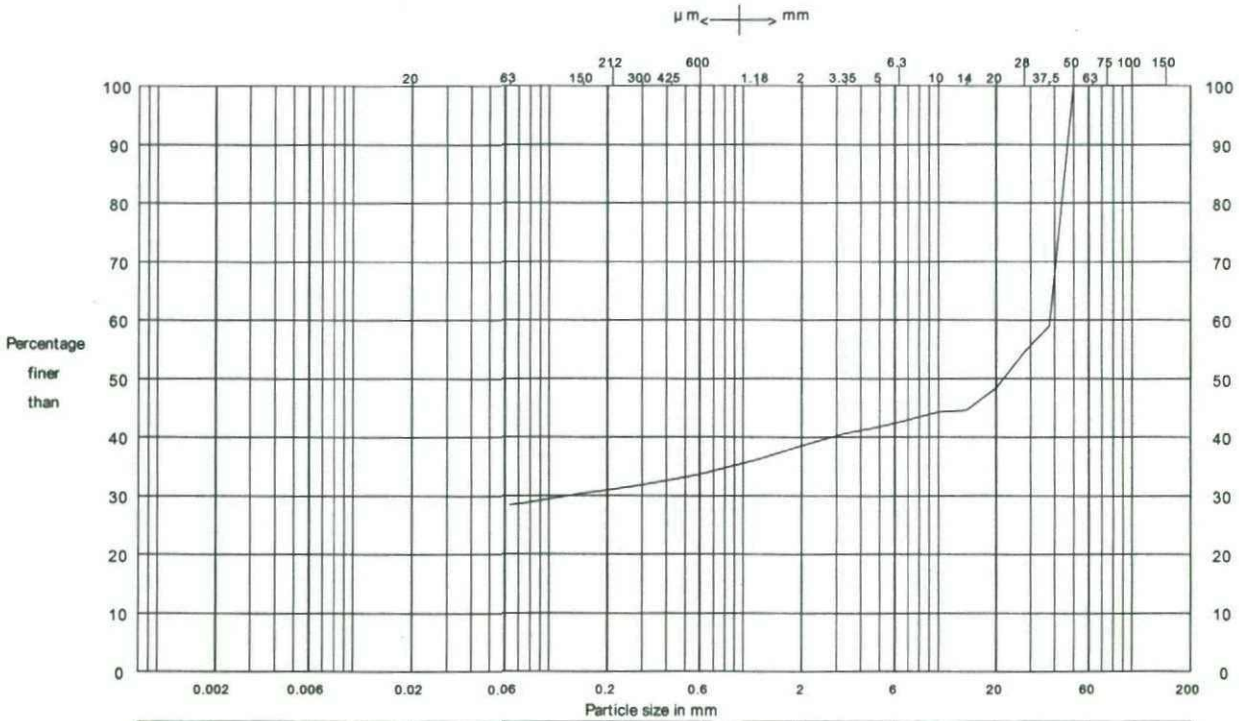
SAMPLE DESCRIPTION

Very silty very sandy GRAVEL

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH1
CLIENT	BARNSLEY MBC	SITE	FOULSTONE & WOMBWELL SCHOOL
SAMPLE DEPTH	2.50 - 2.50	SAMPLE REF 3	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST	Wet Sieve

	Size (microns)							Size (mm)													
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	28	29	30	31	32	33	34	36	38	41	42	42	44	45	48	55	59	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			10			62			0

SAMPLE DESCRIPTION	REMARKS
Very silty sandy GRAVEL	

CC Geotechnical
Tel: 0151-523-0202
Fax: 0151-523-0252

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

HOLE NO. BH5

CLIENT: BARNSLEY MBC

SITE: FOULSTONE & WOMBWELL SCHOOL

SAMPLE DEPTH: 1.50 - 1.50

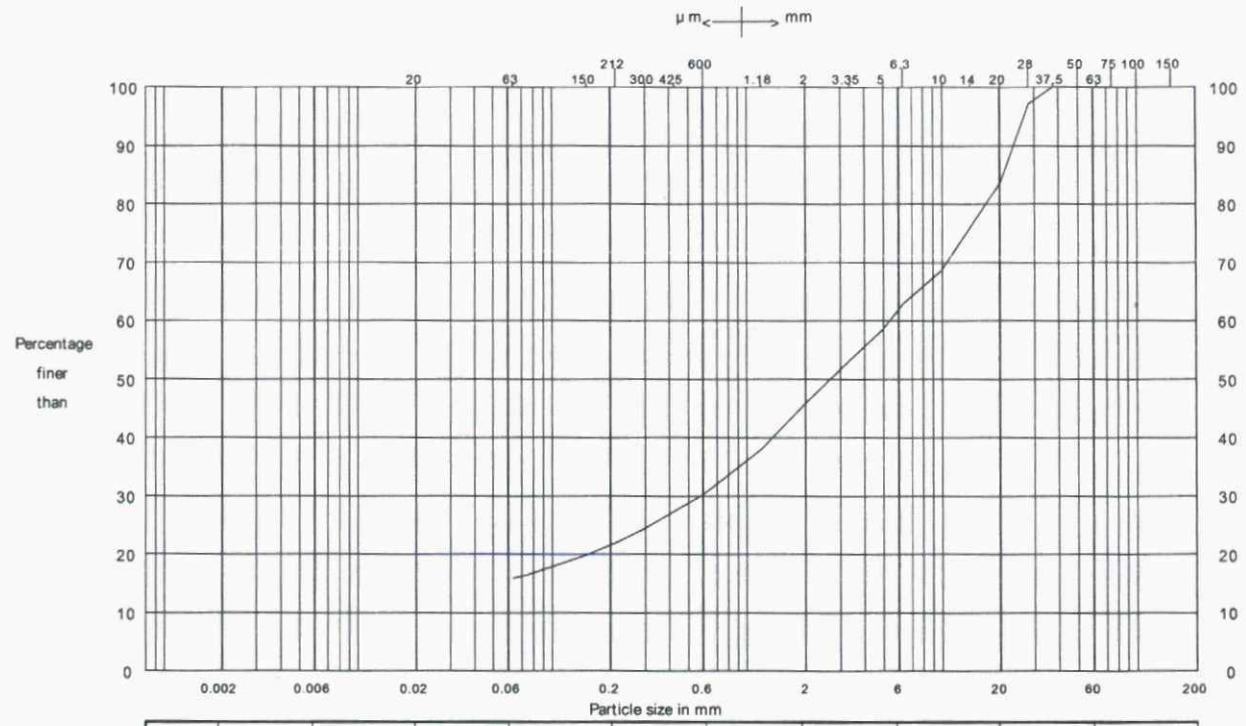
SAMPLE REF: 2

JOB NO. 06/3908/9

METHOD OF PRETREATMENT:

METHOD OF TEST: Wet Sieve

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	16	16	20	22	24	27	30	38	46	53	59	63	69	76	84	97	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			30			54			0

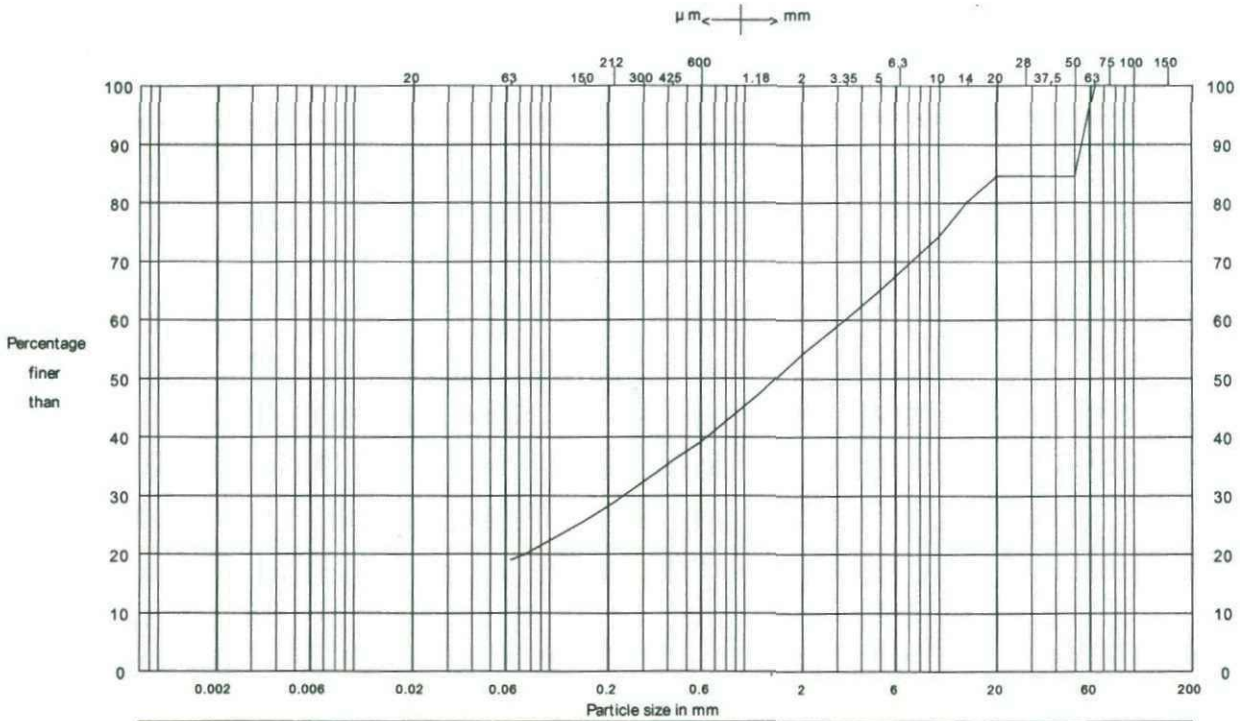
SAMPLE DESCRIPTION

Very silty very sandy GRAVEL

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH5
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 2.50 - 2.50		SAMPLE REF 3	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)													
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	19	20	26	29	32	36	39	47	54	60	65	68	74	80	84	84	84	84	100	100	100	100

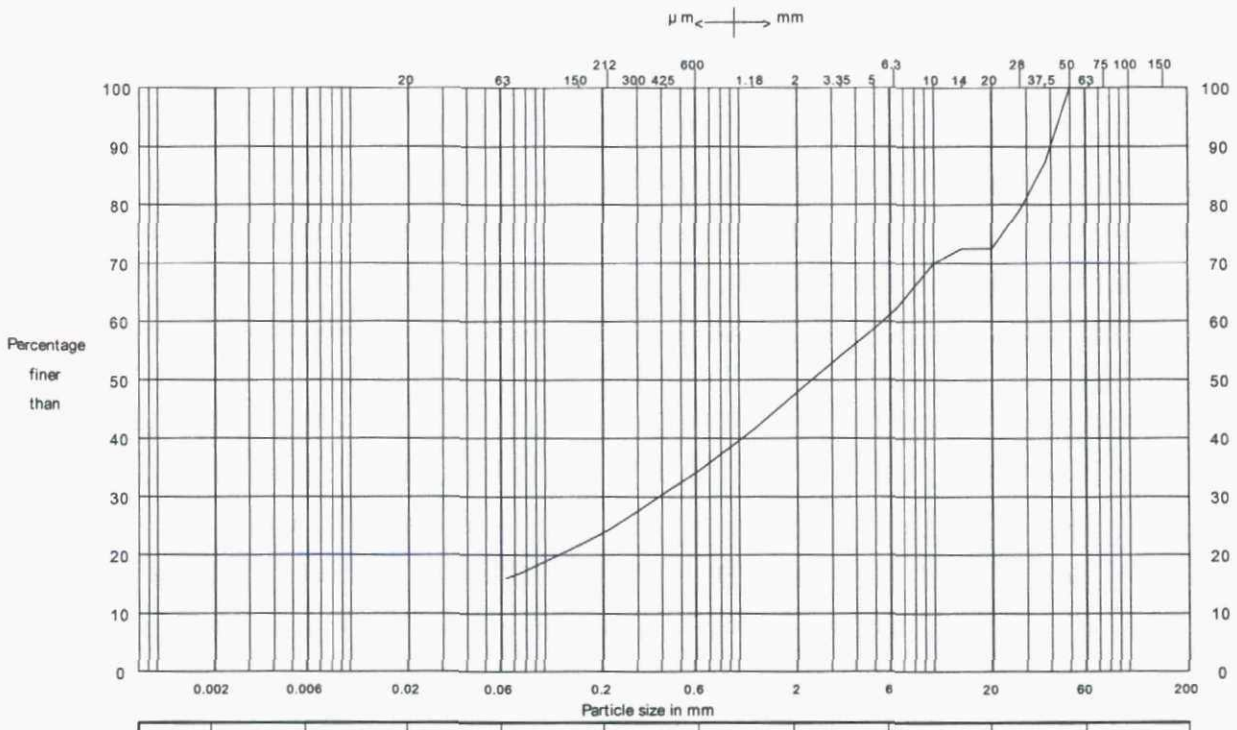


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			35			46			0

SAMPLE DESCRIPTION	REMARKS
Very silty very sandy GRAVEL	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH5
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 3.50 - 3.50		SAMPLE REF 4	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	16	17	22	24	27	31	34	41	48	54	59	62	70	72	72	79	87	100	100	100	100	100

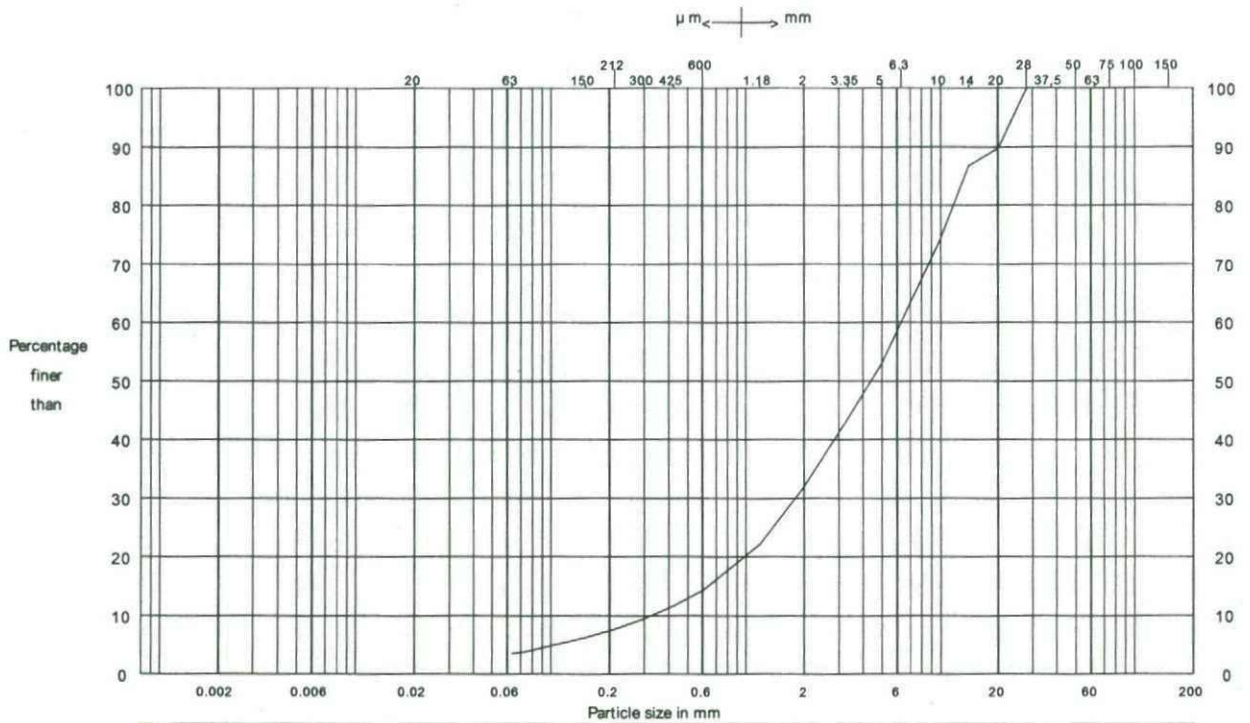


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			32			52			0

SAMPLE DESCRIPTION	REMARKS
Very silty very sandy GRAVEL	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH6
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 2.50 - 2.50		SAMPLE REF 3	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	3	4	6	8	9	12	14	22	32	44	53	60	74	87	90	100	100	100	100	100	100	100



	CLAY	SILT			SAND			GRAVEL			COBBLES
		Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
%	-	-			29			68			0

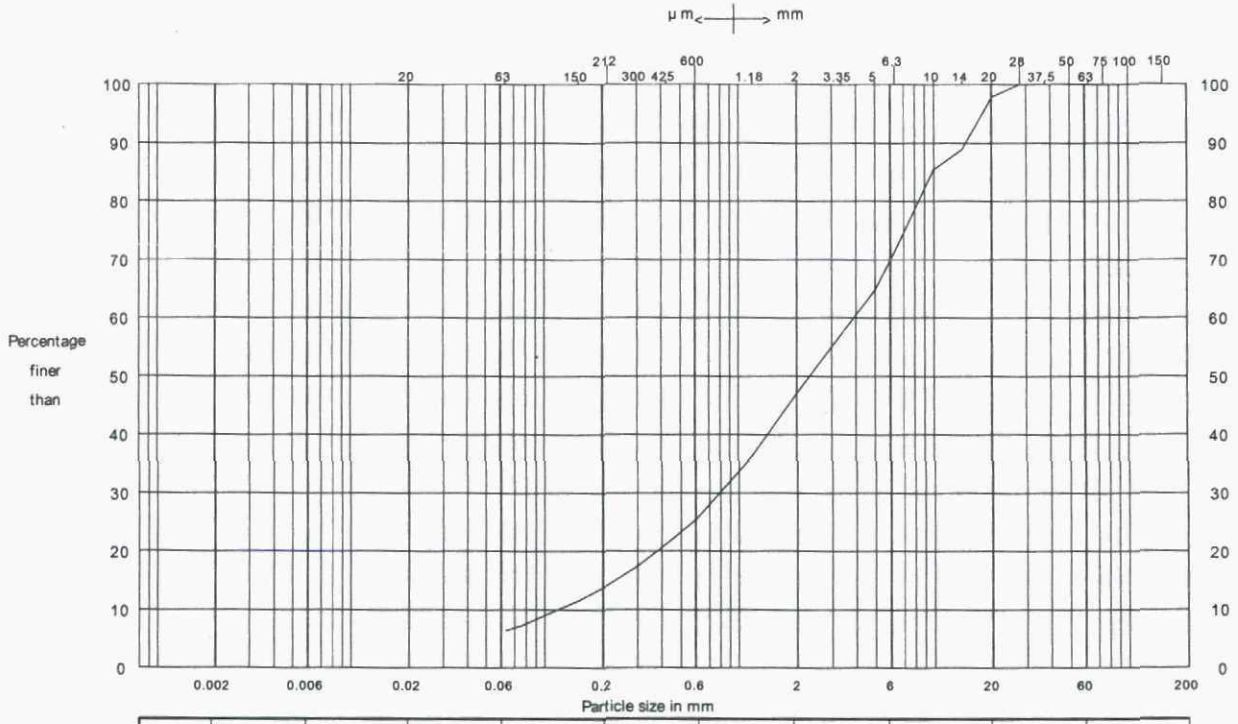
SAMPLE DESCRIPTION

Very sandy slightly silty GRAVEL

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH6
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 5.50 - 5.50		SAMPLE REF 6	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	6	7	11	14	17	21	25	36	47	57	65	71	85	89	98	100	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			41			53			0

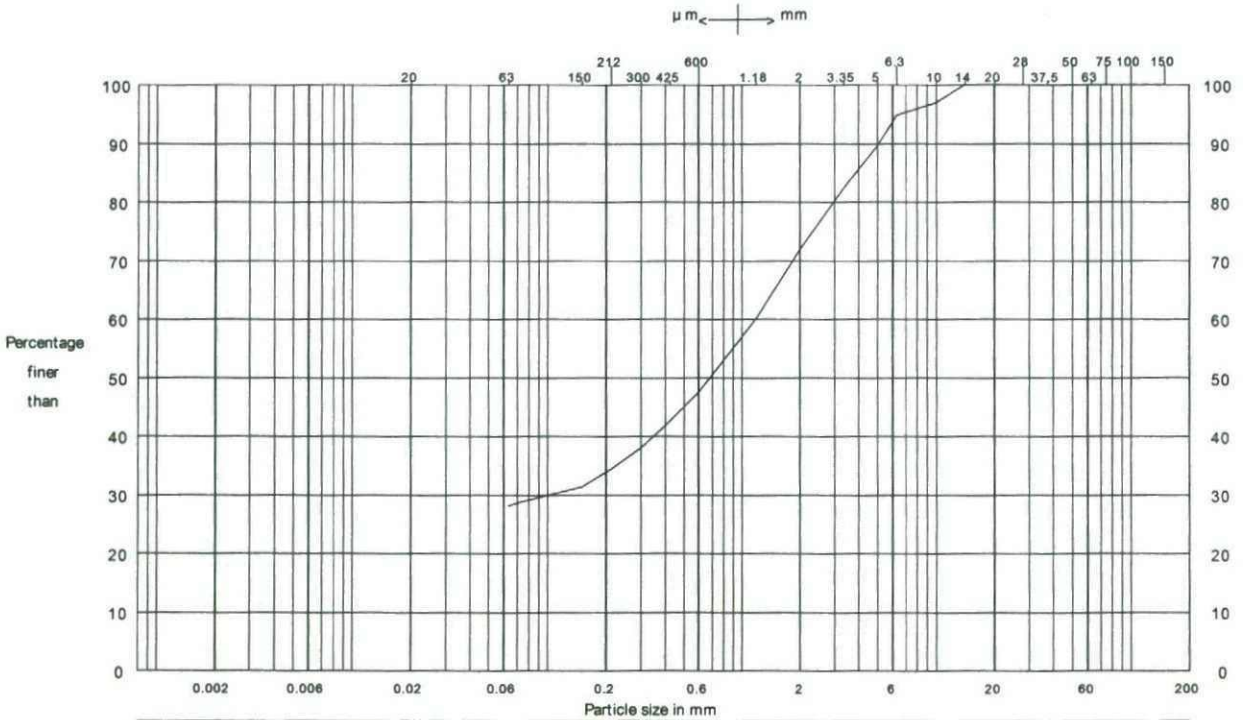
SAMPLE DESCRIPTION

Very sandy silty GRAVEL

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH7
CLIENT	BARNSLEY MBC	SITE	FOULSTONE & WOMBWELL SCHOOL
SAMPLE DEPTH	0.50 - 0.50	SAMPLE REF	1
			JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST	Wet Sieve

	Size (microns)							Size (mm)													
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	28	29	31	34	38	43	48	60	72	82	90	95	97	100	100	100	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			44			28			0

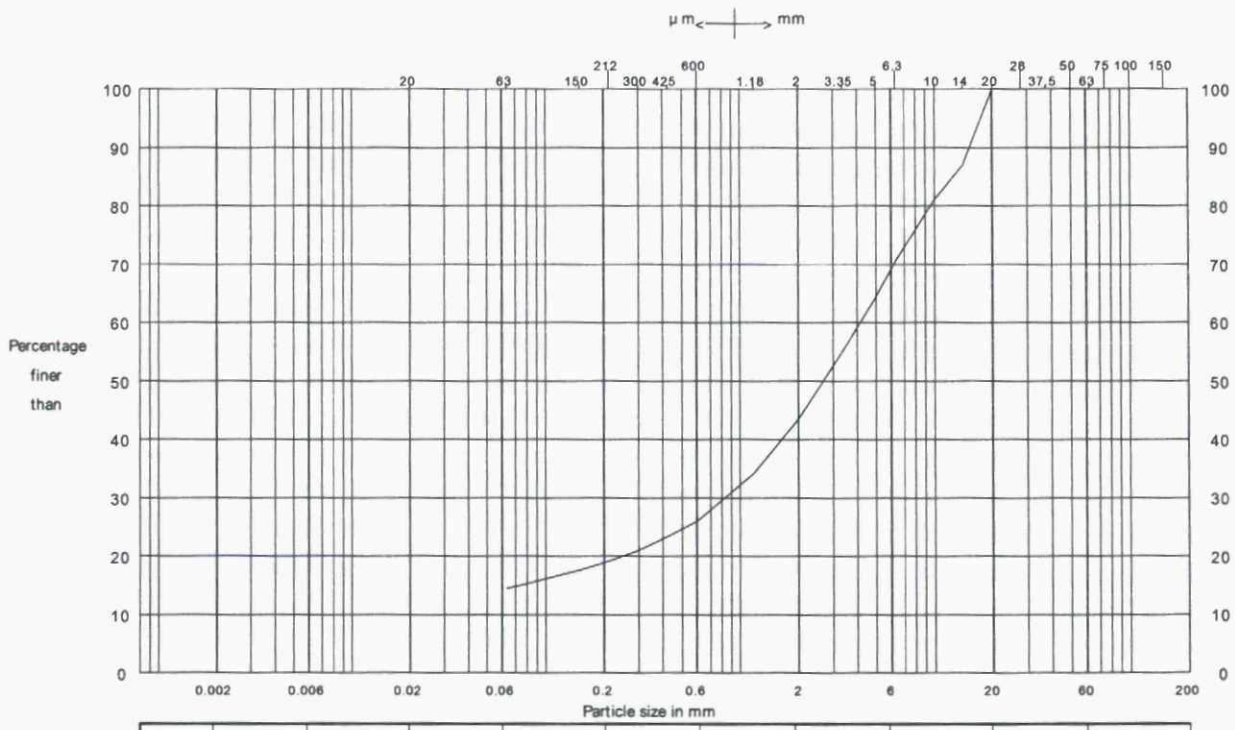
SAMPLE DESCRIPTION

Very silty very gravelly SAND

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH7
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 1.50 - 1.50		SAMPLE REF 2	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	14	15	18	19	21	23	26	34	44	55	64	70	81	87	100	100	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			30			56			0

SAMPLE DESCRIPTION

Very sandy silty GRAVEL

REMARKS

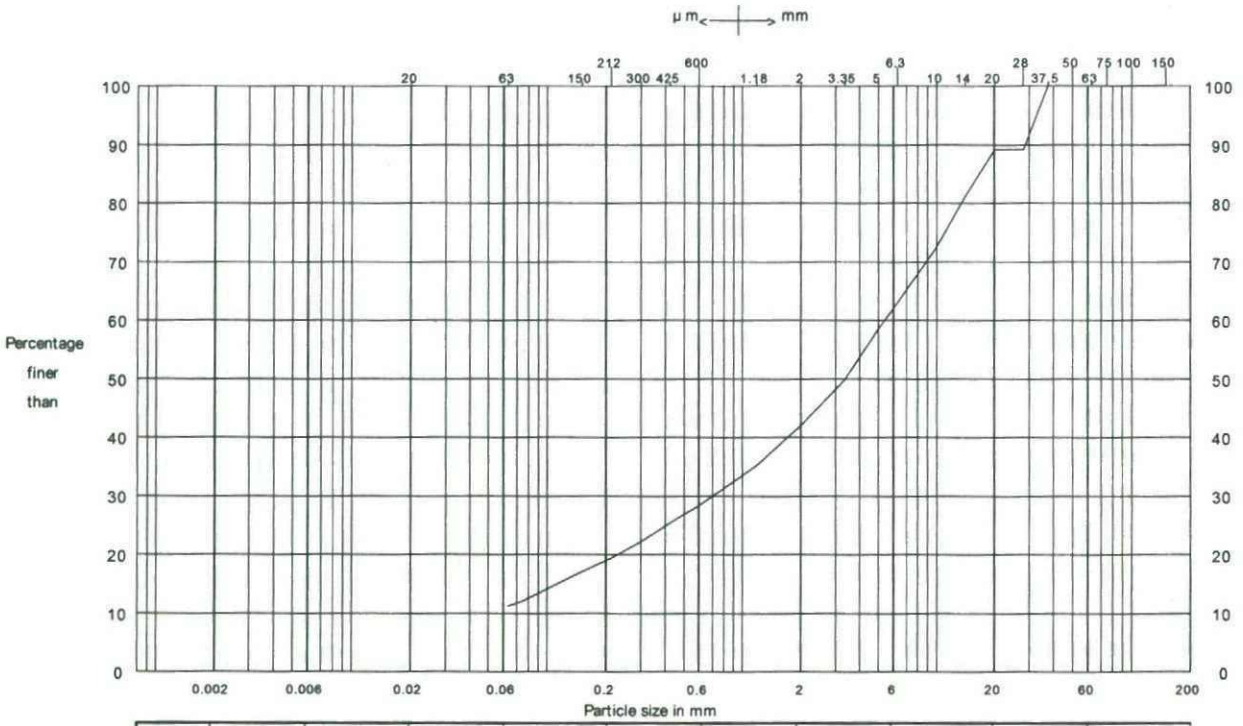
CC Geotechnical
Tel: 0151-523-0202
Fax: 0151-523-0252

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

HOLE NO. BH7

CLIENT: BARNSLEY MBC	SITE: FOULSTONE & WOMBWELL SCHOOL
SAMPLE DEPTH: 5.50 - 5.50	SAMPLE REF: 5
JOB NO.: 06/3908/9	
METHOD OF PRETREATMENT:	METHOD OF TEST: Wet Sieve

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	11	12	17	19	22	25	28	35	42	50	58	63	72	81	89	89	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			31			58			0

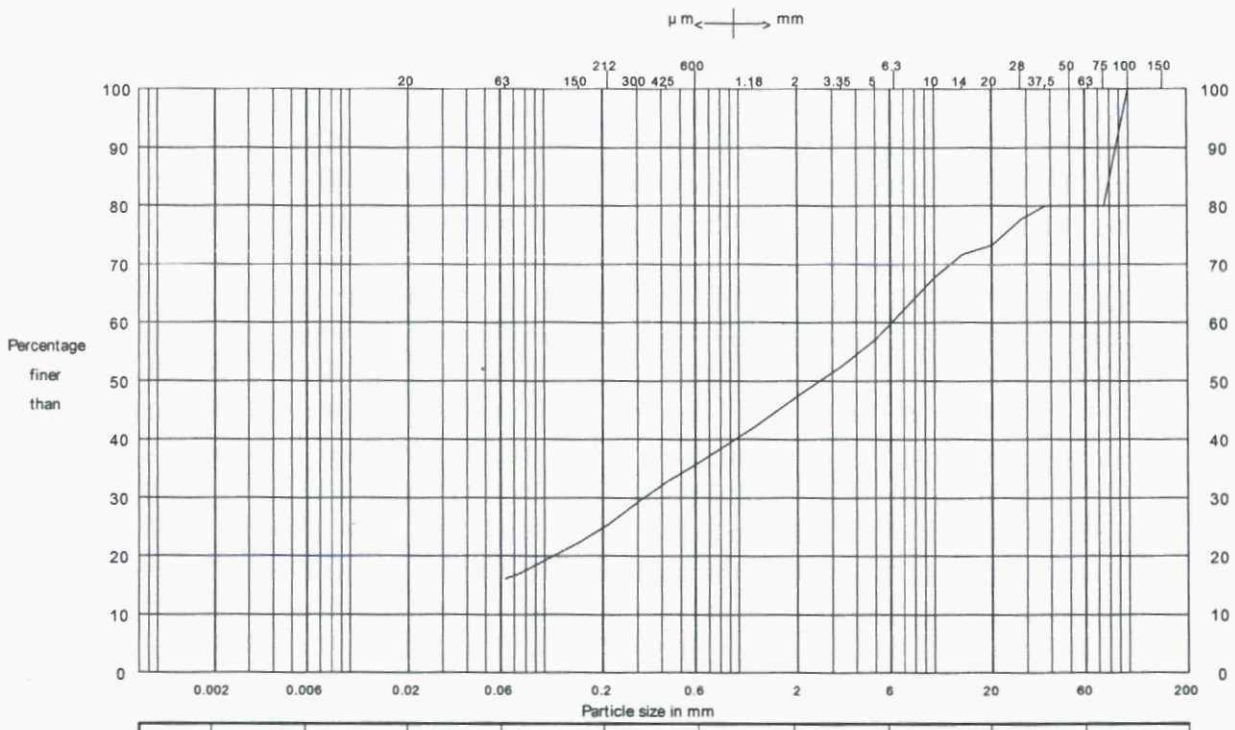
SAMPLE DESCRIPTION

Very sandy silty GRAVEL

REMARKS

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH8
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 0.50 - 0.50		SAMPLE REF 1	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	16	17	22	25	29	33	36	42	47	52	57	60	68	72	73	78	80	80	80	80	100	100

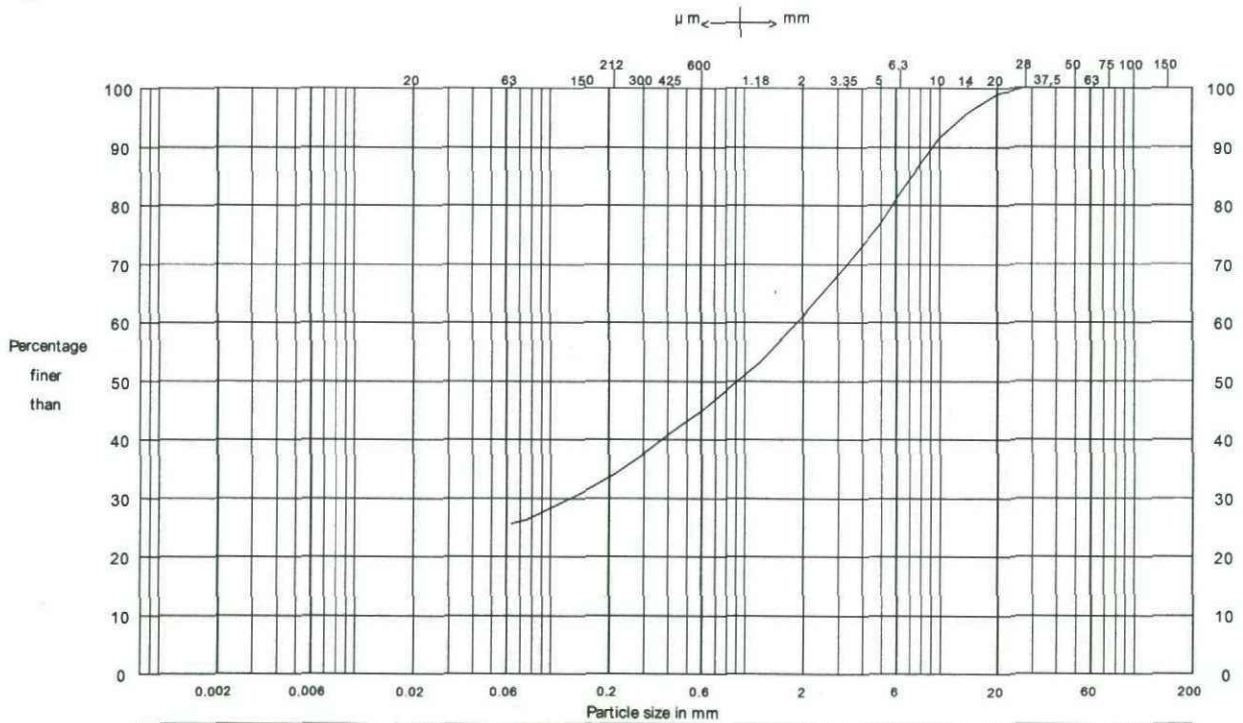


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			31			33			20

SAMPLE DESCRIPTION	REMARKS
Very silty very cobbly SAND and GRAVEL	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH8
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 1.50 - 1.50		SAMPLE REF 2	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	26	26	31	34	37	41	45	53	61	70	77	82	91	96	99	100	100	100	100	100	100	100

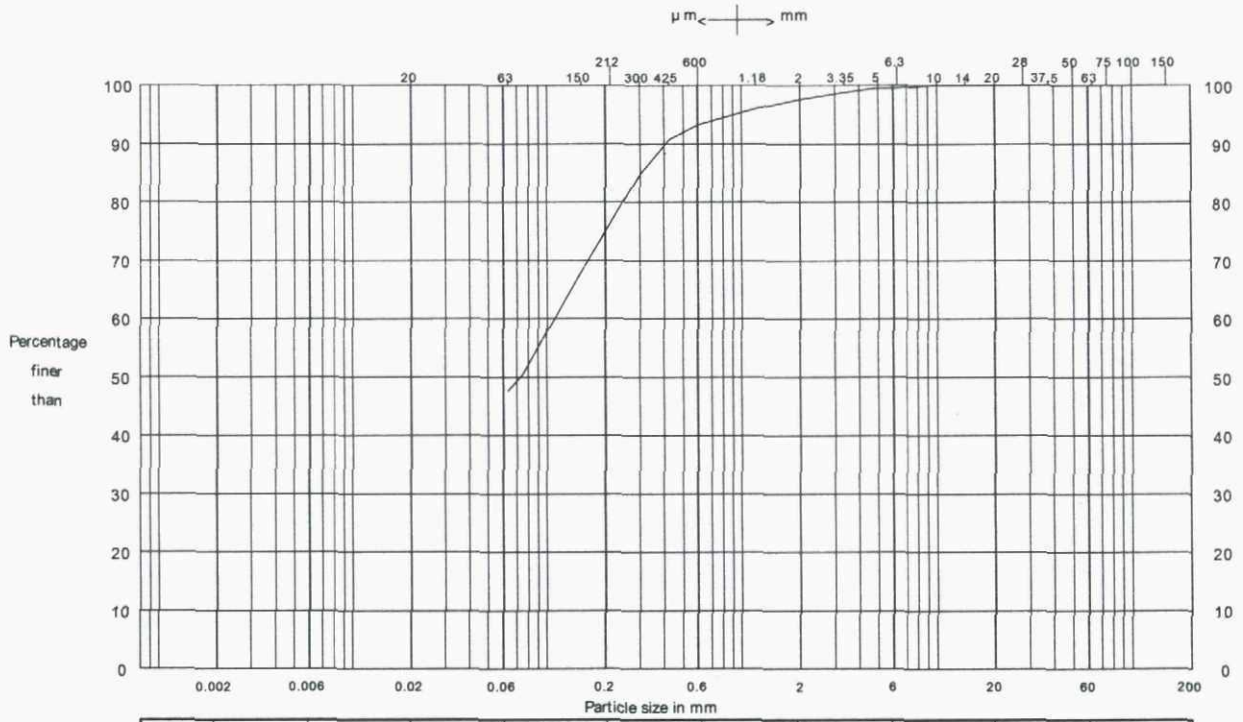


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			35			39			0

SAMPLE DESCRIPTION	REMARKS
Very silty SAND and GRAVEL	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH8
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 2.50 - 2.50		SAMPLE REF 4	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	48	50	68	76	85	91	93	96	98	99	100	100	100	100	100	100	100	100	100	100	100	100

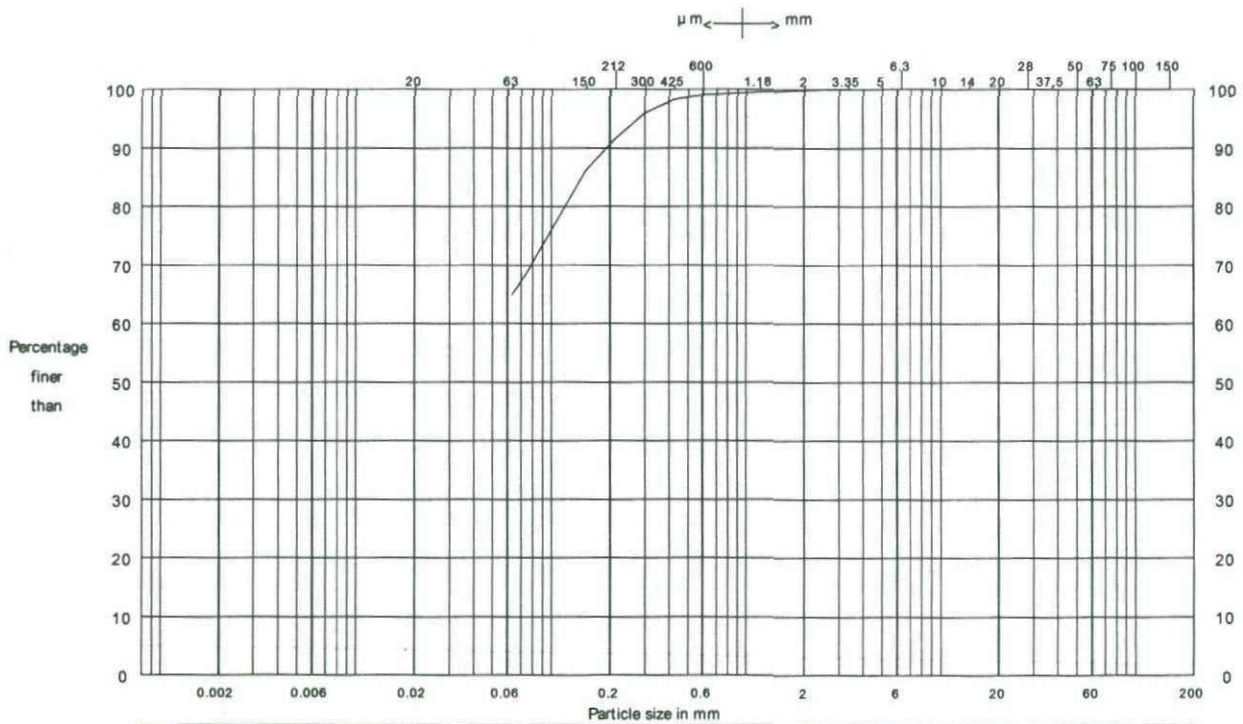


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			50			2			0

SAMPLE DESCRIPTION	REMARKS
Very sandy slightly gravelly CLAY	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH8
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 3.50 - 3.50		SAMPLE REF 5	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)														
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	65	69	86	92	96	98	99	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100

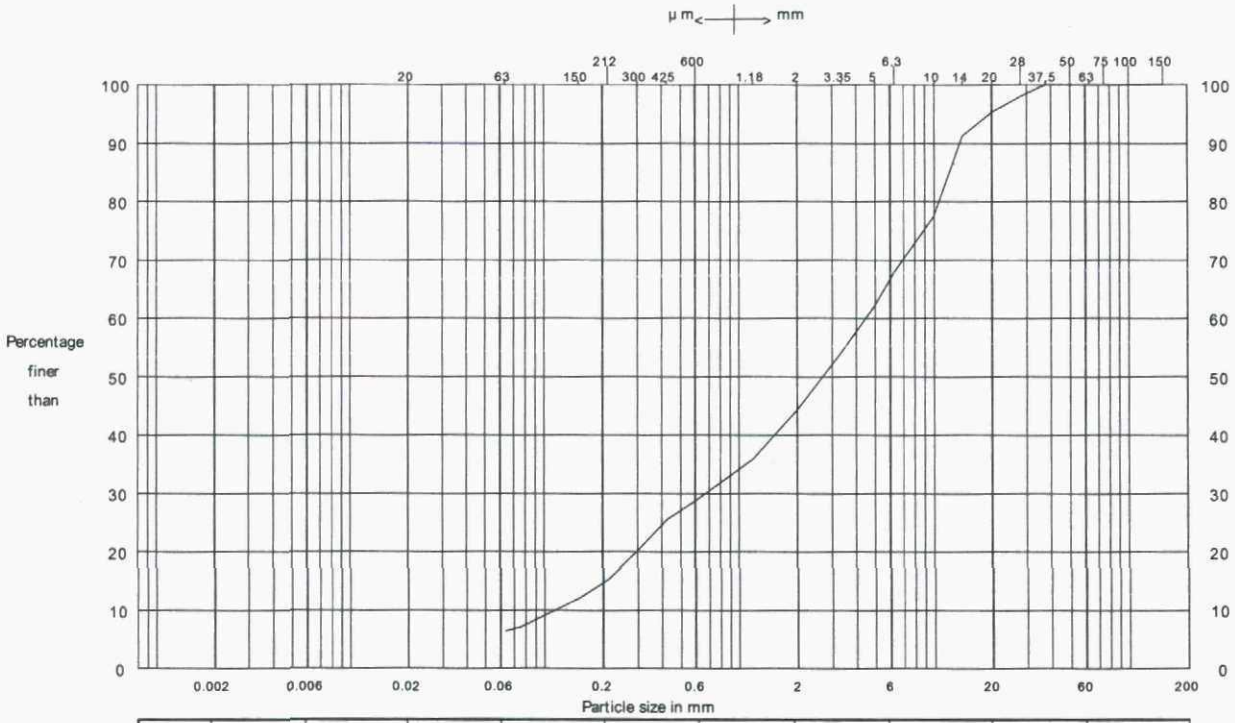


	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			35			0			0

SAMPLE DESCRIPTION	REMARKS
Very sandy CLAY	

CC Geotechnical	Tel: 0151-523-0202 Fax: 0151-523-0252	DETERMINATION OF PARTICLE SIZE DISTRIBUTION	HOLE NO. BH8
CLIENT BARNSLEY MBC		SITE FOULSTONE & WOMBWELL SCHOOL	
SAMPLE DEPTH 5.50 - 5.50		SAMPLE REF 6	JOB NO. 06/3908/9
METHOD OF PRETREATMENT		METHOD OF TEST Wet Sieve	

	Size (microns)							Size (mm)															
Sieve Size	63	75	150	212	300	425	600	1.18	2	3.35	5	6.3	10	14	20	28	37.5	50	63	75	100	150
% by Mass passing Sieve	6	7	12	15	20	25	29	36	44	54	62	68	77	91	95	98	100	100	100	100	100	100



	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
		SILT			SAND			GRAVEL			
%	-	-			38			56			0

SAMPLE DESCRIPTION

Very sandy silty GRAVEL

REMARKS