

Datarapport: Kornstørrelsesfordeling

Laboratorieanalyser for DTU Aqua

I. Nørgaard

DE NATIONALE GEOLOGISKE UNDERSØGELSER FOR
DANMARK OG GRØNLAND, KLIMA- OG ENERGIMINISTERIET



GEUS

Datarapport: Kornstørrelsesfordeling

Laboratorieanalyser for DTU Aqua

I. Nørgaard

Tobis Skrabetogt DEC 2008 PERNILLE KIM L151
Bundprøver ny v Veen til GEUS

positions nr.	Længde bredde	station	Redskab
29,6 m	55 29 00N 04 24 65Ø	1	Ny v Veen
3861/32	54 59 29N 001 50 92Ø	8	Ny v Veen
3861/14	54 50 94N 001 26 00Ø	15	Ny v Veen
3961/19	55 01 06N 001 21 24Ø	19	Ny v Veen
3961/28	55 04 43N 001 22 81Ø	23	Ny v Veen
3760/03	54 12 81N 000 47 95Ø	28	Ny v Veen
3760/04	54 15 68N 000 47 84Ø	32	Ny v Veen
3760/05	54 18 86N 000 55 59Ø	36	Ny v Veen
3761/08	54 11 32N 001 34 73Ø	40	Ny v Veen
3762/02	54 08 94N 002 03 61Ø	47	Ny v Veen
3861/02	54 39 93N 001 0687Ø	54	Ny v Veen
3861/19	54 34 03N 001 15 95Ø	58	Ny v Veen 5
3861/22	54 32 19N 001 34 10Ø	62	Ny v Veen
3861/23	54 32 70N 001 37 35Ø	66	Ny v Veen
7362/01	54 27 30N 002 08 31Ø	73	Ny v Veen
3963/01	55 05 18N 003 28 48Ø	77	Ny v Veen
3963/04	55 15 80N 003 43 53Ø	81	Ny v Veen
3963/08	55 23 13N 003 50 31Ø	85	Ny v Veen
3964/01	55 25 13N 004 03 91Ø	92	Ny v Veen
3964/ 02	55 24 99N 004 18 98Ø	96	Ny v Veen

positions nr.	Længde bredde	station	Redskab
4065/01	55 46 88N 005 03 83Ø	100	Ny v Veen
4065/02	55 53 43N 005 08 94Ø	104	Ny v Veen
4065/03	55 59 91N 005 18 07Ø	108	Ny v Veen
4165/01	56 01 70N 005 15 53Ø	112	Ny v Veen
4165/02	56 03 74N 005 17 17Ø	116	Ny v Veen
Jens 2008/01	56 08 81N 005 19 49Ø	120	Ny v Veen
Jens 2008/01	08 51 19 13	124	Ny v Veen
Jens 2008/01	08 56 18 98	125	Ny v Veen
Jens 2008/01	08 60 18 96	126	Ny v Veen
Jens 2008/01	08 62 18 94	127	Ny v Veen
Jens 2008/02	56 17 97N 005 35 44 Ø	128	Ny v Veen
Jens 2008/02	17 99 35 45	129	Ny v Veen
Jens 2008/02	18 03 35 49	130	Ny v Veen
Jens 2008/02	18 06 35 54	131	Ny v Veen
Jens 2008/02	18 09 35 60	132	Ny v Veen
4267/12	56 56 56N 007 25 68Ø	139	Ny v Veen
4267/27	56 54 75N 007 36 23Ø	143	Ny v Veen
4267/25	56 58 96N 007 41 80 Ø	147	Ny v Veen
4367/23	57 04 89N 007 40 38Ø	151	Ny v Veen
4367/16	57 05 49N 007 26 08Ø	155	Ny v Veen
4367/06	57 03 14N 007 06 28Ø	159	Ny v Veen
4464/05	38 71 18 49	175	Ny v Veen

positions nr.	Længde bredde	station	Redskab
4364/07	57 18 11N 004 33 97Ø	176	Ny v Veen
4364/05	57 09 39N 004 43 64Ø	181	Ny v Veen
4365/04	08 58 28 62	191	Ny v Veen
4263/02	56 48 85N 004 42 88Ø	192	Ny v Veen
4264/03	56 39 99N 004 08 97Ø	198	Ny v Veen
4264/05	568980N 004 250Ø	203	Ny v Veen
4365/01	571526N 005 31 21Ø	208	Ny v Veen
4366/06	57 0607N 06 07 52Ø	213	Ny v Veen
Jens 2007/1	57 04 34N 064 12 45Ø	219	Ny v Veen
4367/02	57 02 56N 07 00 29 Ø	222	Ny v Veen

Prøvebehandling

GEUS har foretaget analyser på 52 sedimentprøver fra Tobis Skrabetogt DEC 2008 PERNILLE KIM L151

Ved modtagelsen af prøverne er de blevet registreret med følgende 5 kategorier:

- dato
- lokalitet
- fortløbende laboratorienummer
- rekvirent
- analysekrav

Analysemetoder

Sigteanalyse:

Totalprøven er tørret og sigtet gennem en sigtesøjle fra 32 mm ned til 0,063 mm med $\frac{1}{2}$ phi intervaller, hvilket svarer til 16 sigter. Metoden er tillempet i forhold til DS 405.9 idet der er indføjet flere sigter end der beskrives i denne standard.

Kornkurven:

Som udgangspunkt for kornkurvestørrelsesanalysen er anvendt DS 405.9.

Resultater

I bilag 1 er vist kornkurven for sedimentprøverne. Kornkurven viser fordeling af sand, silt og ler i prøverne.

Referencer

Dansk Standard DS 405.9. Kornstørrelsesfordeling bestemt ved sigteanalyse. Dansk Standardiseringsråd, Kbh. 1978.

Bilag 1

Grain Size Distribution

Geotechnical

Sample Id: St. 1
 Lab. Id: 090228
 Submitter: DTU Aqua
 Subject: Tobistogt L 151 Dec.08
 Date: April 2009
 Executed: I Nørgaard
 Remarks: For mat. < 2mm



Total Weight 143,41 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,21	0,15	99,85
2,80	-1,49	0,24	0,17	99,69
2,00	-1,00	0,07	0,05	99,64
1,40	-0,49	0,08	0,06	99,58
1,00	0,00	0,09	0,06	99,52
0,710	0,49	0,13	0,09	99,43
0,500	1,00	0,27	0,19	99,24
0,355	1,49	1,32	0,92	98,32
0,250	2,00	12,89	8,99	89,33
0,180	2,47	62,84	43,82	45,51
0,125	3,00	57,56	40,14	5,38
0,090	3,47	5,67	3,95	1,42
0,075	3,74	0,26	0,18	1,24
0,063	3,99	0,15	0,10	1,14
< 0,063	> 3,99	1,63	1,14	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,14
Sand, fine (0,063 mm - 0,200 mm):	56,90
Sand, medium (0,2 mm - 0,6 mm):	41,30
Sand, coarse (0,6 mm - 2 mm):	0,31
Gravel (> 2 mm):	0,36
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,32	1,66
16%	84%	0,24	2,05
25%	75%	0,23	2,14
40%	60%	0,20	2,30
Median 50%	50%	0,19	2,42
75%	25%	0,15	2,72
84%	16%	0,14	2,84
90%	10%	0,13	2,93
95%	5%	0,12	3,04

Moments Statistics

Mean	2,44
Sorting	0,41
Skewness	-0,01
Kurtosis	0,97
Uniformity Coefficient	1,55

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

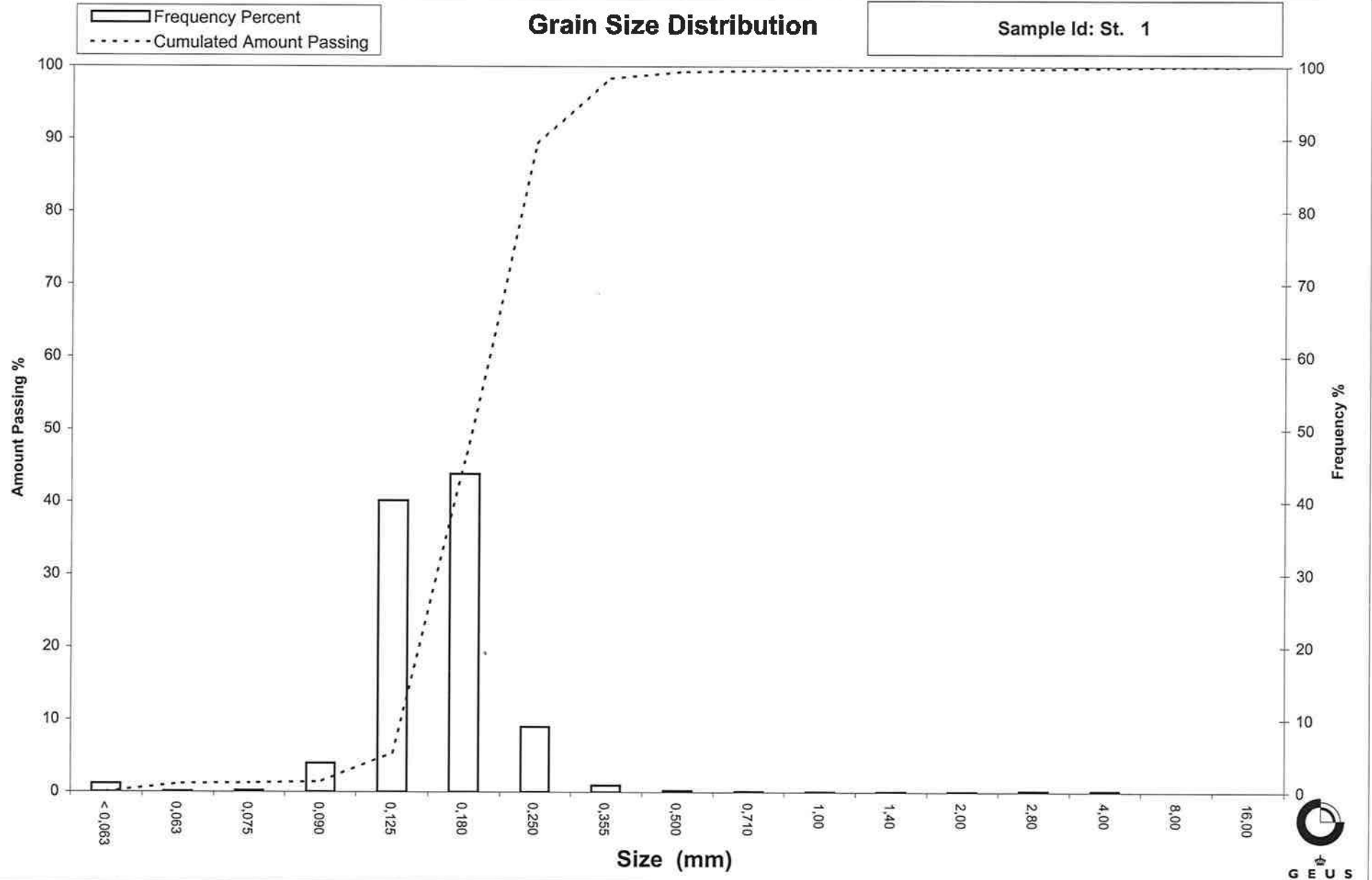
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 1



Grain Size Distribution

Geotechnical

Sample Id: St. 8
Lab. Id: 090229
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 147,01 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,08	0,05	99,95
2,00	-1,00	0,10	0,07	99,88
1,40	-0,49	0,27	0,18	99,69
1,00	0,00	0,35	0,24	99,46
0,710	0,49	0,51	0,35	99,11
0,500	1,00	1,01	0,69	98,42
0,355	1,49	2,99	2,03	96,39
0,250	2,00	10,14	6,90	89,49
0,180	2,47	41,24	28,05	61,44
0,125	3,00	77,42	52,66	8,77
0,090	3,47	9,92	6,75	2,03
0,075	3,74	0,59	0,40	1,63
0,063	3,99	0,22	0,15	1,48
< 0,063	> 3,99	2,17	1,48	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,48
Sand, fine (0,063 mm - 0,200 mm):	67,98
Sand, medium (0,2 mm - 0,6 mm):	29,30
Sand, coarse (0,6 mm - 2 mm):	1,13
Gravel (> 2 mm):	0,12
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,58
16%	84%	0,24	2,08
25%	75%	0,21	2,23
40%	60%	0,18	2,49
Median 50%	50%	0,17	2,57
75%	25%	0,14	2,82
84%	16%	0,13	2,92
90%	10%	0,13	2,99
95%	5%	0,11	3,25

Moments Statistics

Mean	2,52
Sorting	0,46
Skewness	-0,18
Kurtosis	1,15
Uniformity Coefficient	1,41

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

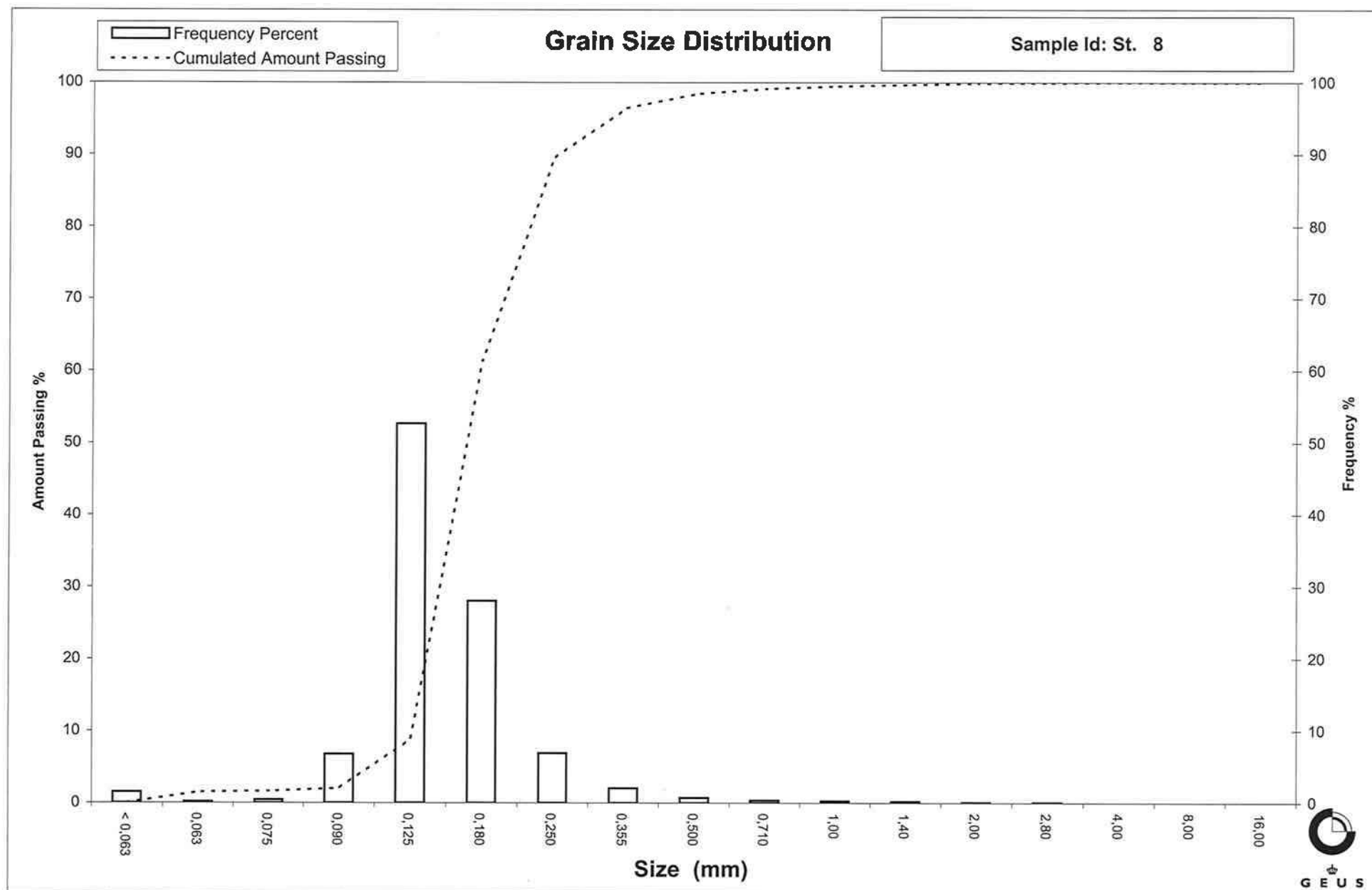
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 15
Lab. Id: 090230
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 137,04 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,04	0,03	99,97
1,40	-0,49	0,05	0,04	99,93
1,00	0,00	0,16	0,12	99,82
0,710	0,49	0,53	0,39	99,43
0,500	1,00	1,89	1,38	98,05
0,355	1,49	7,59	5,54	92,51
0,250	2,00	26,49	19,33	73,18
0,180	2,47	46,94	34,25	38,93
0,125	3,00	45,50	33,20	5,73
0,090	3,47	6,31	4,60	1,12
0,075	3,74	0,36	0,26	0,86
0,063	3,99	0,11	0,08	0,78
< 0,063	> 3,99	1,07	0,78	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,78
Sand, fine (0,063 mm - 0,200 mm):	47,94
Sand, medium (0,2 mm - 0,6 mm):	49,99
Sand, coarse (0,6 mm - 2 mm):	1,26
Gravel (> 2 mm):	0,03
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,42	1,25
16%	84%	0,31	1,70
25%	75%	0,26	1,94
40%	60%	0,22	2,16
Median 50%	50%	0,20	2,30
75%	25%	0,16	2,67
84%	16%	0,14	2,82
90%	10%	0,13	2,92
95%	5%	0,12	3,07

Moments Statistics

Mean	2,27
Sorting	0,55
Skewness	-0,12
Kurtosis	1,02
Uniformity Coefficient	1,69

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

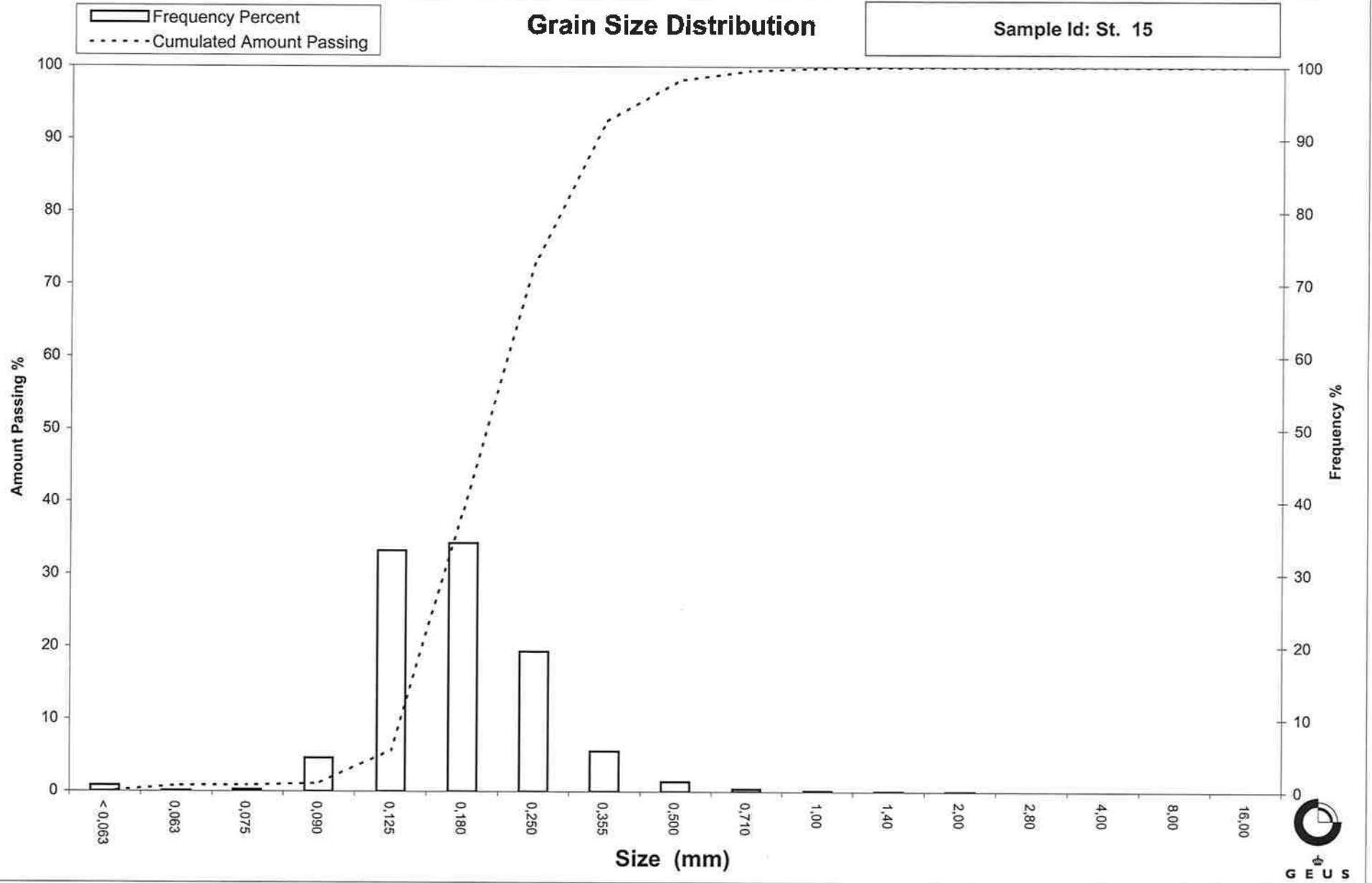
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 15



Grain Size Distribution

Geotechnical

Sample Id: St. 19
Lab. Id: 090231
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 146,34 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,13	0,09	99,91
2,80	-1,49	0,00	0,00	99,91
2,00	-1,00	0,07	0,05	99,86
1,40	-0,49	0,17	0,12	99,75
1,00	0,00	0,18	0,12	99,62
0,710	0,49	0,38	0,26	99,36
0,500	1,00	1,42	0,97	98,39
0,355	1,49	4,62	3,16	95,24
0,250	2,00	14,68	10,03	85,21
0,180	2,47	50,49	34,50	50,70
0,125	3,00	62,53	42,73	7,97
0,090	3,47	10,27	7,02	0,96
0,075	3,74	0,68	0,46	0,49
0,063	3,99	0,23	0,16	0,33
< 0,063	> 3,99	0,49	0,33	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,33
Sand, fine (0,063 mm - 0,200 mm):	60,23
Sand, medium (0,2 mm - 0,6 mm):	38,29
Sand, coarse (0,6 mm - 2 mm):	1,01
Gravel (> 2 mm):	0,14
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,50
16%	84%	0,25	2,01
25%	75%	0,23	2,12
40%	60%	0,20	2,33
Median 50%	50%	0,18	2,48
75%	25%	0,15	2,77
84%	16%	0,14	2,89
90%	10%	0,13	2,97
95%	5%	0,11	3,18

Moments Statistics

Mean	2,46
Sorting	0,47
Skewness	-0,12
Kurtosis	1,07
Uniformity Coefficient	1,56

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

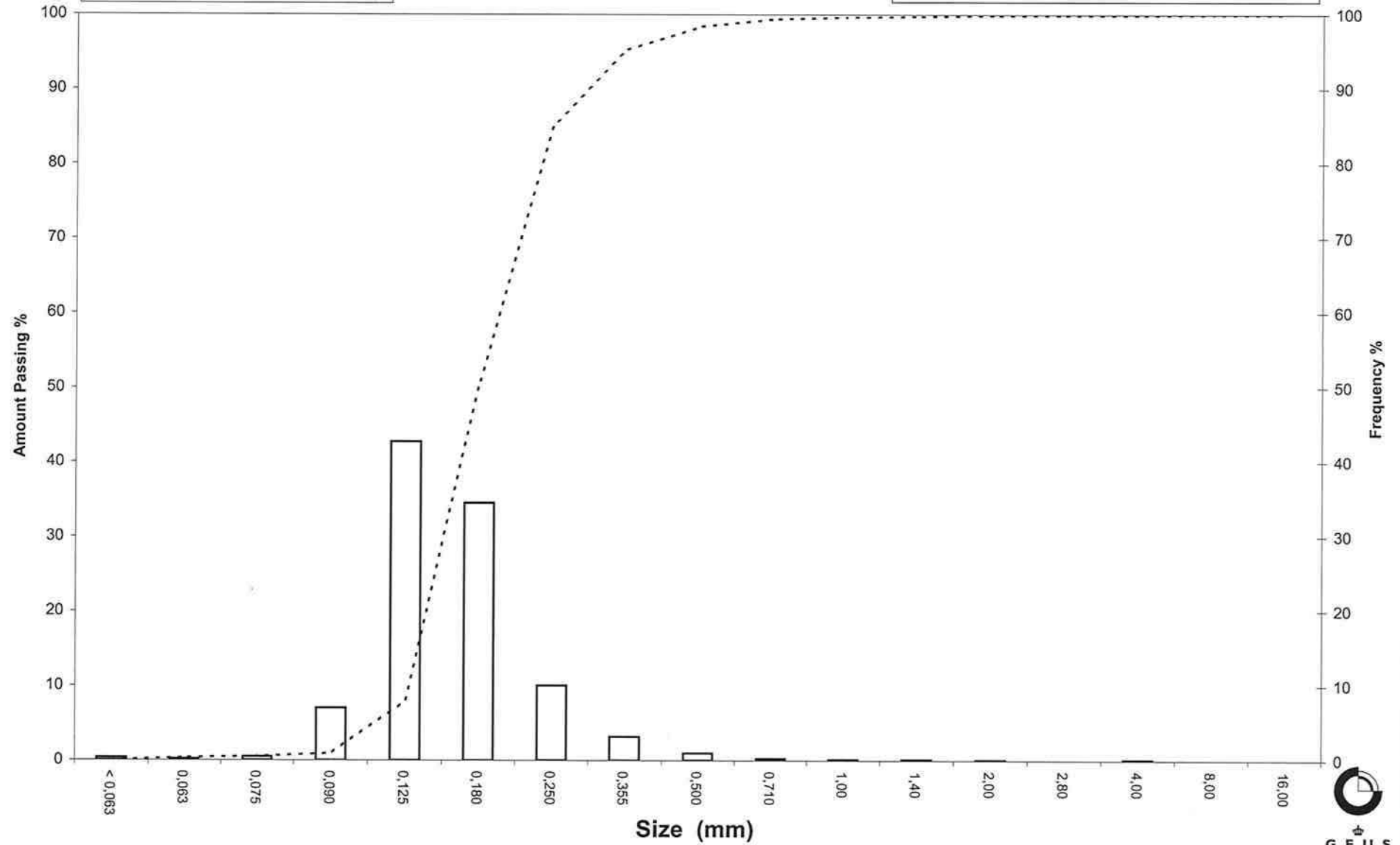
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 19



Grain Size Distribution

Geotechnical

Sample Id: St. 23
Lab. Id: 090232
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 146,3 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,10	0,07	99,93
2,00	-1,00	0,08	0,05	99,88
1,40	-0,49	0,10	0,07	99,81
1,00	0,00	0,20	0,14	99,67
0,710	0,49	0,46	0,31	99,36
0,500	1,00	2,60	1,78	97,58
0,355	1,49	21,55	14,73	82,85
0,250	2,00	58,10	39,71	43,14
0,180	2,47	41,05	28,06	15,08
0,125	3,00	19,43	13,28	1,80
0,090	3,47	1,72	1,18	0,62
0,075	3,74	0,09	0,06	0,56
0,063	3,99	0,04	0,03	0,53
< 0,063	> 3,99	0,78	0,53	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,53
Sand, fine (0,063 mm - 0,200 mm):	22,56
Sand, medium (0,2 mm - 0,6 mm):	75,33
Sand, coarse (0,6 mm - 2 mm):	1,45
Gravel (> 2 mm):	0,12
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,47	1,08
16%	84%	0,37	1,45
25%	75%	0,33	1,58
40%	60%	0,29	1,76
Median 50%	50%	0,27	1,90
75%	25%	0,20	2,29
84%	16%	0,18	2,46
90%	10%	0,16	2,65
95%	5%	0,14	2,85

Moments Statistics

Mean	1,93
Sorting	0,52
Skewness	0,09
Kurtosis	1,03
Uniformity Coefficient	1,85

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

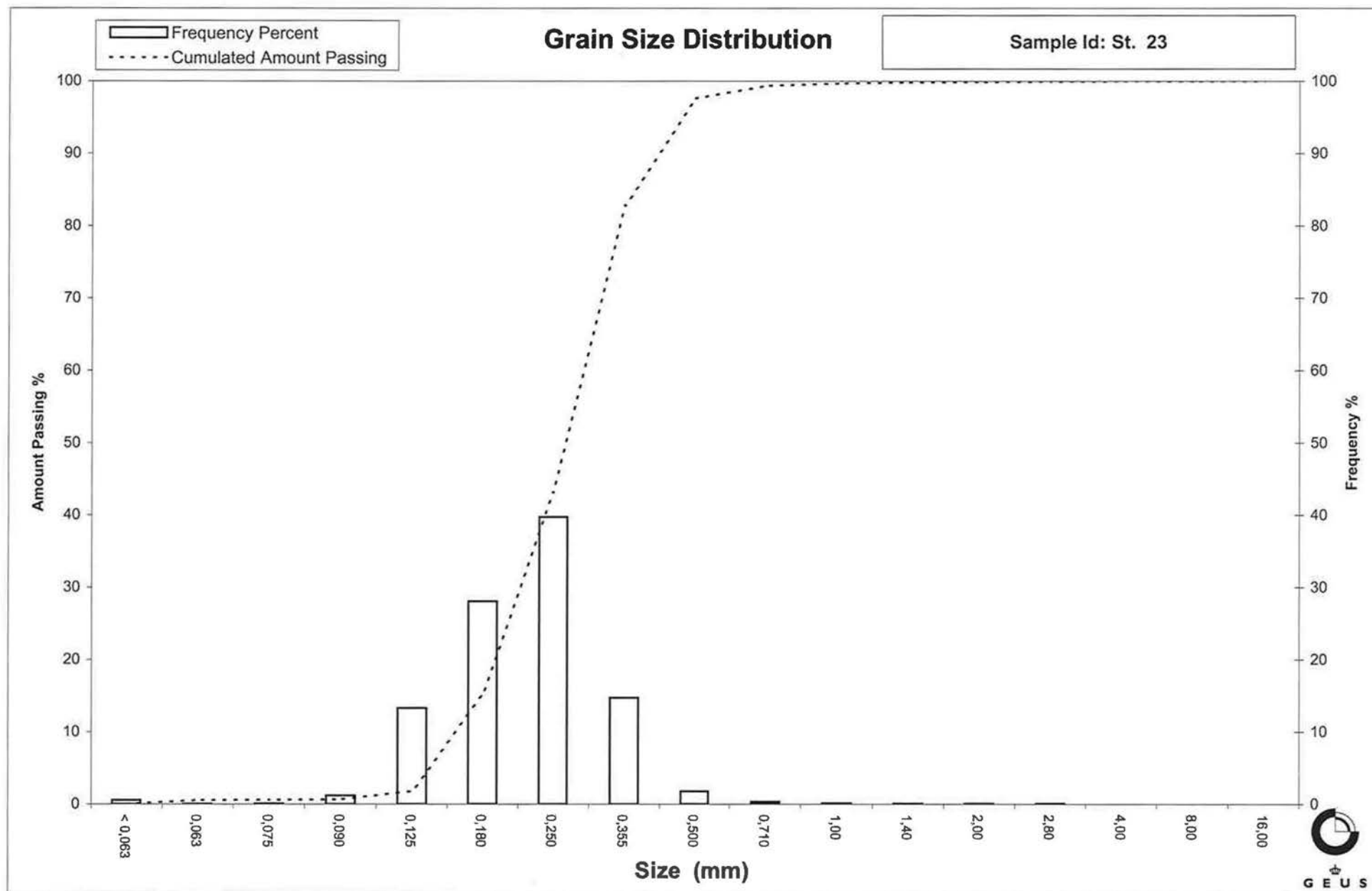
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 28
Lab. Id: 090233
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 148,06 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,01	0,01	99,99
1,40	-0,49	0,01	0,01	99,99
1,00	0,00	0,02	0,01	99,97
0,710	0,49	0,03	0,02	99,95
0,500	1,00	0,04	0,03	99,93
0,355	1,49	2,38	1,61	98,32
0,250	2,00	93,24	62,97	35,34
0,180	2,47	48,02	32,43	2,91
0,125	3,00	2,15	1,45	1,46
0,090	3,47	0,26	0,18	1,28
0,075	3,74	0,04	0,03	1,26
0,063	3,99	0,03	0,02	1,24
< 0,063	> 3,99	1,83	1,24	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,24
Sand, fine (0,063 mm - 0,200 mm):	10,94
Sand, medium (0,2 mm - 0,6 mm):	87,76
Sand, coarse (0,6 mm - 2 mm):	0,05
Gravel (> 2 mm):	0,01
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,52
16%	84%	0,33	1,59
25%	75%	0,32	1,66
40%	60%	0,29	1,78
Median 50%	50%	0,27	1,87
75%	25%	0,23	2,13
84%	16%	0,21	2,26
90%	10%	0,20	2,36
95%	5%	0,18	2,44

Moments Statistics

Mean	1,91
Sorting	0,31
Skewness	0,22
Kurtosis	0,80
Uniformity Coefficient	1,49

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

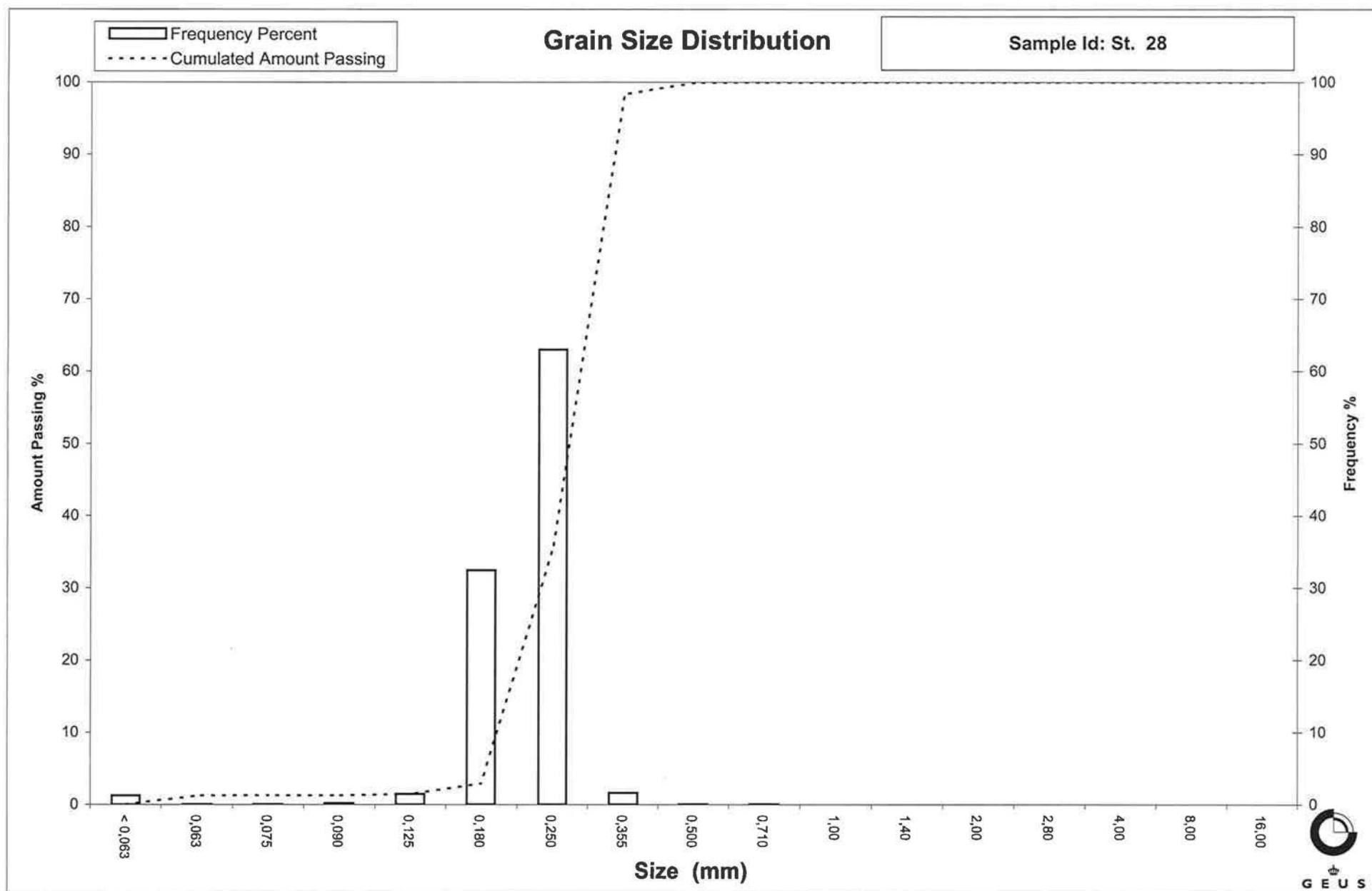
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 32
 Lab. Id: 090234
 Submitter: DTU Aqua
 Subject: Tobistogt L 151 Dec.08
 Date: April 2009
 Executed: I Nørgaard
 Remarks: For mat. < 2mm



Total Weight 133,87 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,02	0,01	99,99
0,710	0,49	0,02	0,01	99,97
0,500	1,00	0,06	0,04	99,93
0,355	1,49	1,65	1,23	98,69
0,250	2,00	71,26	53,23	45,46
0,180	2,47	53,60	40,04	5,42
0,125	3,00	5,40	4,03	1,39
0,090	3,47	0,56	0,42	0,97
0,075	3,74	0,10	0,07	0,90
0,063	3,99	0,05	0,04	0,86
< 0,063	> 3,99	1,15	0,86	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,86
Sand, fine (0,063 mm - 0,200 mm):	16,00
Sand, medium (0,2 mm - 0,6 mm):	83,08
Sand, coarse (0,6 mm - 2 mm):	0,05
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,52
16%	84%	0,33	1,62
25%	75%	0,31	1,70
40%	60%	0,28	1,84
Median 50%	50%	0,26	1,95
75%	25%	0,21	2,22
84%	16%	0,20	2,33
90%	10%	0,19	2,41
95%	5%	0,17	2,52

Moments Statistics

Mean	1,97
Sorting	0,33
Skewness	0,11
Kurtosis	0,78
Uniformity Coefficient	1,48

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

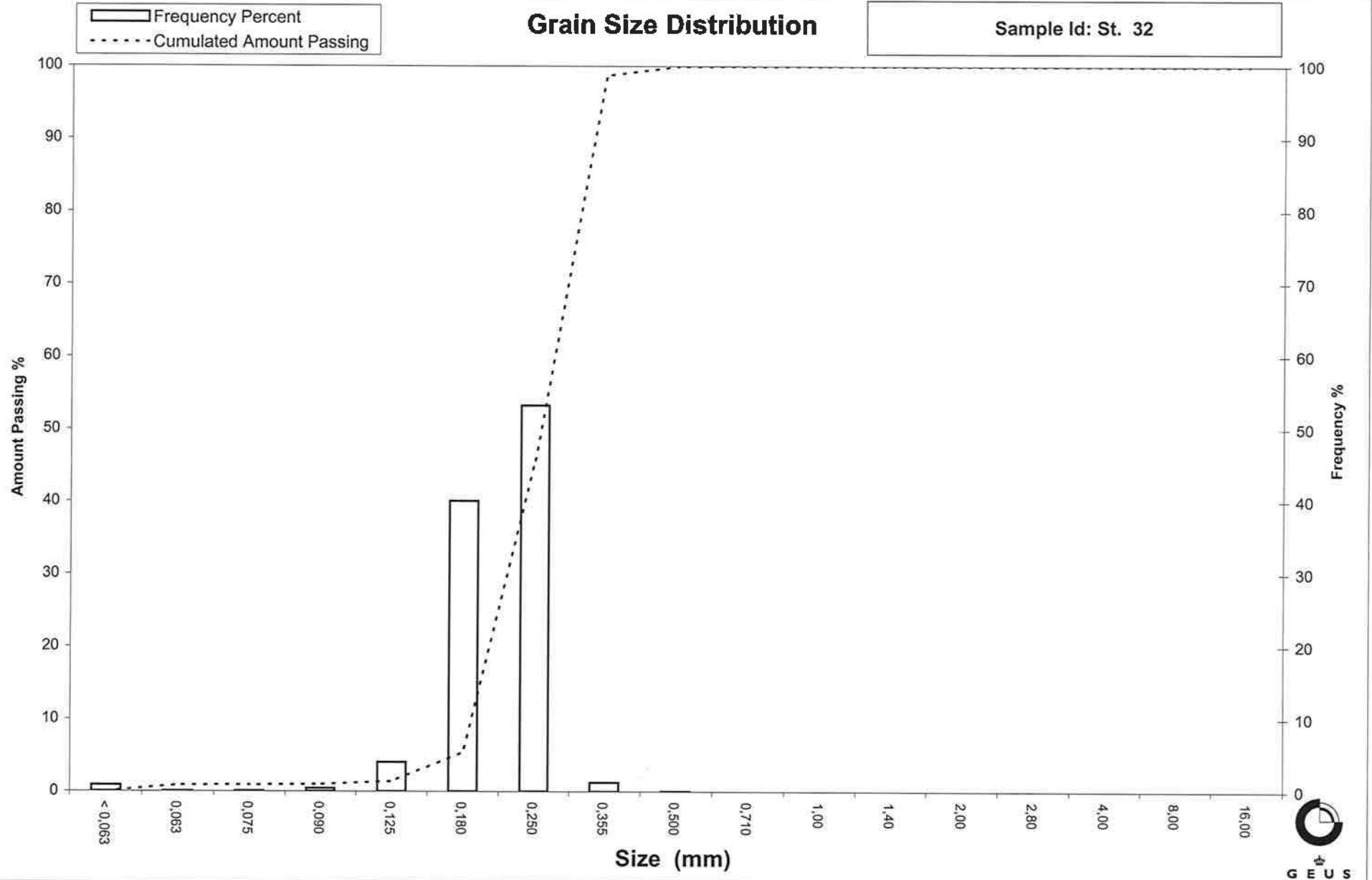
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 32



Grain Size Distribution

Geotechnical

Sample Id: St. 36
Lab. Id: 090235
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 147,83 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,01	0,01	99,99
1,00	0,00	0,01	0,01	99,99
0,710	0,49	0,04	0,03	99,96
0,500	1,00	0,05	0,03	99,93
0,355	1,49	0,29	0,20	99,73
0,250	2,00	27,49	18,60	81,13
0,180	2,47	99,88	67,56	13,57
0,125	3,00	17,79	12,03	1,54
0,090	3,47	0,72	0,49	1,05
0,075	3,74	0,09	0,06	0,99
0,063	3,99	0,06	0,04	0,95
< 0,063	> 3,99	1,40	0,95	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,95
Sand, fine (0,063 mm - 0,200 mm):	31,93
Sand, medium (0,2 mm - 0,6 mm):	67,07
Sand, coarse (0,6 mm - 2 mm):	0,06
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,61
16%	84%	0,27	1,91
25%	75%	0,24	2,04
40%	60%	0,23	2,13
Median 50%	50%	0,22	2,20
75%	25%	0,19	2,38
84%	16%	0,18	2,45
90%	10%	0,16	2,61
95%	5%	0,14	2,83

Moments Statistics

Mean	2,19
Sorting	0,32
Skewness	-0,02
Kurtosis	1,45
Uniformity Coefficient	1,39

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

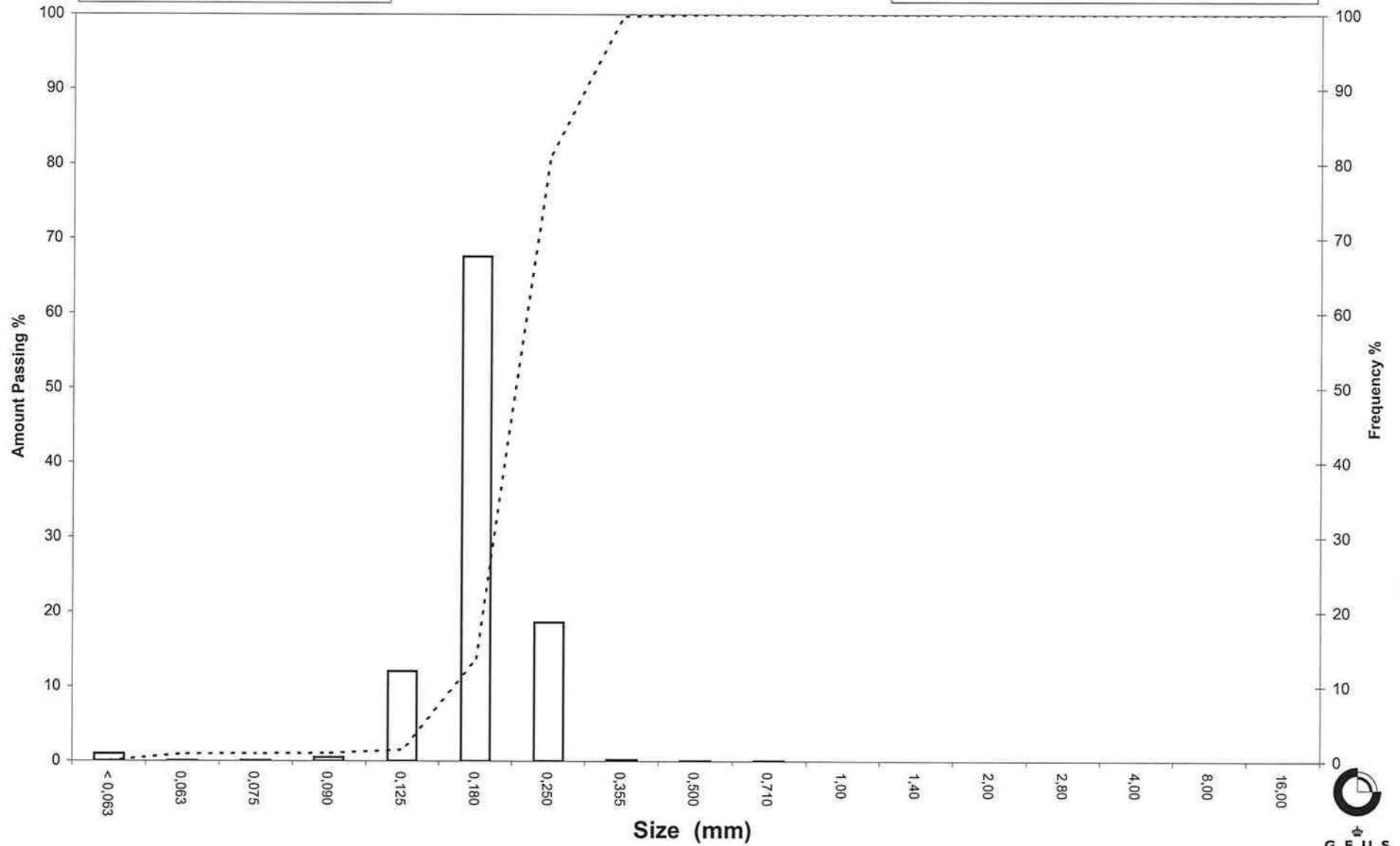
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 36



Grain Size Distribution

Geotechnical

Sample Id: St. 40
Lab. Id: 090236
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 148,71 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,01	0,01	99,99
1,00	0,00	0,02	0,01	99,98
0,710	0,49	0,03	0,02	99,96
0,500	1,00	0,04	0,03	99,93
0,355	1,49	0,39	0,26	99,67
0,250	2,00	9,01	6,06	93,61
0,180	2,47	96,85	65,13	28,48
0,125	3,00	38,96	26,20	2,29
0,090	3,47	1,42	0,95	1,33
0,075	3,74	0,21	0,14	1,19
0,063	3,99	0,09	0,06	1,13
< 0,063	> 3,99	1,68	1,13	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,13
Sand, fine (0,063 mm - 0,200 mm):	45,96
Sand, medium (0,2 mm - 0,6 mm):	52,85
Sand, coarse (0,6 mm - 2 mm):	0,05
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,27	1,87
16%	84%	0,24	2,06
25%	75%	0,23	2,12
40%	60%	0,21	2,23
Median 50%	50%	0,20	2,30
75%	25%	0,17	2,53
84%	16%	0,15	2,70
90%	10%	0,14	2,82
95%	5%	0,13	2,94

Moments Statistics

Mean	2,35
Sorting	0,32
Skewness	0,22
Kurtosis	1,06
Uniformity Coefficient	1,51

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

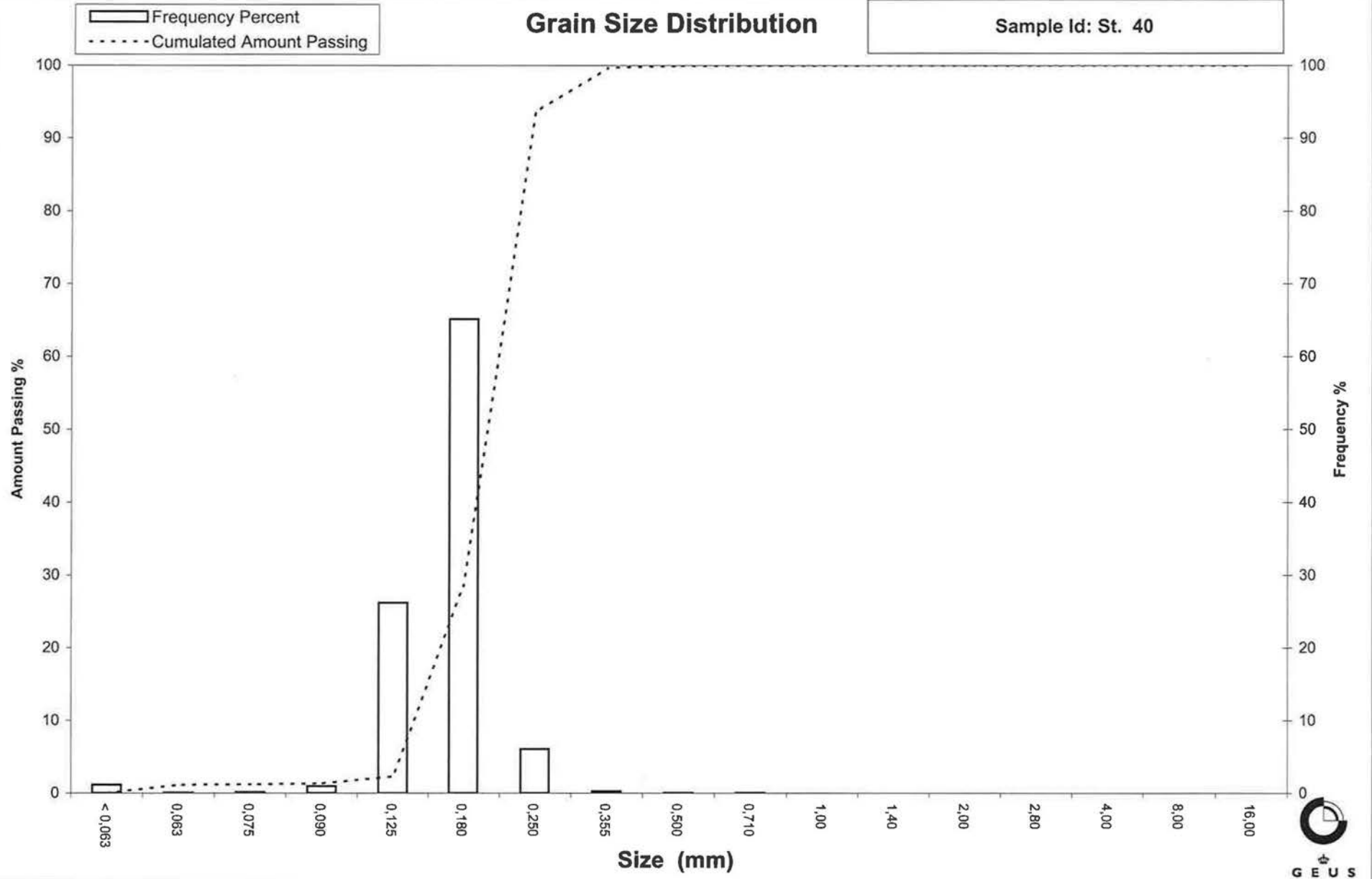
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 40



Grain Size Distribution

Geotechnical

Sample Id: St. 47
Lab. Id: 090237
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 155,11 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,05	0,03	99,97
2,00	-1,00	0,04	0,03	99,94
1,40	-0,49	0,05	0,03	99,91
1,00	0,00	0,06	0,04	99,87
0,710	0,49	0,08	0,05	99,82
0,500	1,00	0,22	0,14	99,68
0,355	1,49	1,20	0,77	98,90
0,250	2,00	9,86	6,36	92,55
0,180	2,47	70,19	45,25	47,30
0,125	3,00	68,61	44,23	3,06
0,090	3,47	2,95	1,90	1,16
0,075	3,74	0,36	0,23	0,93
0,063	3,99	0,14	0,09	0,84
< 0,063	> 3,99	1,30	0,84	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,84
Sand, fine (0,063 mm - 0,200 mm):	59,39
Sand, medium (0,2 mm - 0,6 mm):	39,52
Sand, coarse (0,6 mm - 2 mm):	0,20
Gravel (> 2 mm):	0,06
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,29	1,78
16%	84%	0,24	2,08
25%	75%	0,22	2,17
40%	60%	0,20	2,32
Median 50%	50%	0,18	2,44
75%	25%	0,15	2,72
84%	16%	0,14	2,83
90%	10%	0,13	2,90
95%	5%	0,13	2,97

Moments Statistics

Mean	2,45
Sorting	0,37
Skewness	-0,04
Kurtosis	0,89
Uniformity Coefficient	1,49

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

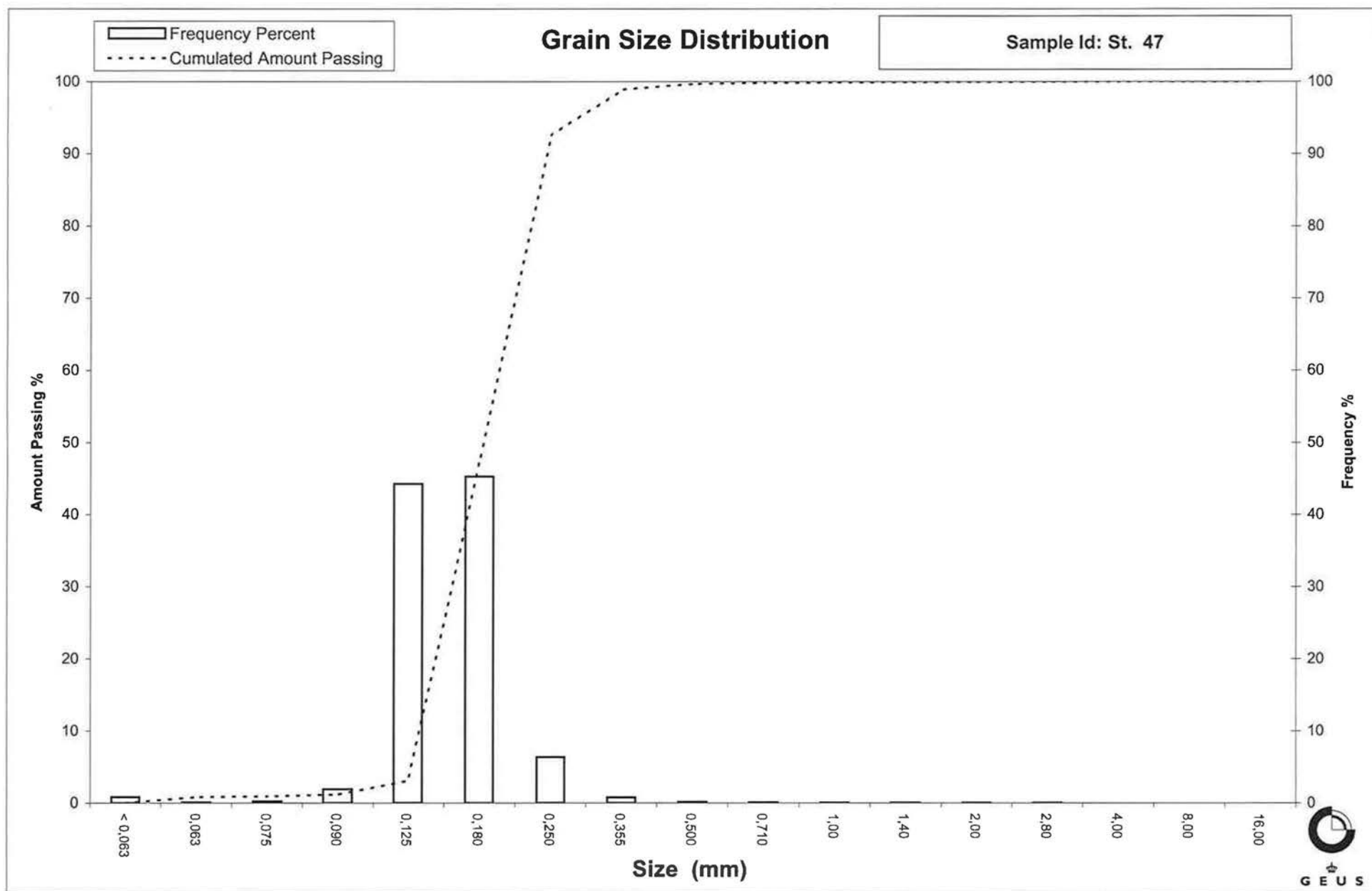
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 54
 Lab. Id: 090238
 Submitter: DTU Aqua
 Subject: Tobistogt L 151 Dec.08
 Date: April 2009
 Executed: I Nørgaard
 Remarks: For mat.< 2mm



Total Weight 132,97 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,06	0,05	99,95
2,00	-1,00	0,03	0,02	99,93
1,40	-0,49	0,02	0,02	99,92
1,00	0,00	0,03	0,02	99,89
0,710	0,49	0,04	0,03	99,86
0,500	1,00	0,06	0,05	99,82
0,355	1,49	0,13	0,10	99,72
0,250	2,00	1,90	1,43	98,29
0,180	2,47	49,25	37,04	61,25
0,125	3,00	75,18	56,54	4,72
0,090	3,47	4,26	3,20	1,51
0,075	3,74	0,49	0,37	1,14
0,063	3,99	0,22	0,17	0,98
< 0,063	> 3,99	1,30	0,98	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,98
Sand, fine (0,063 mm - 0,200 mm):	70,86
Sand, medium (0,2 mm - 0,6 mm):	28,00
Sand, coarse (0,6 mm - 2 mm):	0,09
Gravel (> 2 mm):	0,07
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,24	2,04
16%	84%	0,22	2,16
25%	75%	0,21	2,28
40%	60%	0,18	2,48
Median 50%	50%	0,17	2,56
75%	25%	0,14	2,79
84%	16%	0,14	2,88
90%	10%	0,13	2,94
95%	5%	0,13	3,00

Moments Statistics

Mean	2,54
Sorting	0,32
Skewness	-0,11
Kurtosis	0,77
Uniformity Coefficient	1,37

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

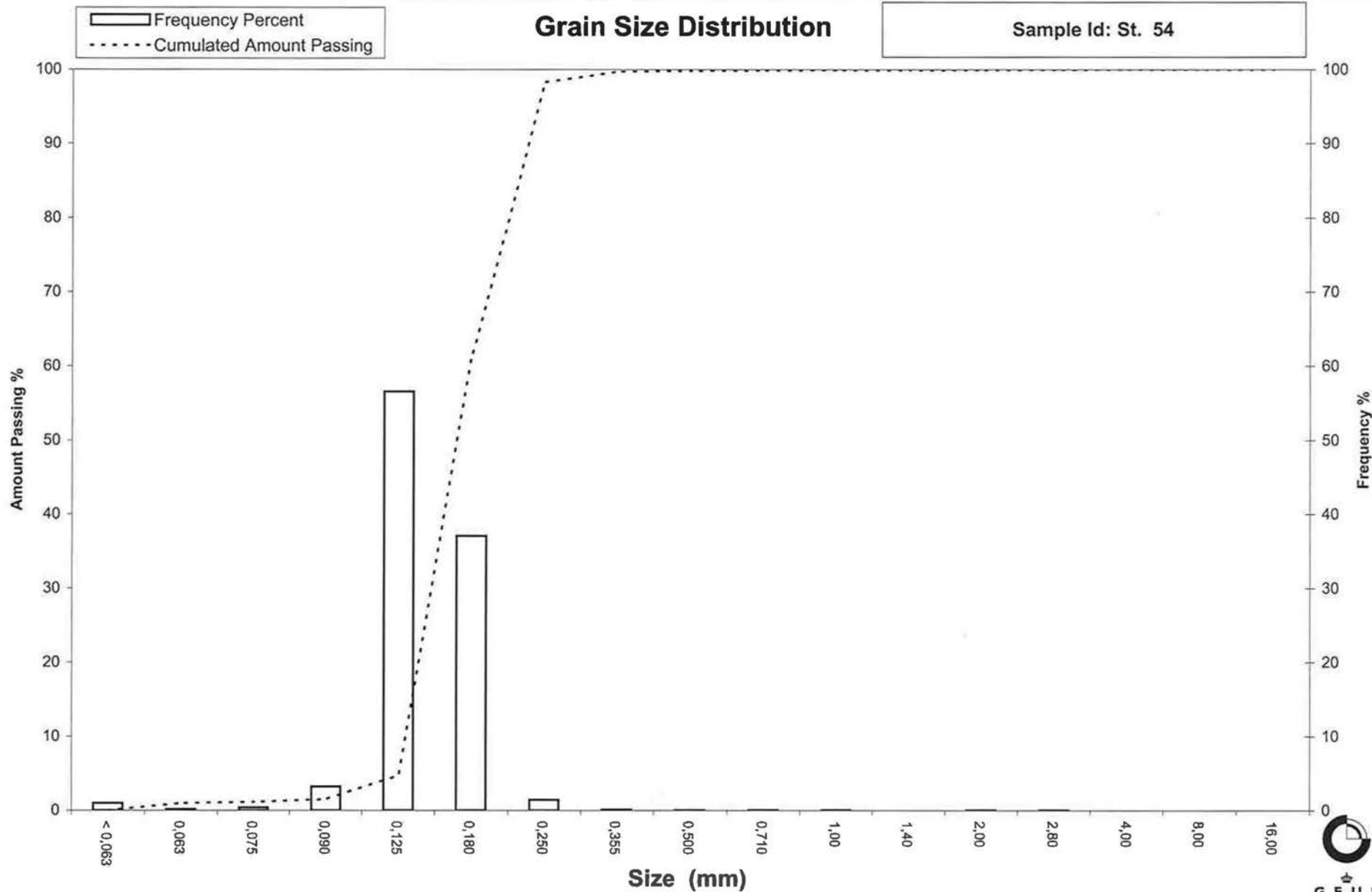
Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 54



Grain Size Distribution

Geotechnical

Sample Id: St. 58
Lab. Id: 090239
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 168,31 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,06	0,04	99,96
2,00	-1,00	0,04	0,02	99,94
1,40	-0,49	0,11	0,07	99,88
1,00	0,00	0,09	0,05	99,82
0,710	0,49	0,28	0,17	99,66
0,500	1,00	2,31	1,37	98,28
0,355	1,49	19,13	11,37	86,92
0,250	2,00	58,21	34,58	52,33
0,180	2,47	72,70	43,19	9,14
0,125	3,00	12,49	7,42	1,72
0,090	3,47	1,39	0,83	0,89
0,075	3,74	0,14	0,08	0,81
0,063	3,99	0,05	0,03	0,78
< 0,063	> 3,99	1,31	0,78	0,00

Gravel

Sand

Sieve Analysis

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,78
Sand, fine (0,063 mm - 0,200 mm):	20,70
Sand, medium (0,2 mm - 0,6 mm):	77,46
Sand, coarse (0,6 mm - 2 mm):	1,00
Gravel (> 2 mm):	0,06
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,46	1,13
16%	84%	0,35	1,53
25%	75%	0,32	1,65
40%	60%	0,27	1,87
Median 50%	50%	0,25	2,02
75%	25%	0,21	2,28
84%	16%	0,19	2,39
90%	10%	0,18	2,46
95%	5%	0,15	2,74

Moments Statistics

Mean	1,98
Sorting	0,46
Skewness	-0,13
Kurtosis	1,05
Uniformity Coefficient	1,51

The analysis is executed according to DS 405.9
 extended by sieves to the ½ phi scale

Size Classes and Percentiles
 are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

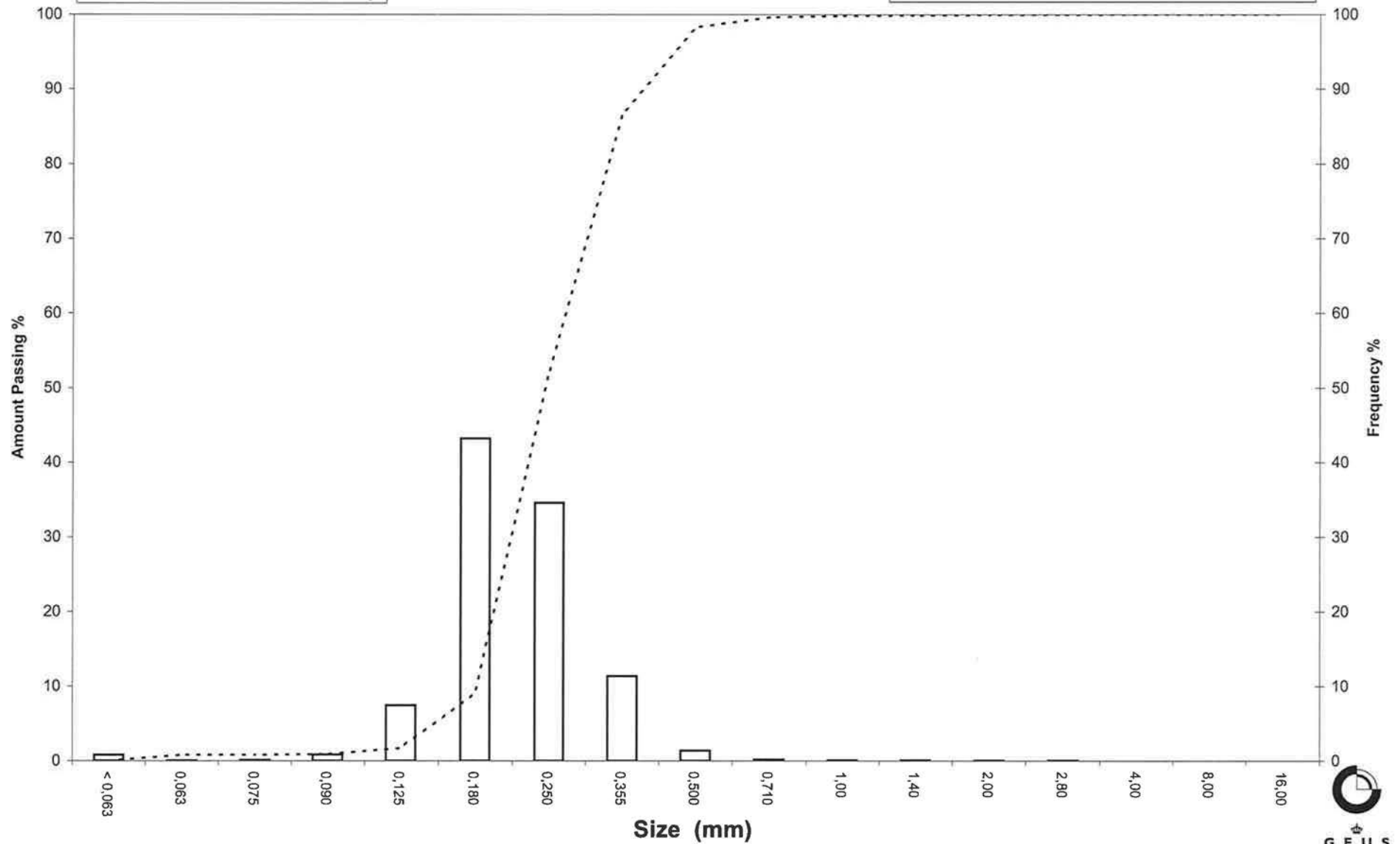
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on
 "Amount in sieve". Uniformity coefficient is based on
 "Amount passing".

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Grain Size Distribution

Sample Id: St. 58



Grain Size Distribution

Geotechnical

Sample Id: St. 62
Lab. Id: 090240
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 162,07 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,06	0,04	99,96
2,00	-1,00	0,02	0,01	99,95
1,40	-0,49	0,09	0,06	99,90
1,00	0,00	0,11	0,07	99,83
0,710	0,49	0,26	0,16	99,67
0,500	1,00	1,13	0,70	98,97
0,355	1,49	4,81	2,97	96,00
0,250	2,00	16,94	10,45	85,55
0,180	2,47	44,78	27,63	57,92
0,125	3,00	84,18	51,94	5,98
0,090	3,47	7,66	4,73	1,25
0,075	3,74	0,28	0,17	1,08
0,063	3,99	0,11	0,07	1,01
< 0,063	> 3,99	1,64	1,01	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,01
Sand, fine (0,063 mm - 0,200 mm):	64,80
Sand, medium (0,2 mm - 0,6 mm):	33,49
Sand, coarse (0,6 mm - 2 mm):	0,65
Gravel (> 2 mm):	0,05
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,54
16%	84%	0,25	2,02
25%	75%	0,22	2,16
40%	60%	0,19	2,43
Median 50%	50%	0,17	2,54
75%	25%	0,15	2,78
84%	16%	0,14	2,88
90%	10%	0,13	2,95
95%	5%	0,12	3,09

Moments Statistics

Mean	2,48
Sorting	0,45
Skewness	-0,25
Kurtosis	1,02
Uniformity Coefficient	1,43

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

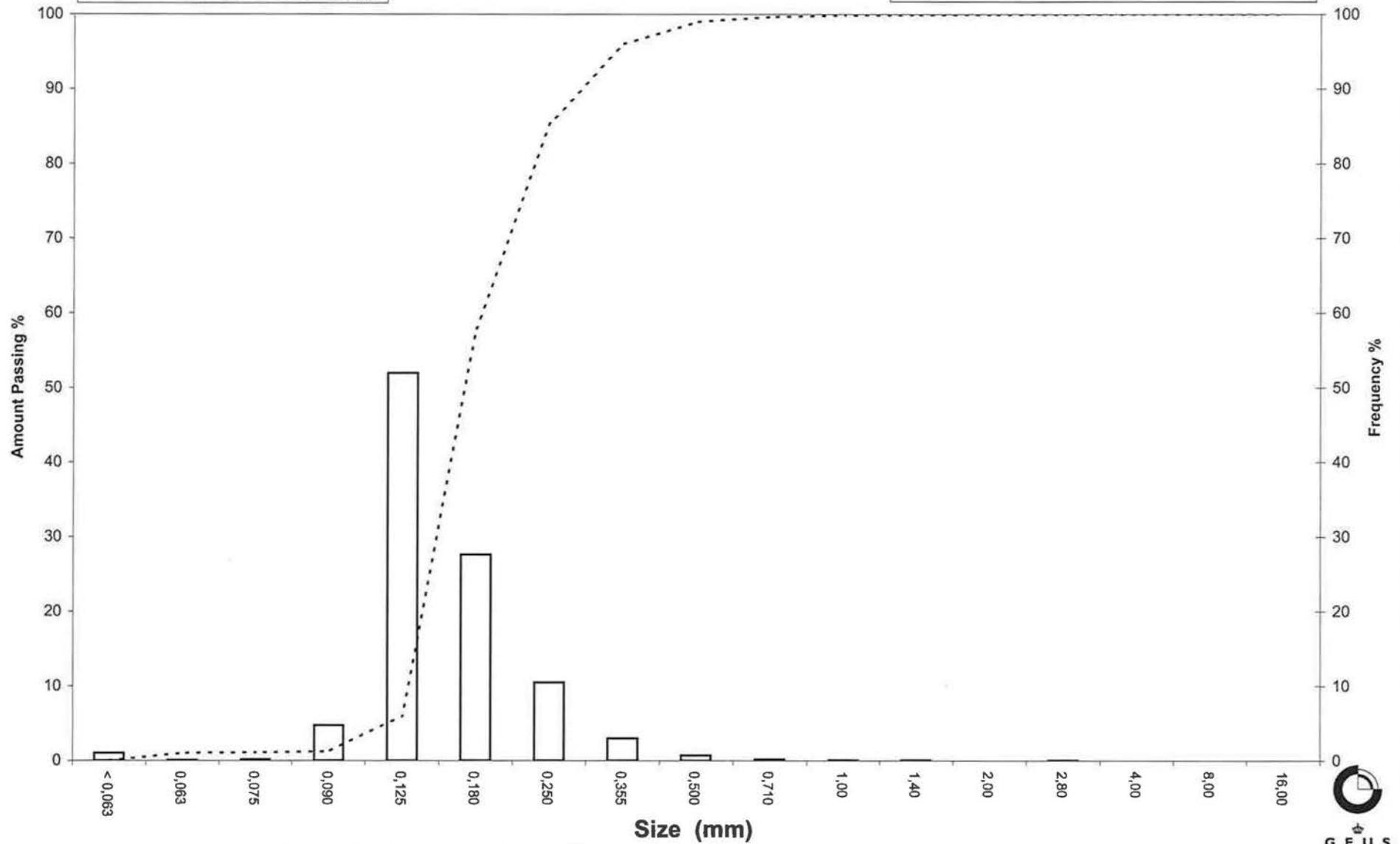
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 62



Grain Size Distribution

Geotechnical

Sample Id: St. 66
Lab. Id: 090241
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 145,27 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,04	0,03	99,97
1,40	-0,49	0,02	0,01	99,96
1,00	0,00	0,11	0,08	99,88
0,710	0,49	0,20	0,14	99,75
0,500	1,00	0,90	0,62	99,13
0,355	1,49	6,71	4,62	94,51
0,250	2,00	25,08	17,26	77,24
0,180	2,47	63,23	43,53	33,72
0,125	3,00	45,39	31,25	2,47
0,090	3,47	1,87	1,29	1,18
0,075	3,74	0,12	0,08	1,10
0,063	3,99	0,06	0,04	1,06
< 0,063	> 3,99	1,54	1,06	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,06
Sand, fine (0,063 mm - 0,200 mm):	45,09
Sand, medium (0,2 mm - 0,6 mm):	53,27
Sand, coarse (0,6 mm - 2 mm):	0,55
Gravel (> 2 mm):	0,03
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,37	1,43
16%	84%	0,29	1,78
25%	75%	0,25	2,02
40%	60%	0,22	2,17
Median 50%	50%	0,21	2,28
75%	25%	0,16	2,60
84%	16%	0,15	2,75
90%	10%	0,14	2,85
95%	5%	0,13	2,95

Moments Statistics

Mean	2,27
Sorting	0,47
Skewness	-0,07
Kurtosis	1,07
Uniformity Coefficient	1,61

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

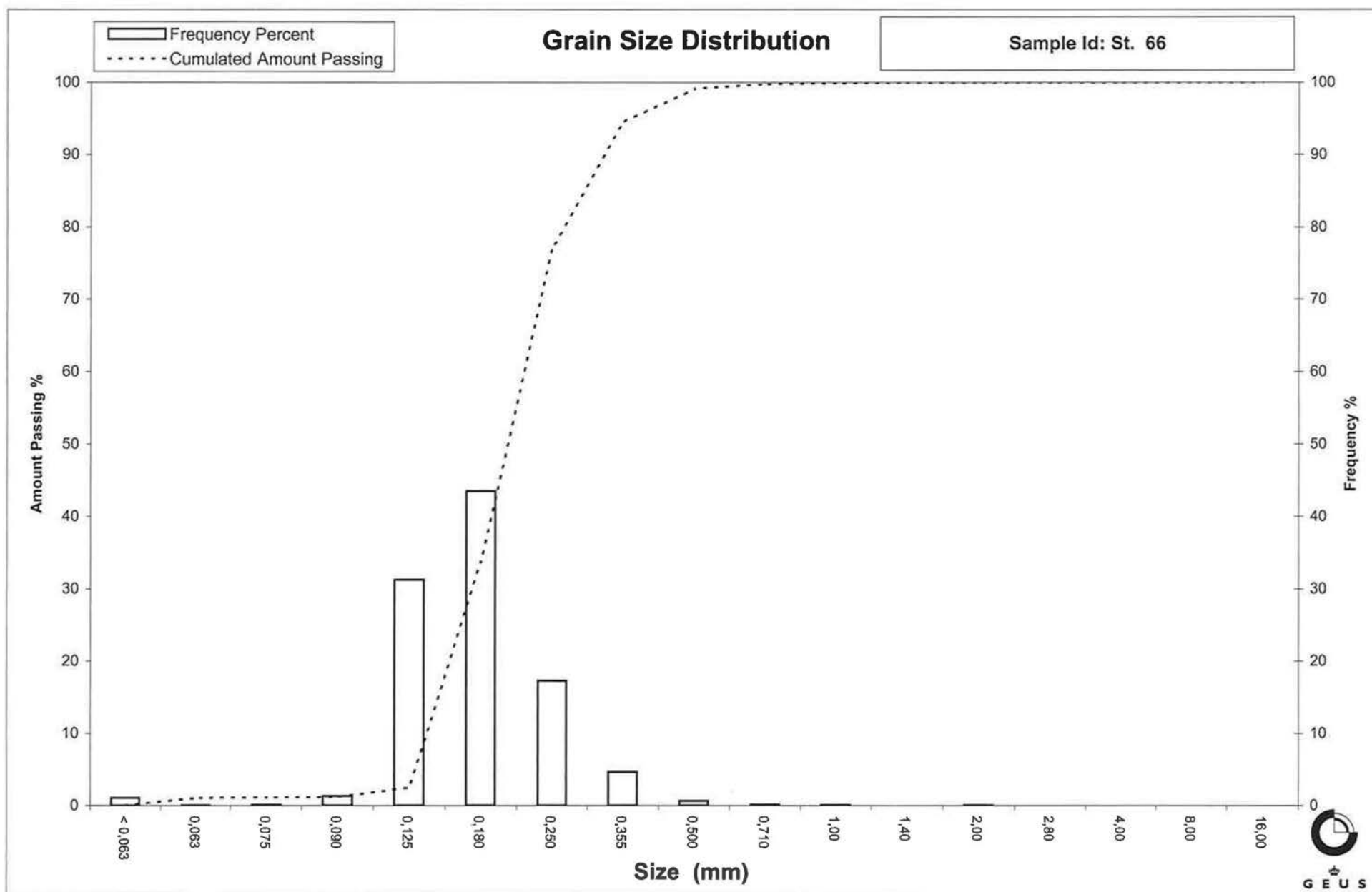
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 73
Lab. Id: 090242
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 150,73 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,18	0,78	99,22
2,80	-1,49	0,44	0,29	98,93
2,00	-1,00	0,28	0,19	98,74
1,40	-0,49	0,21	0,14	98,60
1,00	0,00	0,37	0,25	98,35
0,710	0,49	0,63	0,42	97,94
0,500	1,00	1,42	0,94	96,99
0,355	1,49	3,80	2,52	94,47
0,250	2,00	12,71	8,43	86,04
0,180	2,47	47,97	31,83	54,22
0,125	3,00	72,47	48,08	6,14
0,090	3,47	7,95	5,27	0,86
0,075	3,74	0,33	0,22	0,64
0,063	3,99	0,11	0,07	0,57
< 0,063	> 3,99	0,86	0,57	0,00

Gravel

Sand

Sieve Analysis

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,57
Sand, fine (0,063 mm - 0,200 mm):	62,74
Sand, medium (0,2 mm - 0,6 mm):	34,13
Sand, coarse (0,6 mm - 2 mm):	1,30
Gravel (> 2 mm):	1,26
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,39	1,38
16%	84%	0,25	2,03
25%	75%	0,23	2,15
40%	60%	0,19	2,38
Median 50%	50%	0,18	2,51
75%	25%	0,15	2,77
84%	16%	0,14	2,88
90%	10%	0,13	2,95
95%	5%	0,12	3,09

Moments Statistics

Mean	2,47
Sorting	0,47
Skewness	-0,24
Kurtosis	1,13
Uniformity Coefficient	1,49

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

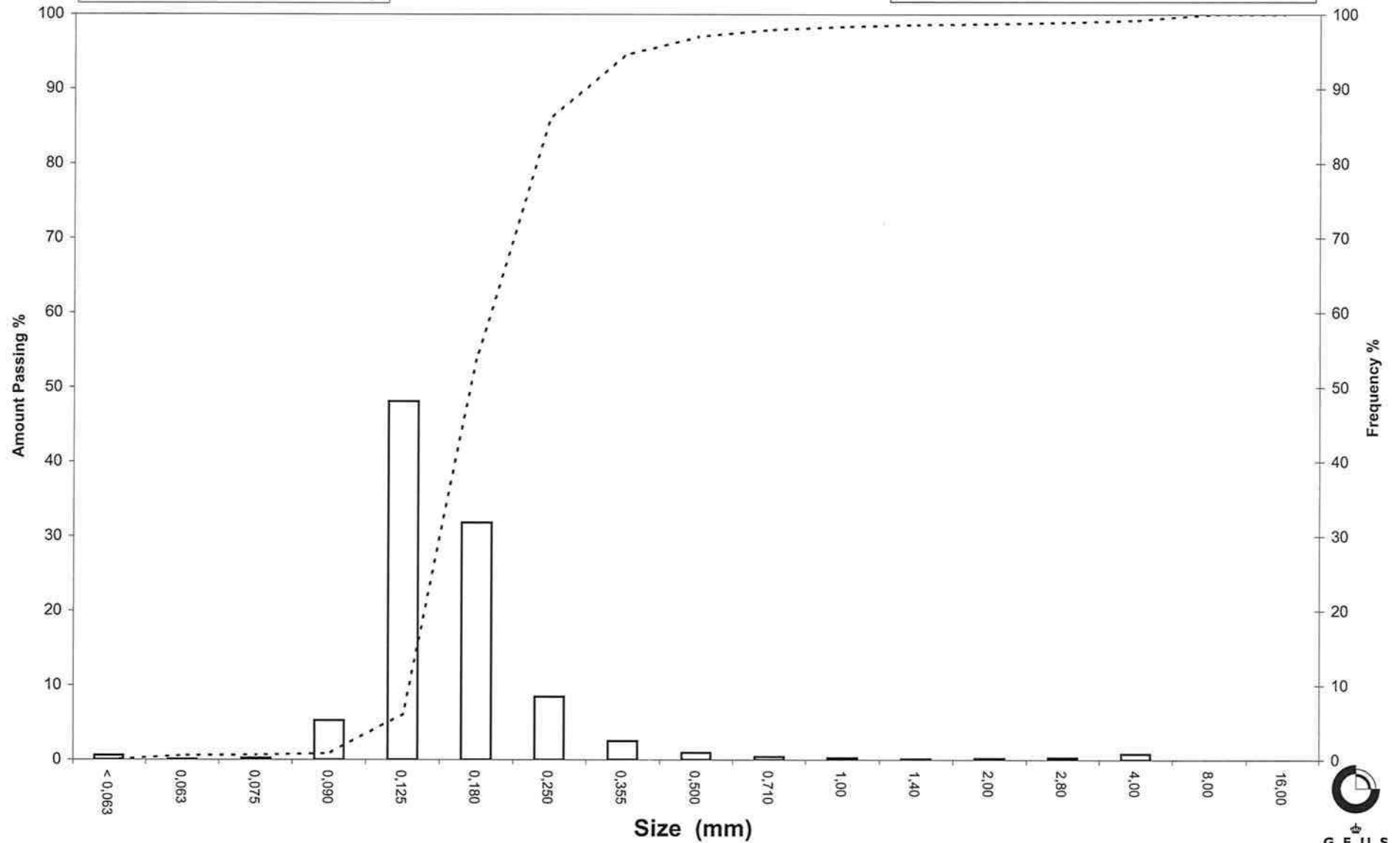
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 73



Grain Size Distribution

Geotechnical

Sample Id: St. 77
Lab. Id: 090243
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 142,62 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,21	0,15	99,85
2,80	-1,49	0,02	0,01	99,84
2,00	-1,00	0,03	0,02	99,82
1,40	-0,49	0,02	0,01	99,80
1,00	0,00	0,02	0,01	99,79
0,710	0,49	0,04	0,03	99,76
0,500	1,00	0,12	0,08	99,68
0,355	1,49	0,66	0,46	99,21
0,250	2,00	4,84	3,39	95,82
0,180	2,47	40,74	28,57	67,26
0,125	3,00	83,74	58,72	8,54
0,090	3,47	10,08	7,07	1,47
0,075	3,74	0,44	0,31	1,16
0,063	3,99	0,17	0,12	1,04
< 0,063	> 3,99	1,49	1,04	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,04
Sand, fine (0,063 mm - 0,200 mm):	74,37
Sand, medium (0,2 mm - 0,6 mm):	24,30
Sand, coarse (0,6 mm - 2 mm):	0,10
Gravel (> 2 mm):	0,18
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,25	2,01
16%	84%	0,22	2,18
25%	75%	0,20	2,33
40%	60%	0,17	2,53
Median 50%	50%	0,16	2,61
75%	25%	0,14	2,83
84%	16%	0,13	2,92
90%	10%	0,13	2,98
95%	5%	0,11	3,22

Moments Statistics

Mean	2,57
Sorting	0,37
Skewness	-0,08
Kurtosis	0,98
Uniformity Coefficient	1,37

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

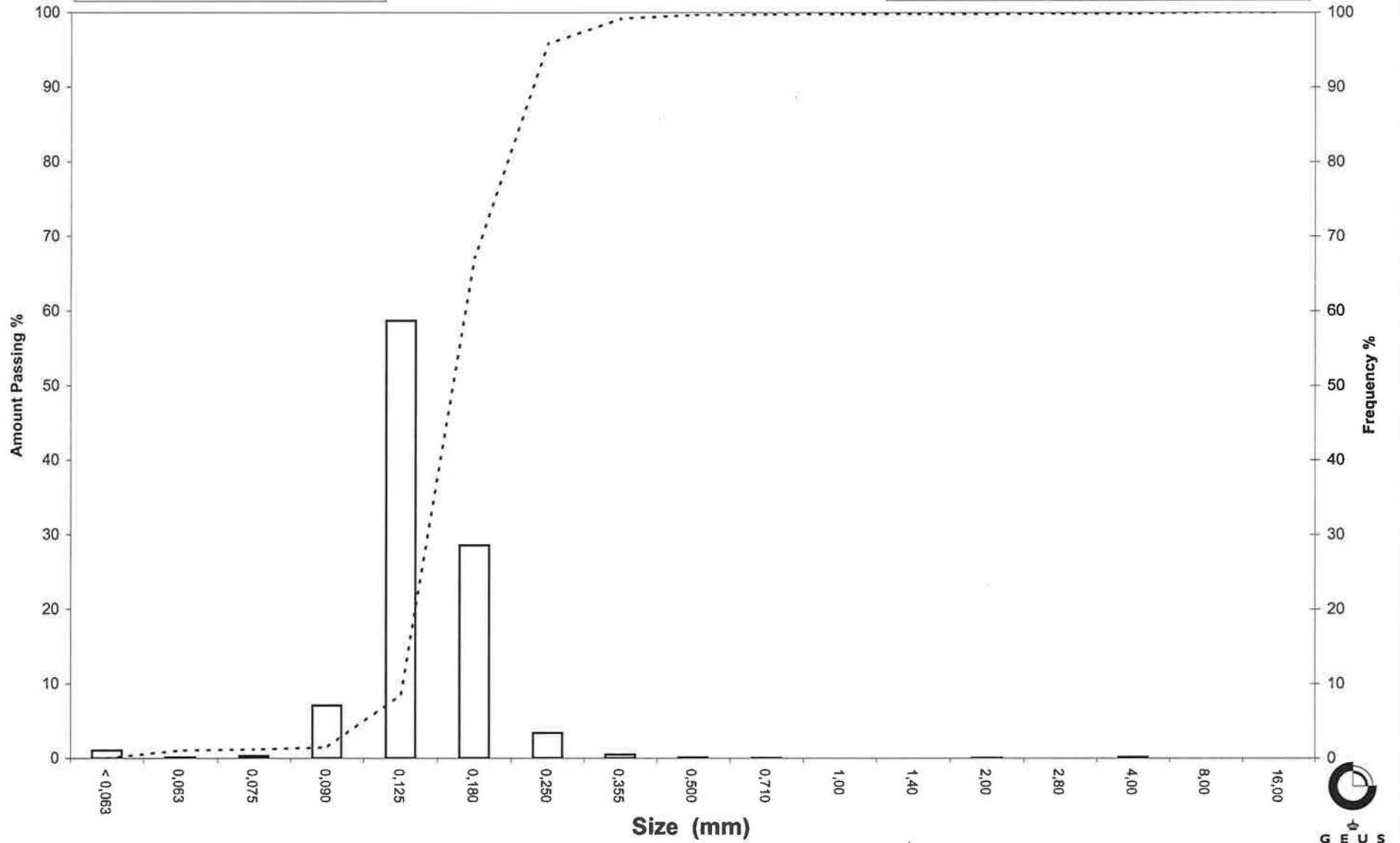
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 77

Frequency Percent
Cumulated Amount Passing



Grain Size Distribution

Geotechnical

Sample Id: St. 81
Lab. Id: 090244
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 154,74 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,61	0,39	99,61
4,00	-2,00	0,05	0,03	99,57
2,80	-1,49	0,08	0,05	99,52
2,00	-1,00	0,02	0,01	99,51
1,40	-0,49	0,02	0,01	99,50
1,00	0,00	0,06	0,04	99,46
0,710	0,49	0,06	0,04	99,42
0,500	1,00	0,11	0,07	99,35
0,355	1,49	0,70	0,45	98,89
0,250	2,00	8,38	5,42	93,48
0,180	2,47	42,39	27,39	66,09
0,125	3,00	85,80	55,45	10,64
0,090	3,47	14,37	9,29	1,35
0,075	3,74	0,55	0,36	1,00
0,063	3,99	0,19	0,12	0,87
< 0,063	> 3,99	1,35	0,87	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,87
Sand, fine (0,063 mm - 0,200 mm):	73,04
Sand, medium (0,2 mm - 0,6 mm):	25,47
Sand, coarse (0,6 mm - 2 mm):	0,13
Gravel (> 2 mm):	0,49
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,28	1,84
16%	84%	0,23	2,15
25%	75%	0,20	2,30
40%	60%	0,17	2,52
Median 50%	50%	0,16	2,61
75%	25%	0,14	2,84
84%	16%	0,13	2,94
90%	10%	0,12	3,03
95%	5%	0,10	3,27

Moments Statistics

Mean	2,56
Sorting	0,41
Skewness	-0,12
Kurtosis	1,08
Uniformity Coefficient	1,42

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

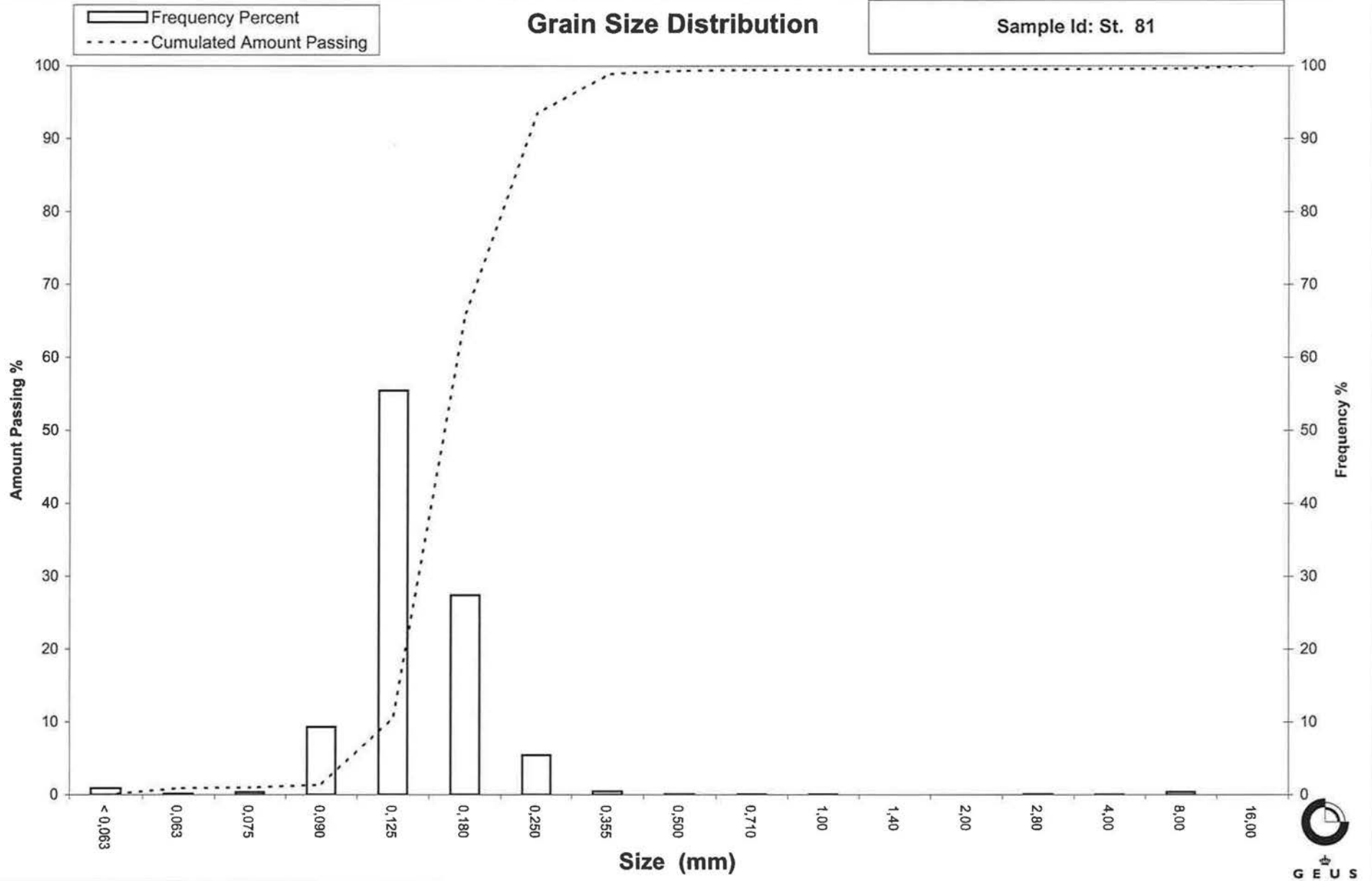
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 81



Grain Size Distribution

Geotechnical

Sample Id: St. 85
Lab. Id: 090245
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 139,55 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,01	0,72	99,28
4,00	-2,00	0,72	0,52	98,76
2,80	-1,49	0,73	0,52	98,24
2,00	-1,00	0,60	0,43	97,81
1,40	-0,49	0,81	0,58	97,23
1,00	0,00	0,84	0,60	96,62
0,710	0,49	0,70	0,50	96,12
0,500	1,00	1,12	0,80	95,32
0,355	1,49	2,62	1,88	93,44
0,250	2,00	11,69	8,38	85,07
0,180	2,47	48,43	34,70	50,36
0,125	3,00	61,23	43,88	6,49
0,090	3,47	7,26	5,20	1,28
0,075	3,74	0,44	0,32	0,97
0,063	3,99	0,11	0,08	0,89
< 0,063	> 3,99	1,24	0,89	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,89
Sand, fine (0,063 mm - 0,200 mm):	59,39
Sand, medium (0,2 mm - 0,6 mm):	35,43
Sand, coarse (0,6 mm - 2 mm):	2,10
Gravel (> 2 mm):	2,19
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,07
16%	84%	0,25	2,01
25%	75%	0,23	2,12
40%	60%	0,20	2,33
Median 50%	50%	0,18	2,48
75%	25%	0,15	2,75
84%	16%	0,14	2,87
90%	10%	0,13	2,95
95%	5%	0,12	3,12

Moments Statistics

Mean	2,45
Sorting	0,52
Skewness	-0,23
Kurtosis	1,33
Uniformity Coefficient	1,54

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

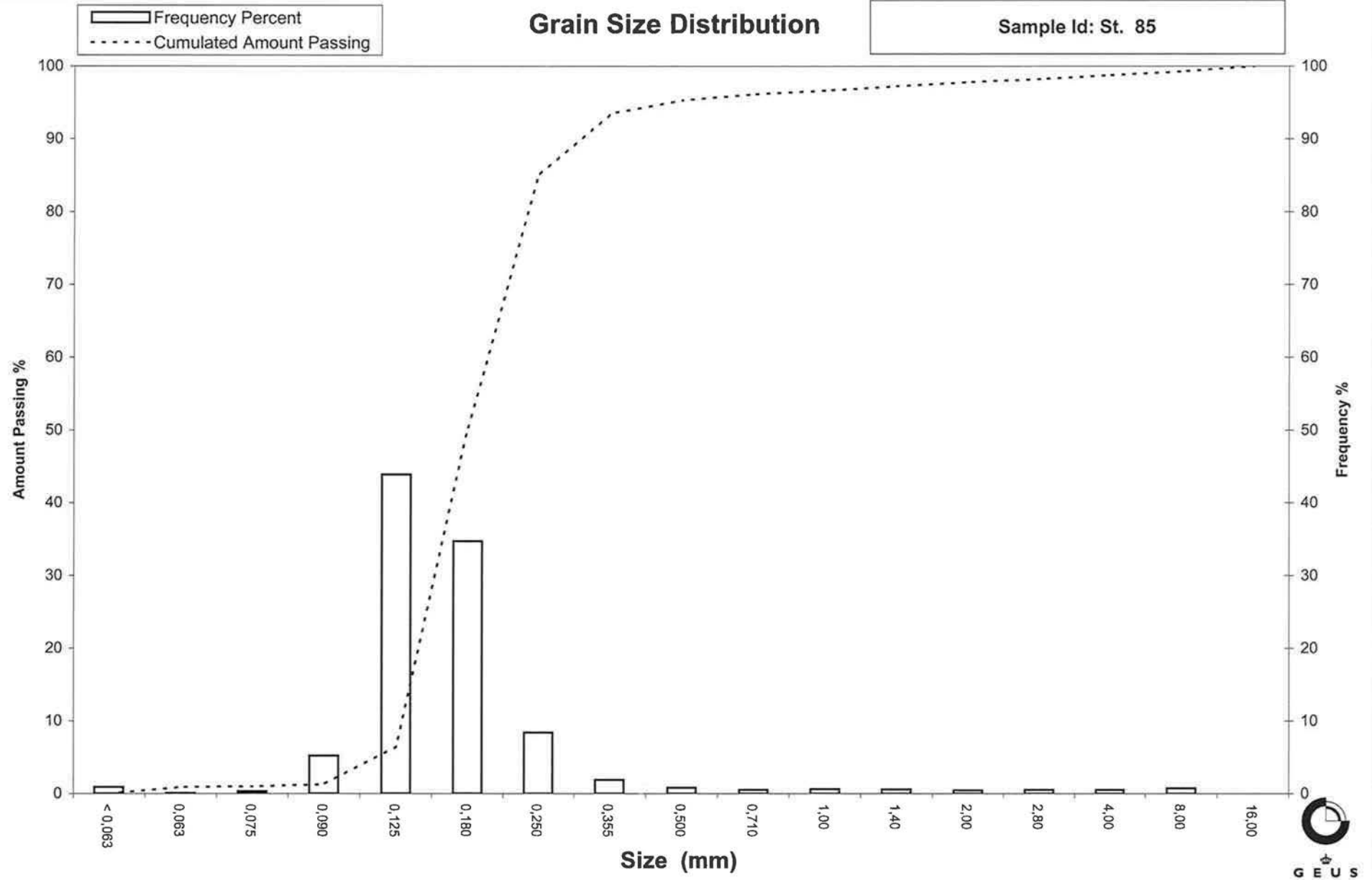
Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)
 Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)
 Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)
 Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)
 Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 85



Grain Size Distribution

Geotechnical

Sample Id: St. 92
Lab. Id: 090246
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 143,04 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,24	0,17	99,83
2,80	-1,49	0,14	0,10	99,73
2,00	-1,00	0,06	0,04	99,69
1,40	-0,49	0,06	0,04	99,65
1,00	0,00	0,19	0,13	99,52
0,710	0,49	0,58	0,41	99,11
0,500	1,00	1,70	1,19	97,92
0,355	1,49	4,21	2,94	94,98
0,250	2,00	19,97	13,96	81,02
0,180	2,47	48,25	33,73	47,29
0,125	3,00	60,18	42,07	5,22
0,090	3,47	5,43	3,80	1,42
0,075	3,74	0,26	0,18	1,24
0,063	3,99	0,08	0,06	1,18
< 0,063	> 3,99	1,69	1,18	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,18
Sand, fine (0,063 mm - 0,200 mm):	55,74
Sand, medium (0,2 mm - 0,6 mm):	41,56
Sand, coarse (0,6 mm - 2 mm):	1,20
Gravel (> 2 mm):	0,31
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,36	1,49
16%	84%	0,27	1,88
25%	75%	0,24	2,07
40%	60%	0,21	2,28
Median 50%	50%	0,19	2,43
75%	25%	0,15	2,73
84%	16%	0,14	2,85
90%	10%	0,13	2,93
95%	5%	0,12	3,02

Moments Statistics

Mean	2,38
Sorting	0,47
Skewness	-0,18
Kurtosis	0,96
Uniformity Coefficient	1,57

The analysis is executed according to DS 405.9
 extended by sieves to the ½ phi scale

Size Classes and Percentiles
 are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

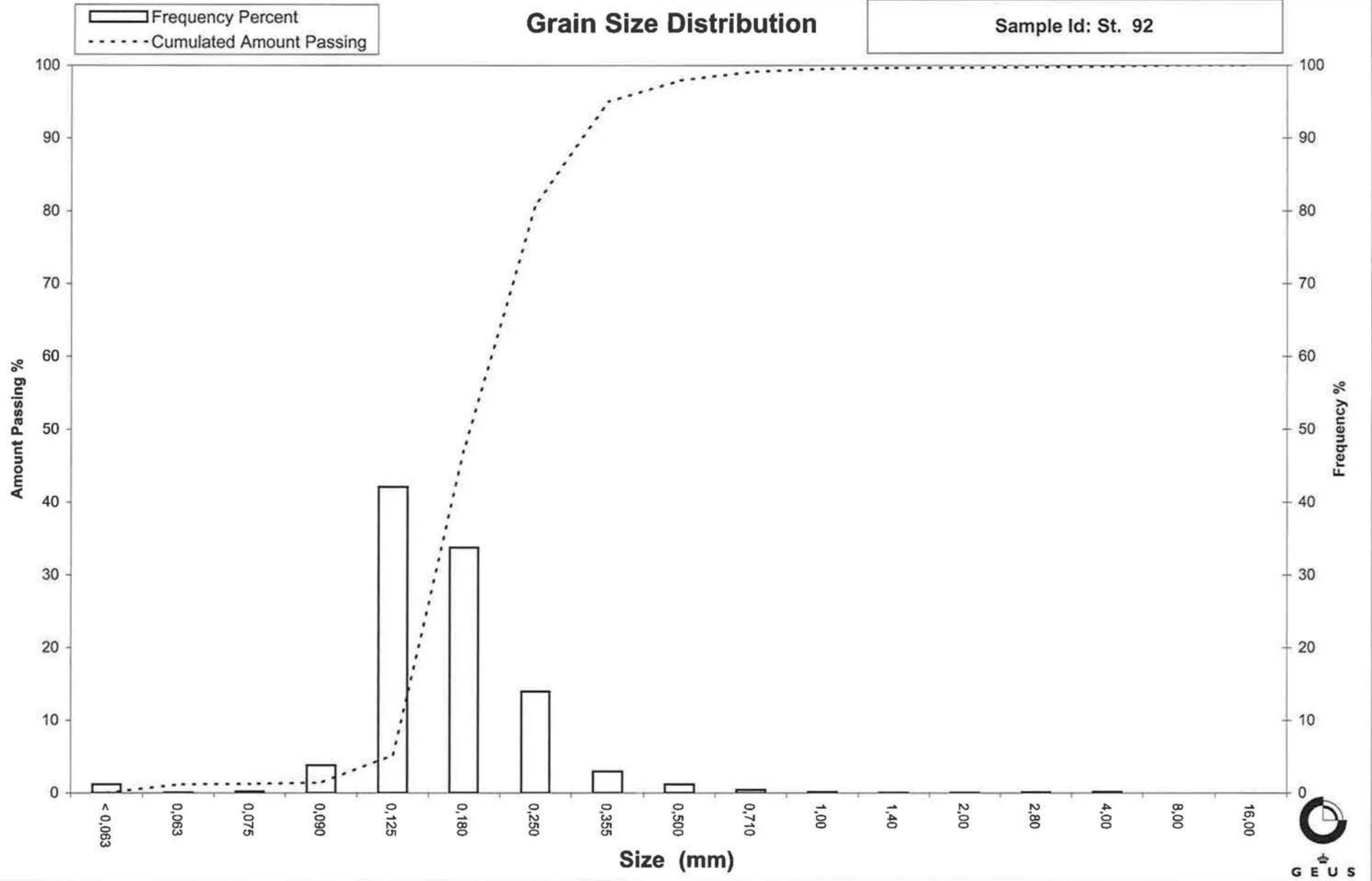
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on
 "Amount in sieve". Uniformity coefficient is based on
 "Amount passing".

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Grain Size Distribution

Sample Id: St. 92



Grain Size Distribution

Geotechnical

Sample Id: St. 96
Lab. Id: 090247
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 139,7 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,01	0,01	99,99
2,80	-1,49	0,06	0,04	99,95
2,00	-1,00	0,02	0,01	99,94
1,40	-0,49	0,02	0,01	99,92
1,00	0,00	0,02	0,01	99,91
0,710	0,49	0,03	0,02	99,89
0,500	1,00	0,12	0,09	99,80
0,355	1,49	1,09	0,78	99,02
0,250	2,00	10,73	7,68	91,34
0,180	2,47	51,38	36,78	54,56
0,125	3,00	67,11	48,04	6,52
0,090	3,47	7,10	5,08	1,44
0,075	3,74	0,32	0,23	1,21
0,063	3,99	0,09	0,06	1,15
< 0,063	> 3,99	1,60	1,15	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,15
Sand, fine (0,063 mm - 0,200 mm):	63,92
Sand, medium (0,2 mm - 0,6 mm):	34,77
Sand, coarse (0,6 mm - 2 mm):	0,10
Gravel (> 2 mm):	0,06
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,30	1,74
16%	84%	0,24	2,08
25%	75%	0,22	2,19
40%	60%	0,19	2,39
Median 50%	50%	0,17	2,52
75%	25%	0,15	2,77
84%	16%	0,14	2,88
90%	10%	0,13	2,95
95%	5%	0,11	3,13

Moments Statistics

Mean	2,49
Sorting	0,41
Skewness	-0,10
Kurtosis	0,98
Uniformity Coefficient	1,48

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

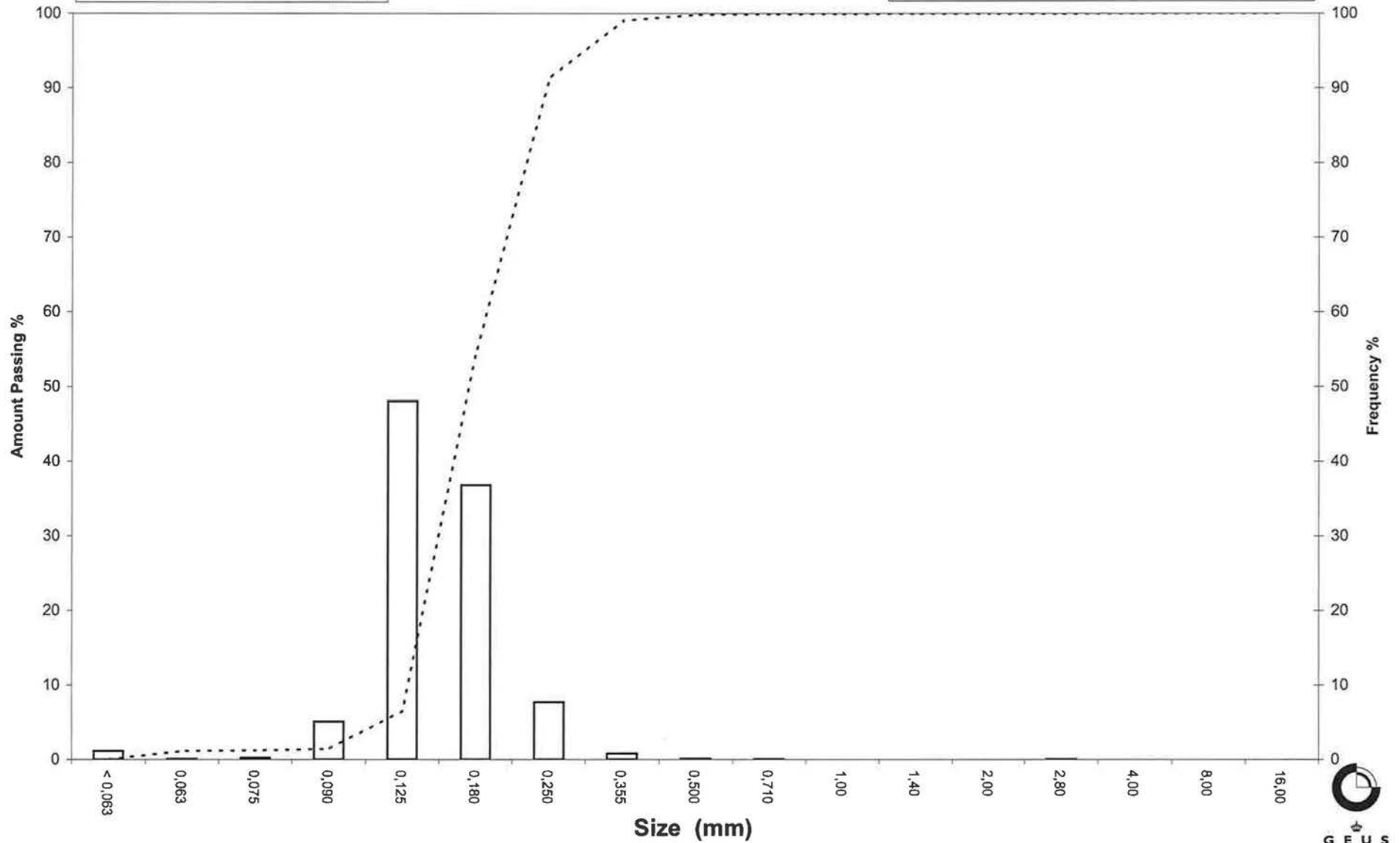
Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 96



Grain Size Distribution

Geotechnical

Sample Id: St. 100
Lab. Id: 090248
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 140,92 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,10	0,07	99,93
2,00	-1,00	0,03	0,02	99,91
1,40	-0,49	0,02	0,01	99,89
1,00	0,00	0,11	0,08	99,82
0,710	0,49	0,27	0,19	99,62
0,500	1,00	0,93	0,66	98,96
0,355	1,49	4,92	3,49	95,47
0,250	2,00	24,44	17,34	78,13
0,180	2,47	37,55	26,65	51,48
0,125	3,00	61,42	43,59	7,90
0,090	3,47	9,48	6,73	1,17
0,075	3,74	0,32	0,23	0,94
0,063	3,99	0,11	0,08	0,87
< 0,063	> 3,99	1,22	0,87	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,87
Sand, fine (0,063 mm - 0,200 mm):	58,23
Sand, medium (0,2 mm - 0,6 mm):	40,18
Sand, coarse (0,6 mm - 2 mm):	0,63
Gravel (> 2 mm):	0,09
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,51
16%	84%	0,29	1,81
25%	75%	0,24	2,05
40%	60%	0,20	2,30
Median 50%	50%	0,18	2,49
75%	25%	0,15	2,77
84%	16%	0,14	2,89
90%	10%	0,13	2,97
95%	5%	0,11	3,19

Moments Statistics

Mean	2,39
Sorting	0,52
Skewness	-0,22
Kurtosis	0,95
Uniformity Coefficient	1,59

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

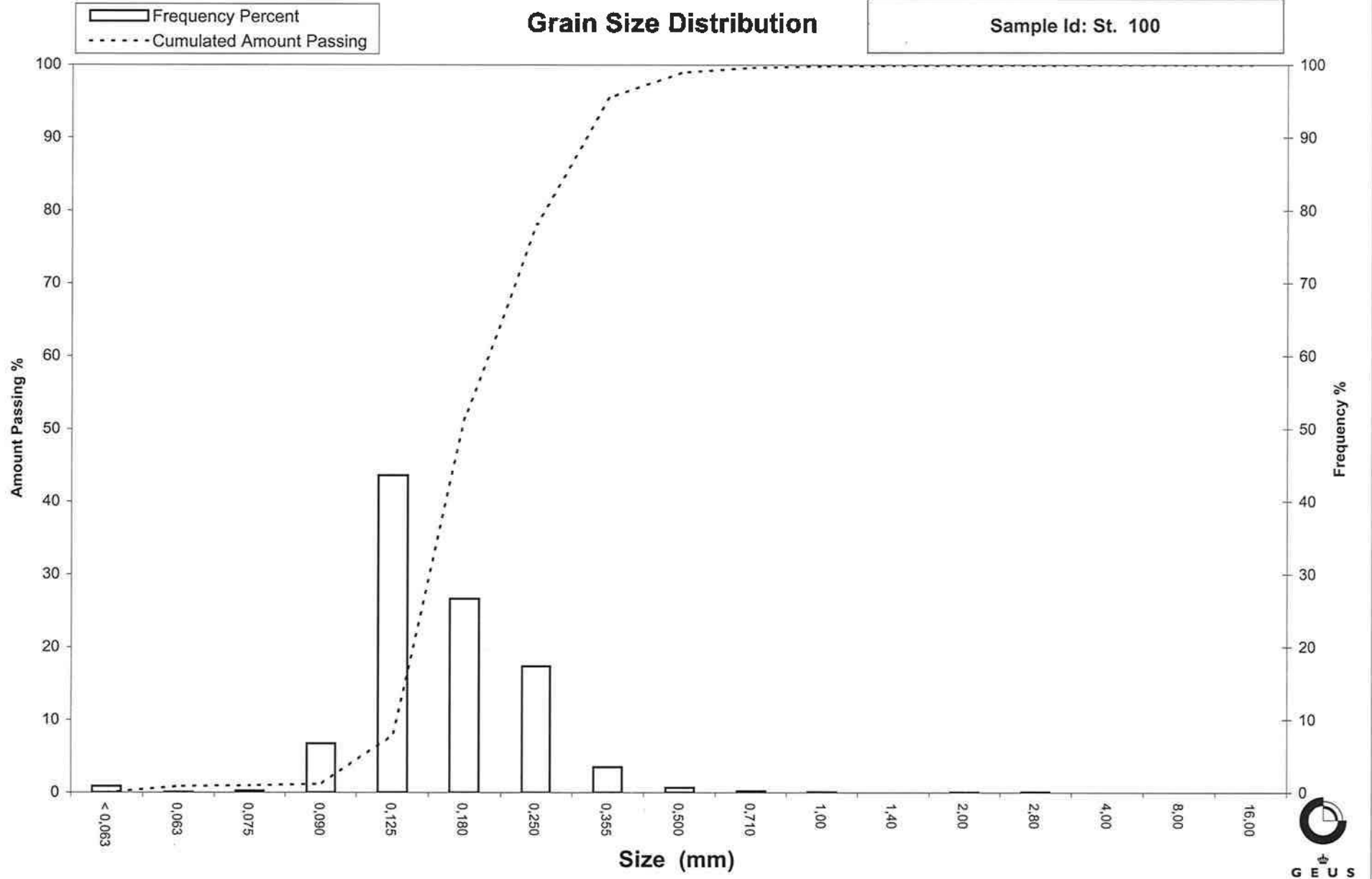
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 100



Grain Size Distribution

Geotechnical

Sample Id: St. 104
Lab. Id: 090249
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 104,86 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,01	0,01	99,99
1,40	-0,49	0,09	0,09	99,90
1,00	0,00	0,75	0,72	99,19
0,710	0,49	0,90	0,86	98,33
0,500	1,00	5,75	5,48	92,85
0,355	1,49	20,96	19,99	72,86
0,250	2,00	41,08	39,18	33,68
0,180	2,47	24,67	23,53	10,16
0,125	3,00	9,32	8,89	1,27
0,090	3,47	1,01	0,96	0,31
0,075	3,74	0,05	0,05	0,26
0,063	3,99	0,02	0,02	0,24
< 0,063	> 3,99	0,25	0,24	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,24
Sand, fine (0,063 mm - 0,200 mm):	16,64
Sand, medium (0,2 mm - 0,6 mm):	78,58
Sand, coarse (0,6 mm - 2 mm):	4,53
Gravel (> 2 mm):	0,01
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,58	0,78
16%	84%	0,44	1,20
25%	75%	0,37	1,43
40%	60%	0,32	1,64
Median 50%	50%	0,29	1,77
75%	25%	0,22	2,16
84%	16%	0,20	2,34
90%	10%	0,18	2,48
95%	5%	0,15	2,76

Moments Statistics

Mean	1,77
Sorting	0,59
Skewness	0,00
Kurtosis	1,12
Uniformity Coefficient	1,79

The analysis is executed according to DS 405.9
 extended by sieves to the ½ phi scale

Size Classes and Percentiles
 are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

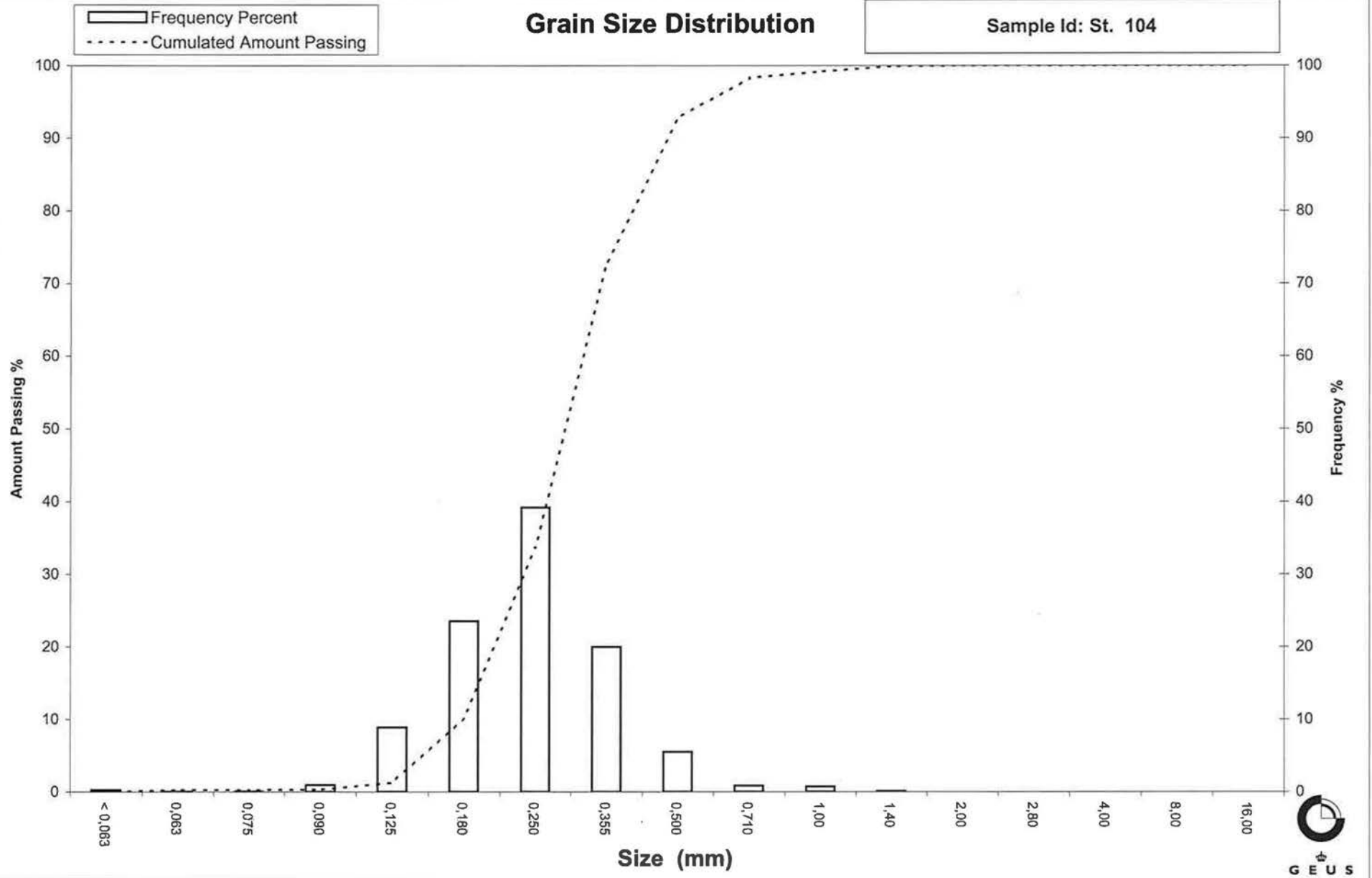
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on
 "Amount in sieve". Uniformity coefficient is based on
 "Amount passing".

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Grain Size Distribution

Sample Id: St. 104



Grain Size Distribution

Geotechnical

Sample Id: St. 108
Lab. Id: 090250
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



GEUS

Total Weight 109,55 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,03	0,03	99,97
0,710	0,49	0,10	0,09	99,88
0,500	1,00	1,46	1,33	98,55
0,355	1,49	13,08	11,94	86,61
0,250	2,00	50,27	45,89	40,72
0,180	2,47	37,11	33,87	6,85
0,125	3,00	5,41	4,94	1,91
0,090	3,47	0,89	0,81	1,10
0,075	3,74	0,15	0,14	0,96
0,063	3,99	0,07	0,06	0,89
< 0,063	> 3,99	0,98	0,89	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,89
Sand, fine (0,063 mm - 0,200 mm):	15,63
Sand, medium (0,2 mm - 0,6 mm):	82,66
Sand, coarse (0,6 mm - 2 mm):	0,82
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,46	1,13
16%	84%	0,35	1,52
25%	75%	0,33	1,61
40%	60%	0,29	1,77
Median 50%	50%	0,27	1,88
75%	25%	0,22	2,20
84%	16%	0,20	2,33
90%	10%	0,19	2,42
95%	5%	0,16	2,65

Moments Statistics

Mean	1,91
Sorting	0,43
Skewness	0,06
Kurtosis	1,05
Uniformity Coefficient	1,58

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

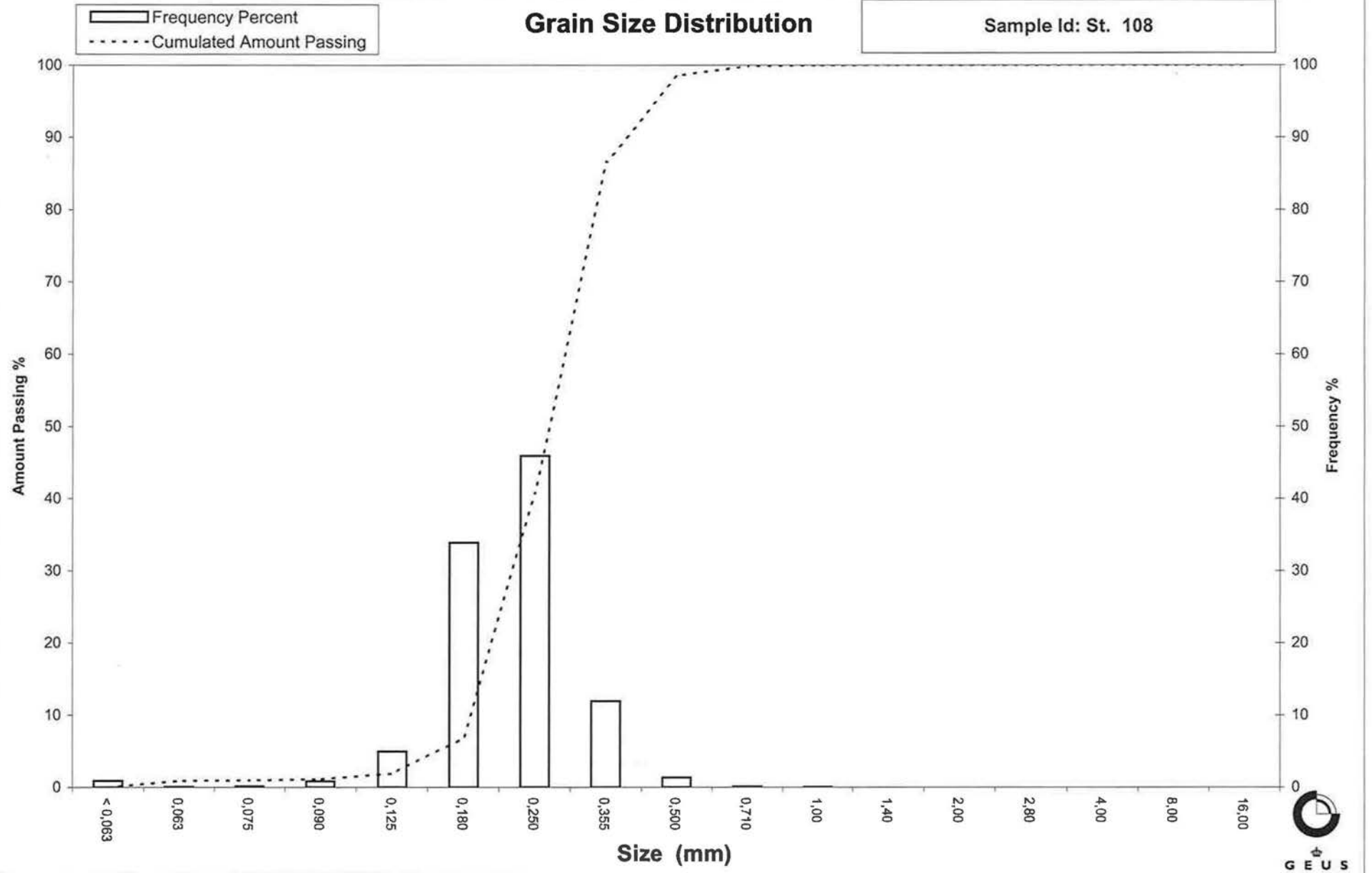
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 108



Grain Size Distribution

Geotechnical

Sample Id: St. 112
Lab. Id: 090251
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 200,21 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,25	1,62	98,38
4,00	-2,00	0,73	0,36	98,01
2,80	-1,49	1,06	0,53	97,48
2,00	-1,00	1,31	0,65	96,83
1,40	-0,49	2,24	1,12	95,71
1,00	0,00	3,31	1,65	94,06
0,710	0,49	7,62	3,81	90,25
0,500	1,00	33,84	16,90	73,35
0,355	1,49	54,18	27,06	46,29
0,250	2,00	46,36	23,16	23,13
0,180	2,47	36,37	18,17	4,96
0,125	3,00	7,62	3,81	1,16
0,090	3,47	0,53	0,26	0,89
0,075	3,74	0,10	0,05	0,84
0,063	3,99	0,03	0,01	0,83
< 0,063	> 3,99	1,66	0,83	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,83
Sand, fine (0,063 mm - 0,200 mm):	9,33
Sand, medium (0,2 mm - 0,6 mm):	71,24
Sand, coarse (0,6 mm - 2 mm):	15,43
Gravel (> 2 mm):	3,17
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,23	-0,30
16%	84%	0,63	0,66
25%	75%	0,52	0,94
40%	60%	0,43	1,22
Median 50%	50%	0,37	1,42
75%	25%	0,26	1,95
84%	16%	0,22	2,17
90%	10%	0,20	2,33
95%	5%	0,18	2,47

Moments Statistics

Mean	1,41
Sorting	0,80
Skewness	-0,12
Kurtosis	1,12
Uniformity Coefficient	2,15

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

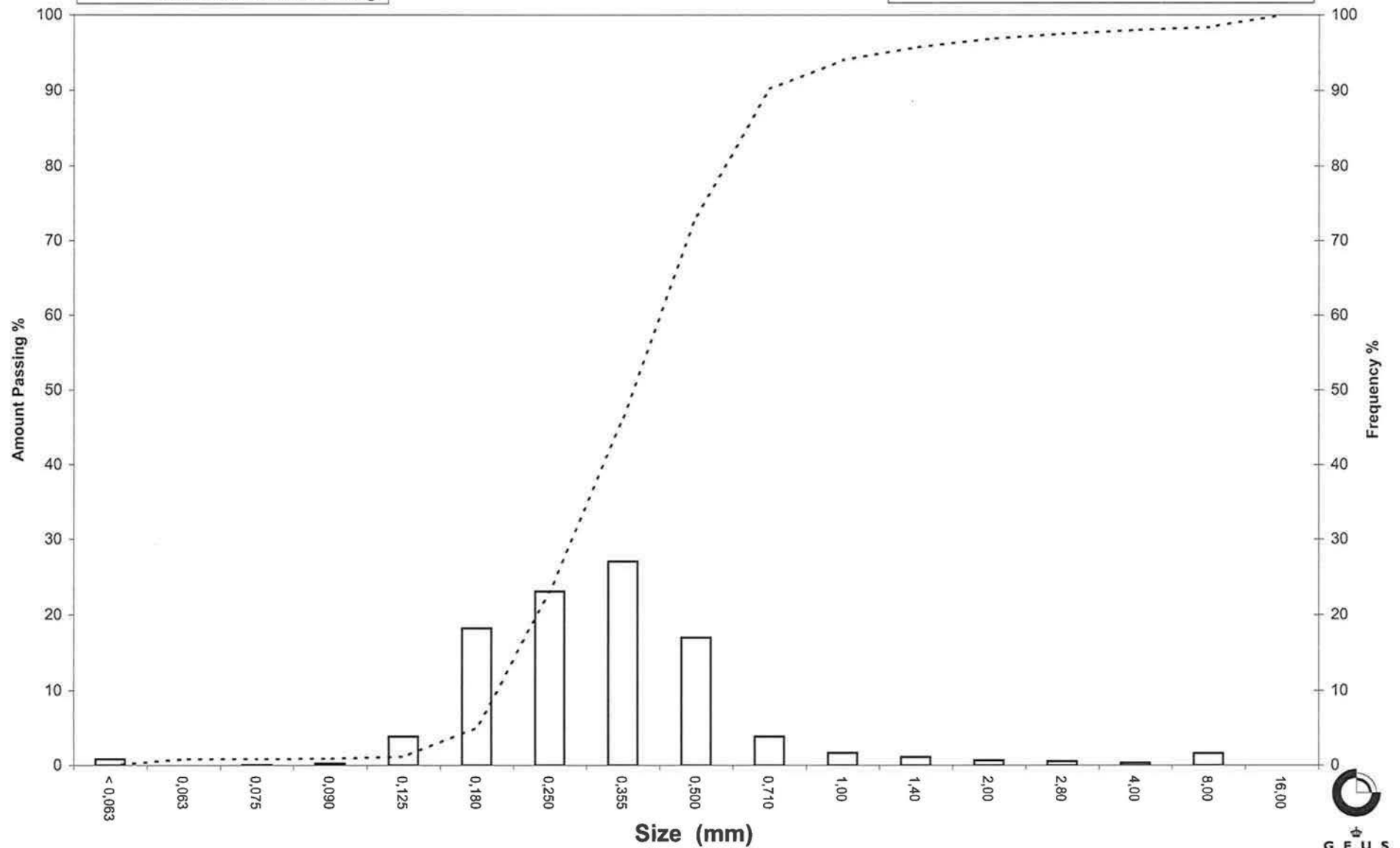
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 112



Grain Size Distribution

Geotechnical

Sample Id: St. 116
Lab. Id: 090252
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 114,18 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,12	0,11	99,89
1,40	-0,49	0,06	0,05	99,84
1,00	0,00	0,28	0,25	99,60
0,710	0,49	1,80	1,58	98,02
0,500	1,00	17,85	15,63	82,39
0,355	1,49	46,76	40,95	41,43
0,250	2,00	33,06	28,95	12,48
0,180	2,47	9,81	8,59	3,89
0,125	3,00	3,14	2,75	1,14
0,090	3,47	0,42	0,37	0,77
0,075	3,74	0,07	0,06	0,71
0,063	3,99	0,02	0,02	0,69
< 0,063	> 3,99	0,79	0,69	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,69
Sand, fine (0,063 mm - 0,200 mm):	5,65
Sand, medium (0,2 mm - 0,6 mm):	83,49
Sand, coarse (0,6 mm - 2 mm):	10,06
Gravel (> 2 mm):	0,11
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,67	0,58
16%	84%	0,52	0,94
25%	75%	0,47	1,08
40%	60%	0,42	1,25
Median 50%	50%	0,39	1,38
75%	25%	0,30	1,76
84%	16%	0,26	1,93
90%	10%	0,23	2,12
95%	5%	0,19	2,40

Moments Statistics

Mean	1,41
Sorting	0,52
Skewness	0,12
Kurtosis	1,10
Uniformity Coefficient	1,83

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

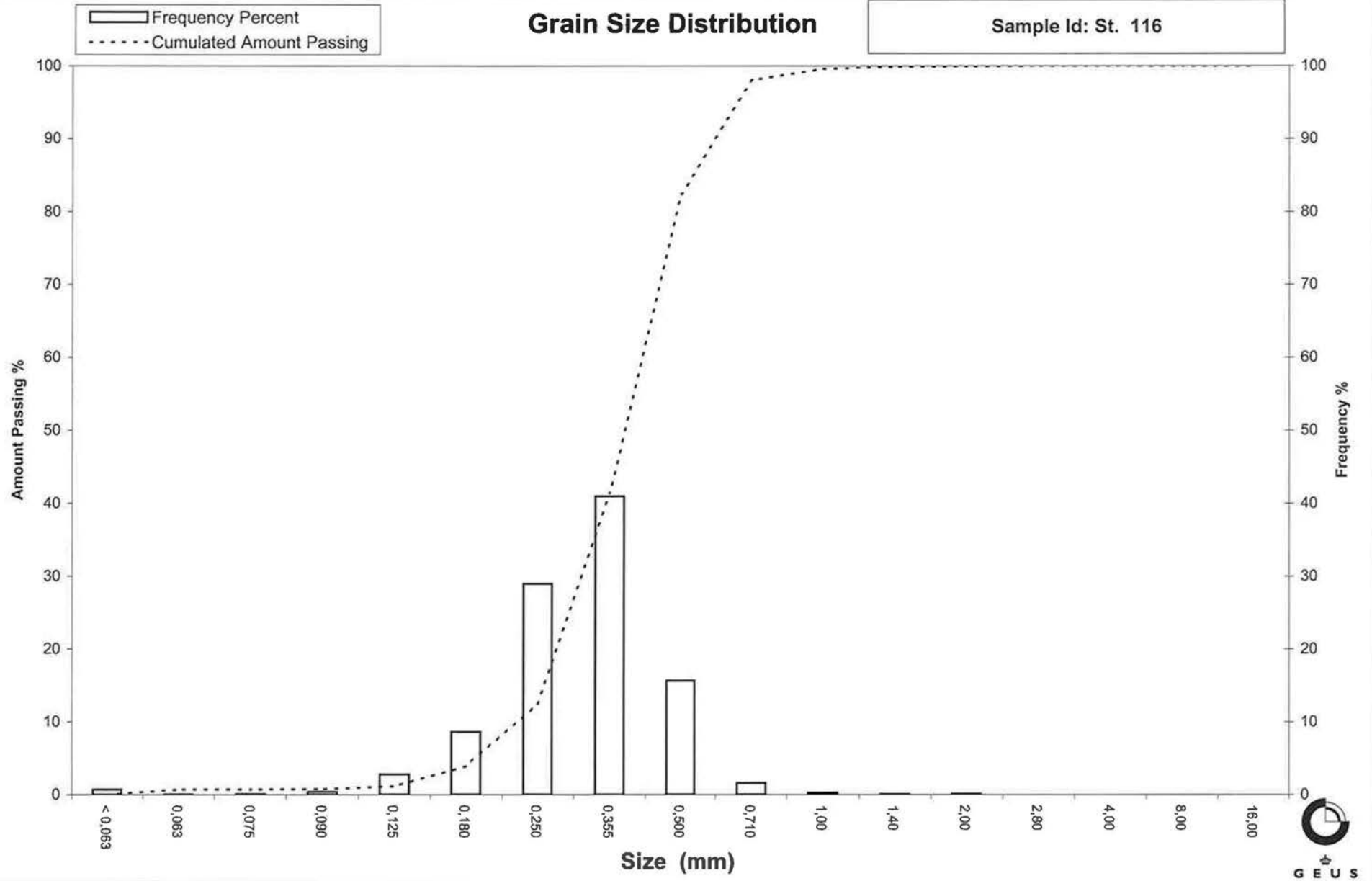
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 116



Grain Size Distribution

Geotechnical

Sample Id: St. 120
Lab. Id: 090253
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 111,06 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,05	0,05	99,95
2,00	-1,00	0,03	0,03	99,93
1,40	-0,49	0,02	0,02	99,91
1,00	0,00	0,03	0,03	99,88
0,710	0,49	0,16	0,14	99,74
0,500	1,00	1,04	0,94	98,80
0,355	1,49	3,71	3,34	95,46
0,250	2,00	13,91	12,52	82,94
0,180	2,47	41,54	37,40	45,53
0,125	3,00	33,86	30,49	15,05
0,090	3,47	14,54	13,09	1,95
0,075	3,74	0,72	0,65	1,31
0,063	3,99	0,20	0,18	1,13
< 0,063	> 3,99	1,25	1,13	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,13
Sand, fine (0,063 mm - 0,200 mm):	55,10
Sand, medium (0,2 mm - 0,6 mm):	43,03
Sand, coarse (0,6 mm - 2 mm):	0,68
Gravel (> 2 mm):	0,07
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,51
16%	84%	0,26	1,95
25%	75%	0,24	2,09
40%	60%	0,21	2,27
Median 50%	50%	0,19	2,41
75%	25%	0,14	2,81
84%	16%	0,13	2,98
90%	10%	0,11	3,16
95%	5%	0,10	3,35

Moments Statistics

Mean	2,45
Sorting	0,54
Skewness	0,07
Kurtosis	1,05
Uniformity Coefficient	1,86

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

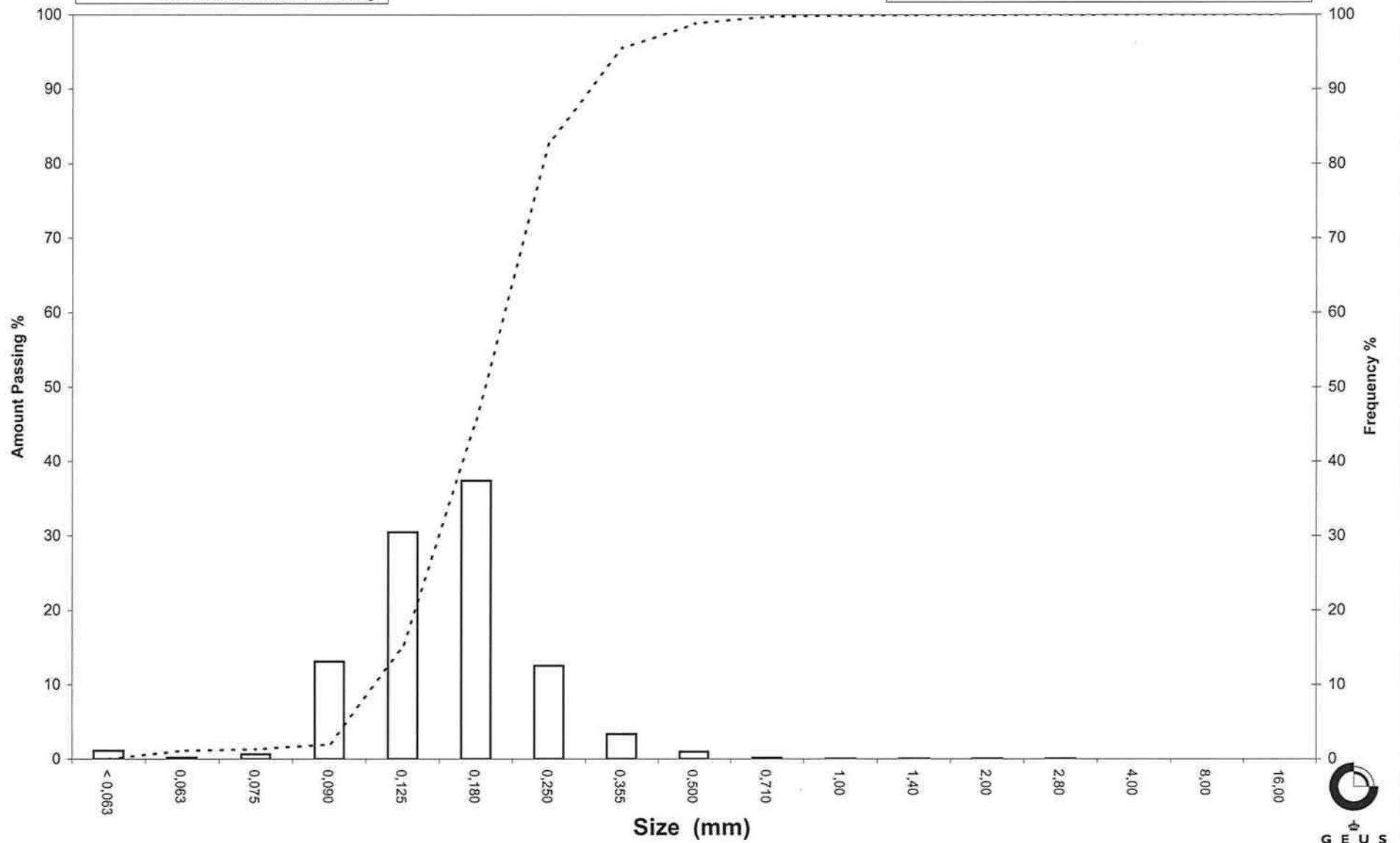
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 120



Grain Size Distribution

Geotechnical

Sample Id: St. 124
Lab. Id: 090254
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 112,59 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,01	0,01	99,99
1,40	-0,49	0,02	0,02	99,97
1,00	0,00	0,02	0,02	99,96
0,710	0,49	0,08	0,07	99,88
0,500	1,00	0,39	0,35	99,54
0,355	1,49	2,59	2,30	97,24
0,250	2,00	23,44	20,82	76,42
0,180	2,47	39,66	35,23	41,19
0,125	3,00	33,89	30,10	11,09
0,090	3,47	10,70	9,50	1,59
0,075	3,74	0,45	0,40	1,19
0,063	3,99	0,15	0,13	1,06
< 0,063	> 3,99	1,19	1,06	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,06
Sand, fine (0,063 mm - 0,200 mm):	50,20
Sand, medium (0,2 mm - 0,6 mm):	48,45
Sand, coarse (0,6 mm - 2 mm):	0,29
Gravel (> 2 mm):	0,01
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,54
16%	84%	0,29	1,79
25%	75%	0,25	2,02
40%	60%	0,22	2,20
Median 50%	50%	0,20	2,34
75%	25%	0,15	2,73
84%	16%	0,13	2,90
90%	10%	0,12	3,05
95%	5%	0,10	3,29

Moments Statistics

Mean	2,34
Sorting	0,54
Skewness	0,05
Kurtosis	1,00
Uniformity Coefficient	1,80

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

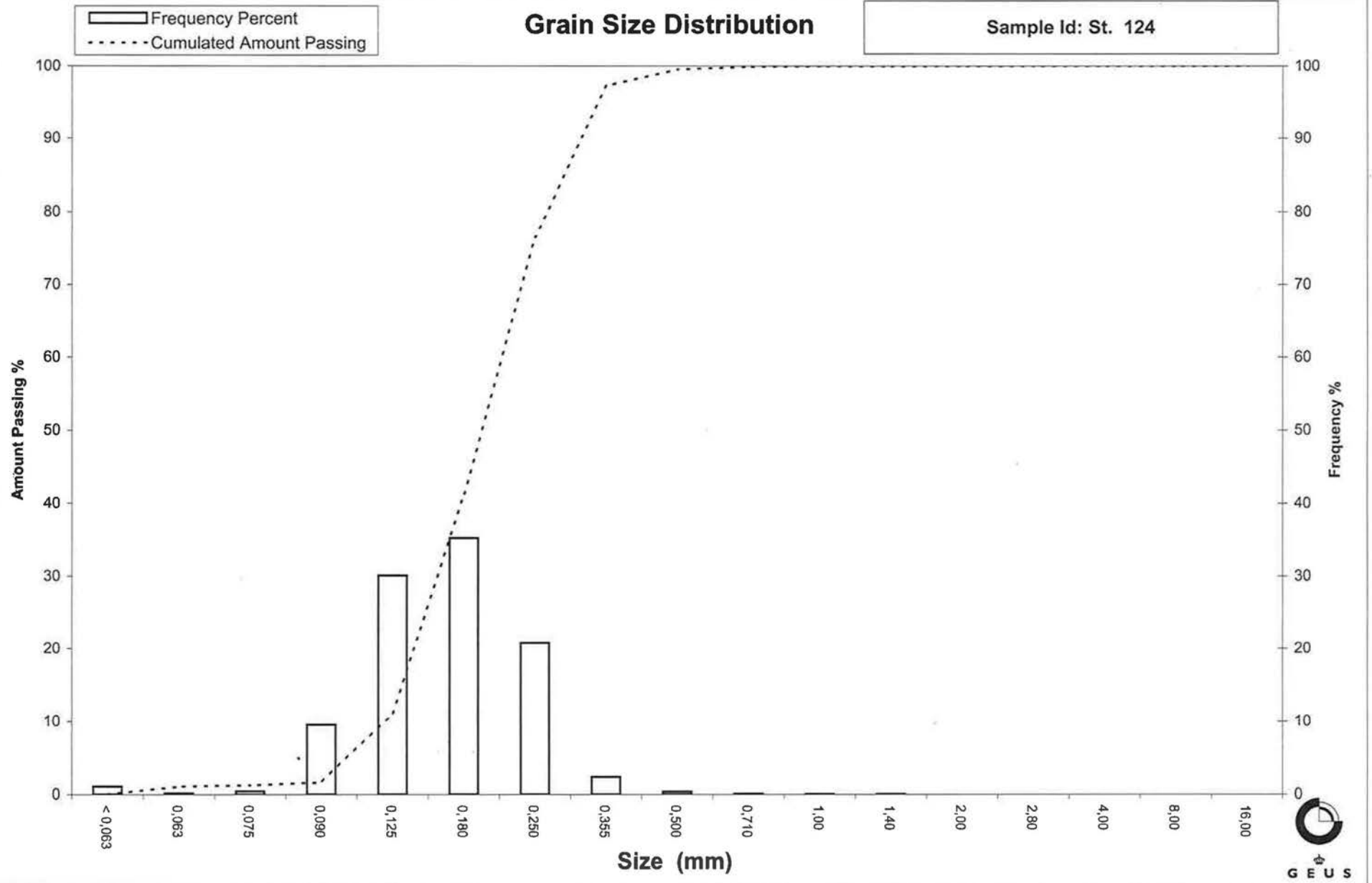
Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 124



Grain Size Distribution

Geotechnical

Sample Id: St. 125
Lab. Id: 090255
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 112,17 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,05	0,04	99,96
2,00	-1,00	0,01	0,01	99,95
1,40	-0,49	0,06	0,05	99,89
1,00	0,00	0,06	0,05	99,84
0,710	0,49	0,24	0,21	99,63
0,500	1,00	0,84	0,75	98,88
0,355	1,49	3,91	3,49	95,39
0,250	2,00	25,57	22,80	72,60
0,180	2,47	37,34	33,29	39,31
0,125	3,00	31,05	27,68	11,63
0,090	3,47	10,82	9,65	1,98
0,075	3,74	0,55	0,49	1,49
0,063	3,99	0,21	0,19	1,30
< 0,063	> 3,99	1,46	1,30	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,30
Sand, fine (0,063 mm - 0,200 mm):	47,52
Sand, medium (0,2 mm - 0,6 mm):	50,42
Sand, coarse (0,6 mm - 2 mm):	0,71
Gravel (> 2 mm):	0,05
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,50
16%	84%	0,30	1,72
25%	75%	0,26	1,94
40%	60%	0,22	2,16
Median 50%	50%	0,20	2,30
75%	25%	0,15	2,72
84%	16%	0,13	2,90
90%	10%	0,12	3,07
95%	5%	0,10	3,31

Moments Statistics

Mean	2,31
Sorting	0,57
Skewness	0,06
Kurtosis	0,94
Uniformity Coefficient	1,88

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

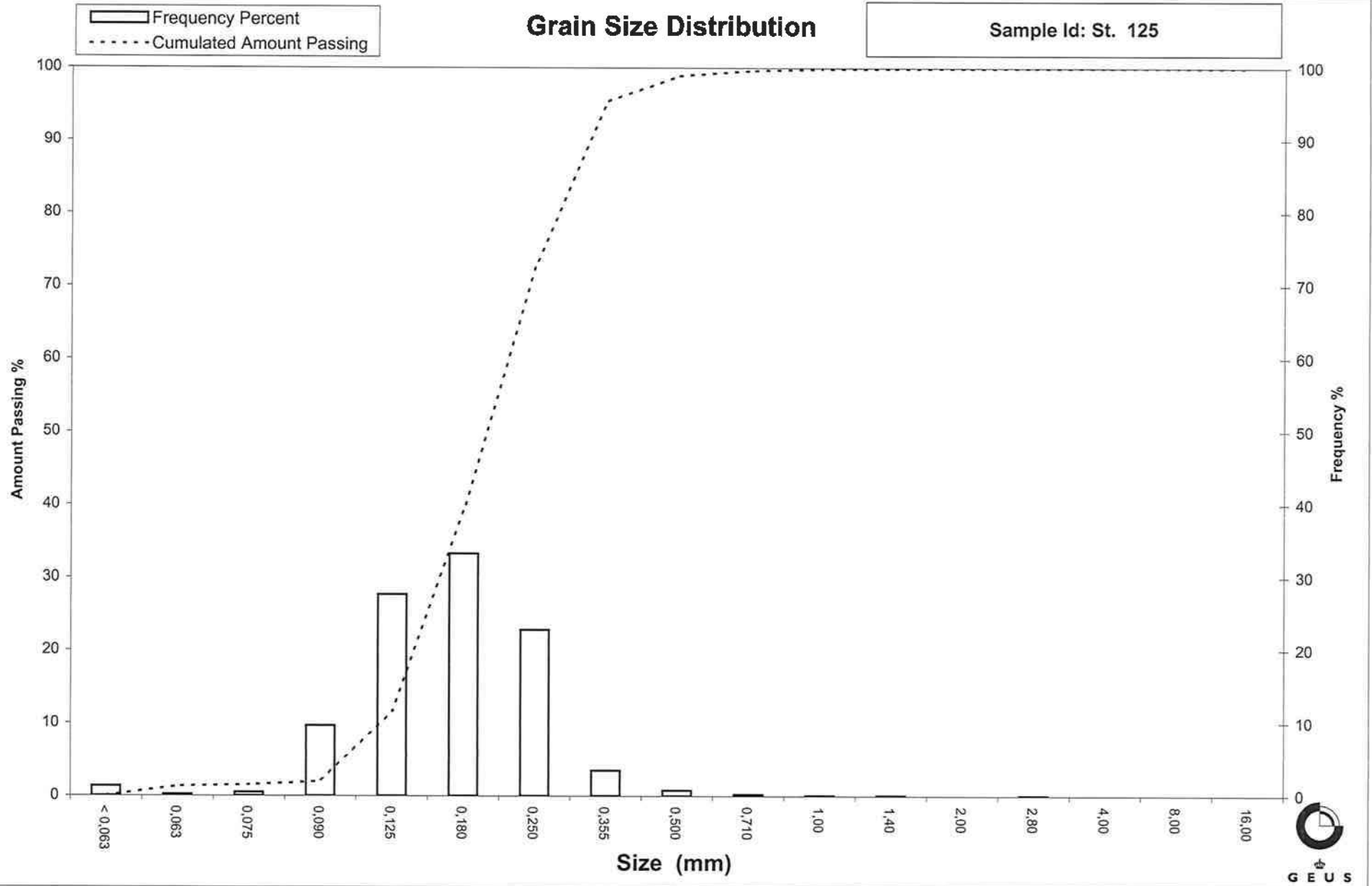
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 125



Grain Size Distribution

Geotechnical

Sample Id: St. 126
Lab. Id: 090256
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 101,16 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,17	0,17	99,83
2,80	-1,49	0,05	0,05	99,78
2,00	-1,00	0,04	0,04	99,74
1,40	-0,49	0,02	0,02	99,72
1,00	0,00	0,09	0,09	99,63
0,710	0,49	0,31	0,31	99,33
0,500	1,00	1,53	1,51	97,82
0,355	1,49	4,47	4,42	93,40
0,250	2,00	21,03	20,79	72,61
0,180	2,47	37,19	36,76	35,84
0,125	3,00	25,89	25,59	10,25
0,090	3,47	8,84	8,74	1,51
0,075	3,74	0,41	0,41	1,11
0,063	3,99	0,13	0,13	0,98
< 0,063	> 3,99	0,99	0,98	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,98
Sand, fine (0,063 mm - 0,200 mm):	45,37
Sand, medium (0,2 mm - 0,6 mm):	52,19
Sand, coarse (0,6 mm - 2 mm):	1,21
Gravel (> 2 mm):	0,26
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,41	1,29
16%	84%	0,31	1,70
25%	75%	0,26	1,93
40%	60%	0,23	2,15
Median 50%	50%	0,21	2,27
75%	25%	0,16	2,67
84%	16%	0,14	2,86
90%	10%	0,12	3,01
95%	5%	0,10	3,27

Moments Statistics

Mean	2,28
Sorting	0,59
Skewness	0,01
Kurtosis	1,09
Uniformity Coefficient	1,82

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

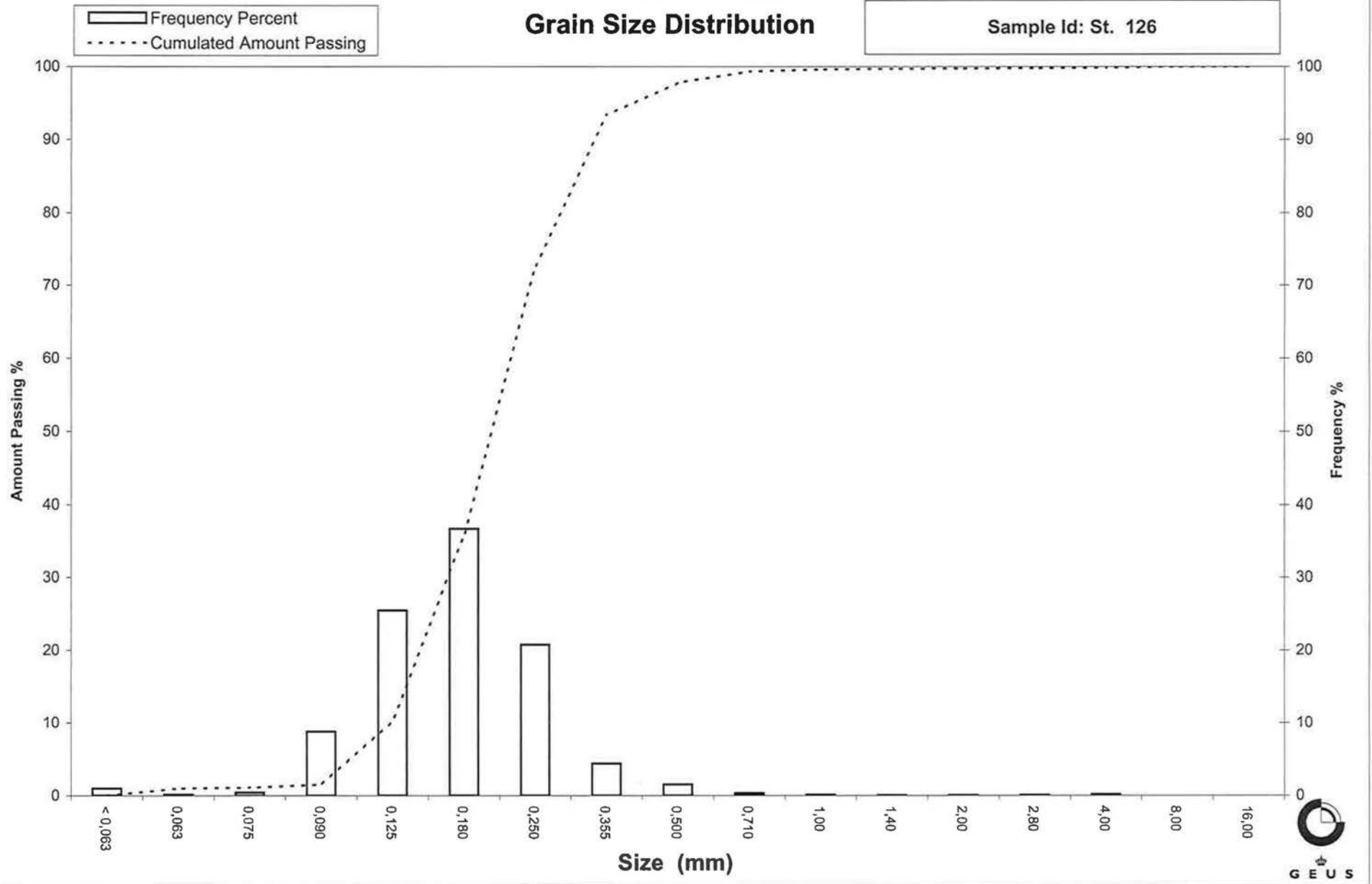
Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)
 Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)
 Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)
 Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)
 Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 126



Grain Size Distribution

Geotechnical

Sample Id: St. 127
Lab. Id: 090257
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 105,35 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,02	0,02	99,98
1,40	-0,49	0,00	0,00	99,98
1,00	0,00	0,04	0,04	99,94
0,710	0,49	0,15	0,14	99,80
0,500	1,00	0,96	0,91	98,89
0,355	1,49	3,56	3,38	95,51
0,250	2,00	20,07	19,05	76,46
0,180	2,47	39,74	37,72	38,74
0,125	3,00	28,42	26,98	11,76
0,090	3,47	10,57	10,03	1,73
0,075	3,74	0,50	0,47	1,25
0,063	3,99	0,15	0,14	1,11
< 0,063	> 3,99	1,17	1,11	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,11
Sand, fine (0,063 mm - 0,200 mm):	48,40
Sand, medium (0,2 mm - 0,6 mm):	49,81
Sand, coarse (0,6 mm - 2 mm):	0,66
Gravel (> 2 mm):	0,02
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,51
16%	84%	0,29	1,78
25%	75%	0,25	2,02
40%	60%	0,22	2,19
Median 50%	50%	0,20	2,32
75%	25%	0,15	2,72
84%	16%	0,13	2,90
90%	10%	0,12	3,07
95%	5%	0,10	3,30

Moments Statistics

Mean	2,33
Sorting	0,55
Skewness	0,07
Kurtosis	1,05
Uniformity Coefficient	1,85

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

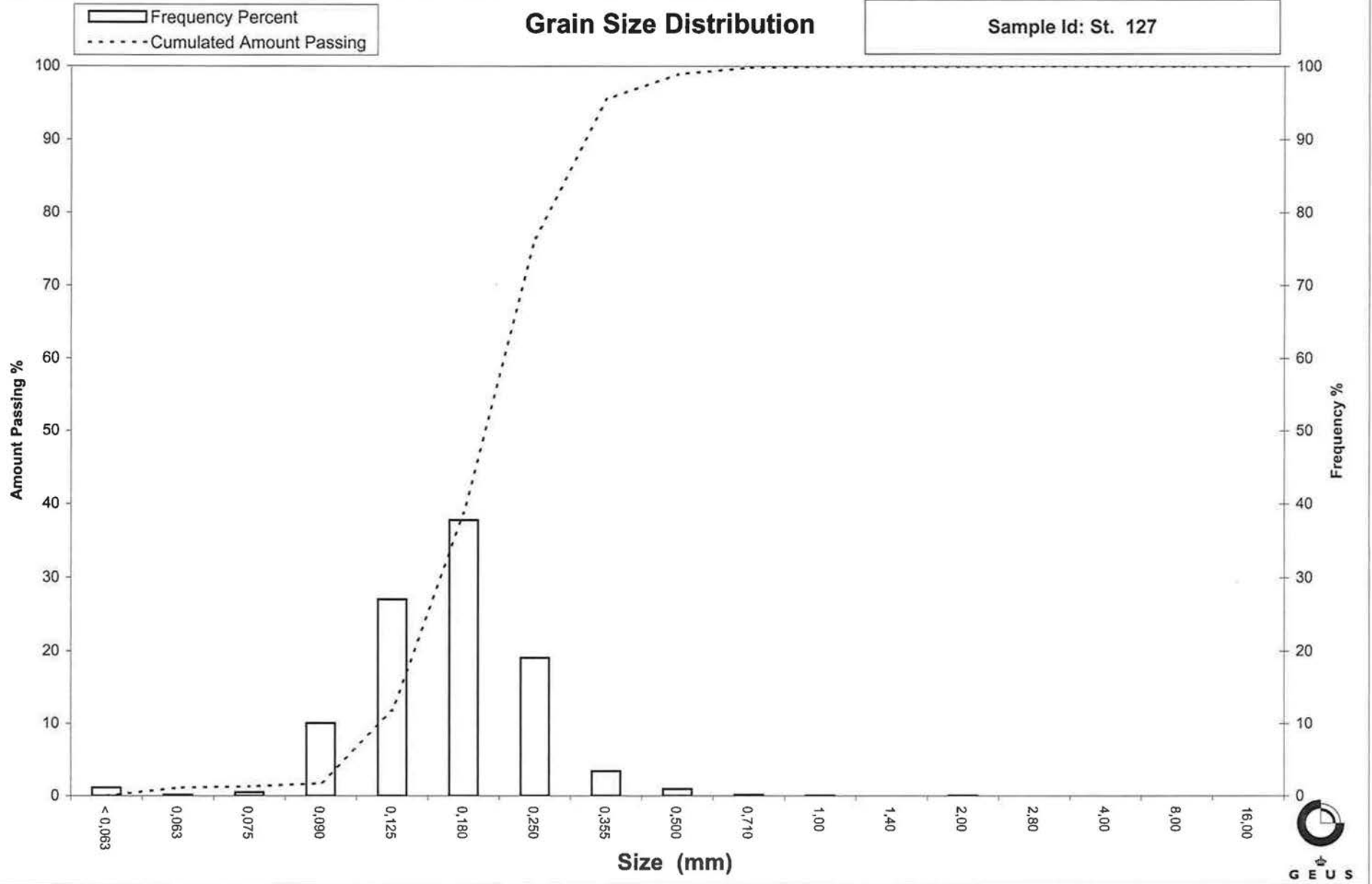
Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 127



Grain Size Distribution

Geotechnical

Sample Id: St. 128
Lab. Id: 090258
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 121,52 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,05	0,04	99,96
1,40	-0,49	0,07	0,06	99,90
1,00	0,00	0,34	0,28	99,62
0,710	0,49	1,52	1,25	98,37
0,500	1,00	8,18	6,73	91,64
0,355	1,49	35,83	29,48	62,15
0,250	2,00	59,25	48,76	13,40
0,180	2,47	14,06	11,57	1,83
0,125	3,00	0,88	0,72	1,10
0,090	3,47	0,20	0,16	0,94
0,075	3,74	0,04	0,03	0,91
0,063	3,99	0,01	0,01	0,90
< 0,063	> 3,99	1,09	0,90	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,90
Sand, fine (0,063 mm - 0,200 mm):	4,24
Sand, medium (0,2 mm - 0,6 mm):	89,71
Sand, coarse (0,6 mm - 2 mm):	5,11
Gravel (> 2 mm):	0,04
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,60	0,73
16%	84%	0,46	1,11
25%	75%	0,42	1,26
40%	60%	0,35	1,51
Median 50%	50%	0,33	1,60
75%	25%	0,27	1,86
84%	16%	0,26	1,97
90%	10%	0,23	2,12
95%	5%	0,20	2,33

Moments Statistics

Mean	1,56
Sorting	0,46
Skewness	-0,12
Kurtosis	1,09
Uniformity Coefficient	1,53

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

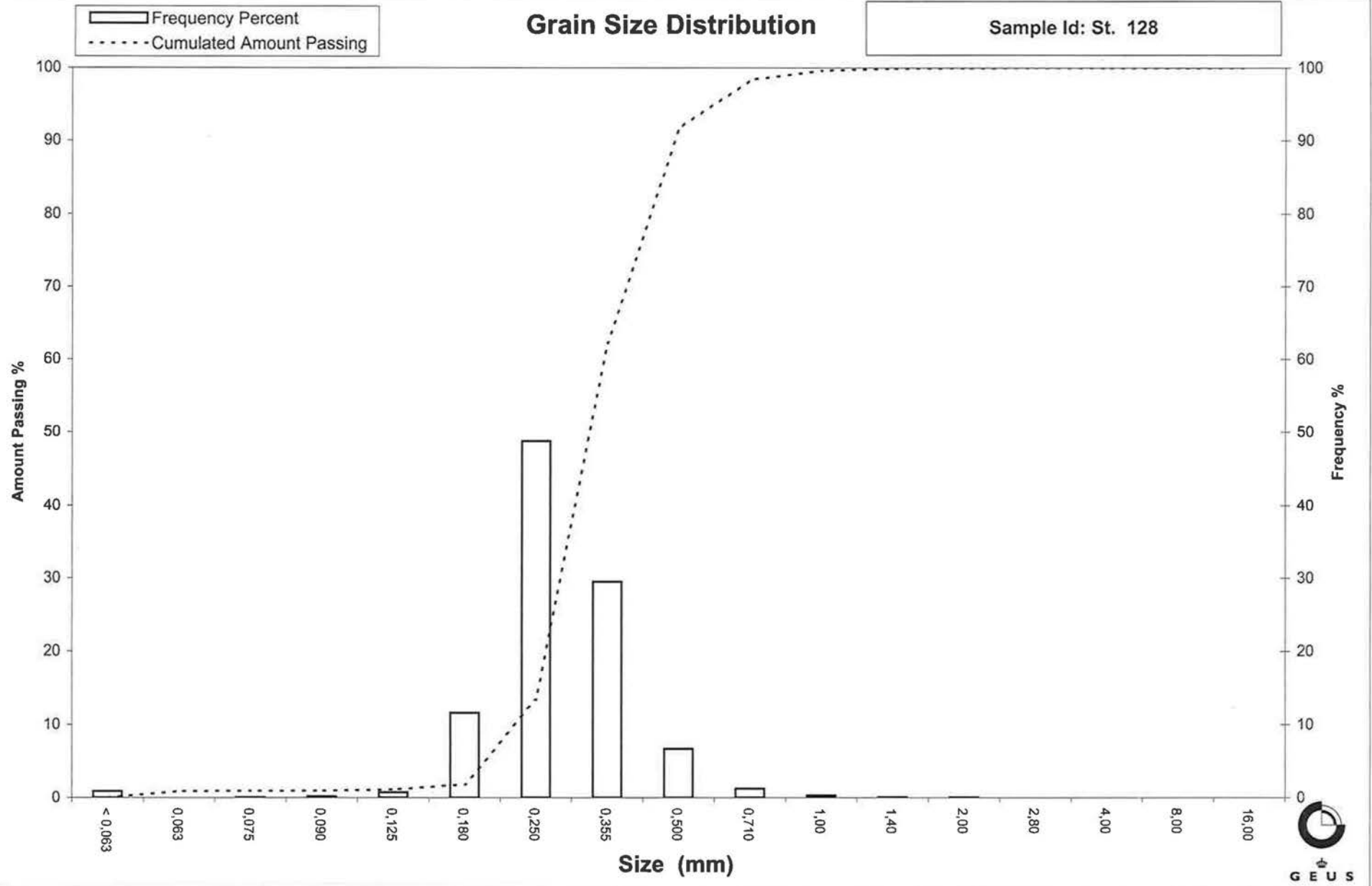
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 128



Grain Size Distribution

Geotechnical

Sample Id: St. 129
Lab. Id: 090259
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 110,54 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,05	0,05	99,95
1,40	-0,49	0,17	0,15	99,80
1,00	0,00	0,49	0,44	99,36
0,710	0,49	2,49	2,25	97,11
0,500	1,00	11,18	10,11	86,99
0,355	1,49	34,03	30,79	56,21
0,250	2,00	48,16	43,57	12,64
0,180	2,47	12,68	11,47	1,17
0,125	3,00	0,53	0,48	0,69
0,090	3,47	0,09	0,08	0,61
0,075	3,74	0,05	0,05	0,56
0,063	3,99	0,04	0,04	0,52
< 0,063	> 3,99	0,58	0,52	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,52
Sand, fine (0,063 mm - 0,200 mm):	3,92
Sand, medium (0,2 mm - 0,6 mm):	87,36
Sand, coarse (0,6 mm - 2 mm):	8,15
Gravel (> 2 mm):	0,05
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,67	0,59
16%	84%	0,49	1,04
25%	75%	0,44	1,17
40%	60%	0,37	1,42
Median 50%	50%	0,34	1,56
75%	25%	0,28	1,84
84%	16%	0,26	1,95
90%	10%	0,23	2,10
95%	5%	0,20	2,30

Moments Statistics

Mean	1,52
Sorting	0,49
Skewness	-0,13
Kurtosis	1,06
Uniformity Coefficient	1,59

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

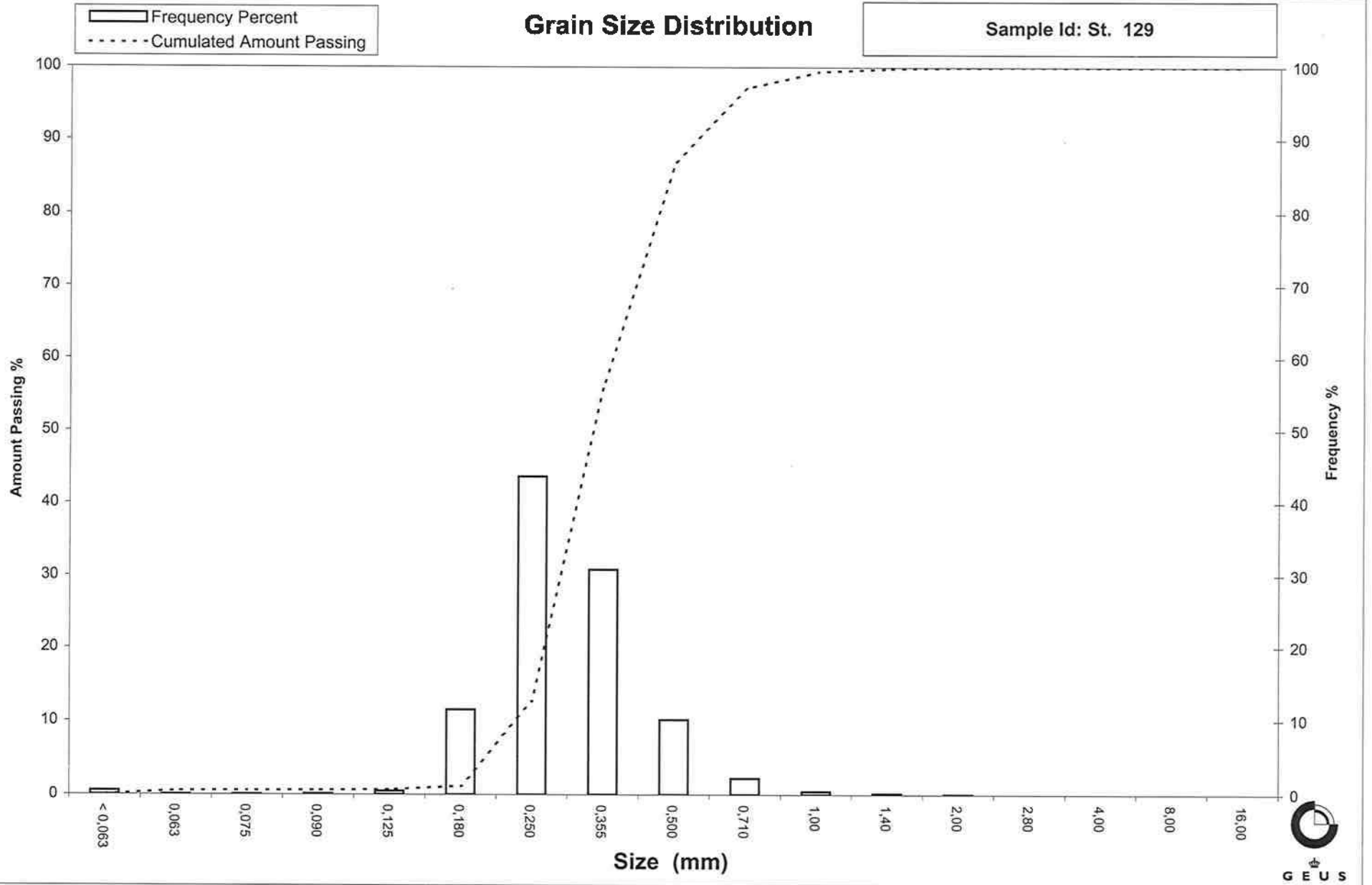
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 129



Grain Size Distribution

Geotechnical

Sample Id: St. 130
Lab. Id: 090260
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 116,29 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,05	0,04	99,96
1,00	0,00	0,41	0,35	99,60
0,710	0,49	1,76	1,51	98,09
0,500	1,00	10,87	9,35	88,74
0,355	1,49	36,13	31,07	57,67
0,250	2,00	51,06	43,91	13,77
0,180	2,47	14,32	12,31	1,45
0,125	3,00	0,65	0,56	0,89
0,090	3,47	0,10	0,09	0,81
0,075	3,74	0,05	0,04	0,77
0,063	3,99	0,03	0,03	0,74
< 0,063	> 3,99	0,86	0,74	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,74
Sand, fine (0,063 mm - 0,200 mm):	4,23
Sand, medium (0,2 mm - 0,6 mm):	88,22
Sand, coarse (0,6 mm - 2 mm):	6,81
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,64	0,64
16%	84%	0,48	1,07
25%	75%	0,44	1,20
40%	60%	0,37	1,45
Median 50%	50%	0,34	1,57
75%	25%	0,28	1,85
84%	16%	0,26	1,97
90%	10%	0,23	2,13
95%	5%	0,20	2,32

Moments Statistics

Mean	1,54
Sorting	0,48
Skewness	-0,11
Kurtosis	1,05
Uniformity Coefficient	1,60

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

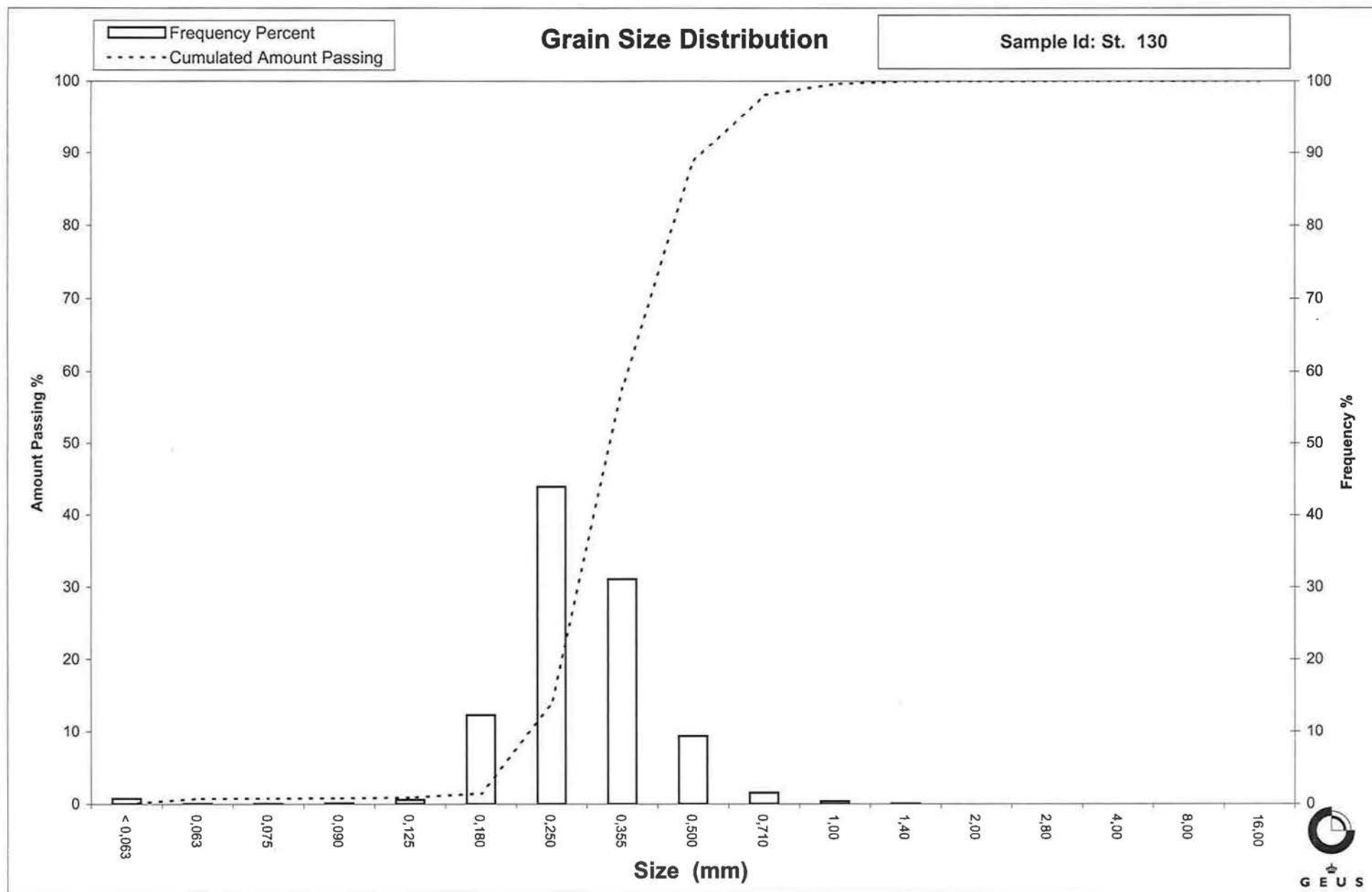
Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)
 Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)
 Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)
 Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)
 Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 131
Lab. Id: 090261
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 111,56 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,03	0,03	99,97
1,40	-0,49	0,08	0,07	99,90
1,00	0,00	0,21	0,19	99,71
0,710	0,49	1,09	0,98	98,74
0,500	1,00	6,83	6,12	92,61
0,355	1,49	32,07	28,75	63,87
0,250	2,00	53,20	47,69	16,18
0,180	2,47	16,06	14,40	1,78
0,125	3,00	0,95	0,85	0,93
0,090	3,47	0,09	0,08	0,85
0,075	3,74	0,03	0,03	0,82
0,063	3,99	0,02	0,02	0,81
< 0,063	> 3,99	0,90	0,81	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,81
Sand, fine (0,063 mm - 0,200 mm):	5,09
Sand, medium (0,2 mm - 0,6 mm):	89,63
Sand, coarse (0,6 mm - 2 mm):	4,44
Gravel (> 2 mm):	0,03
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,58	0,78
16%	84%	0,46	1,13
25%	75%	0,41	1,28
40%	60%	0,35	1,53
Median 50%	50%	0,32	1,62
75%	25%	0,27	1,89
84%	16%	0,25	2,01
90%	10%	0,22	2,18
95%	5%	0,20	2,35

Moments Statistics

Mean	1,59
Sorting	0,46
Skewness	-0,10
Kurtosis	1,06
Uniformity Coefficient	1,58

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

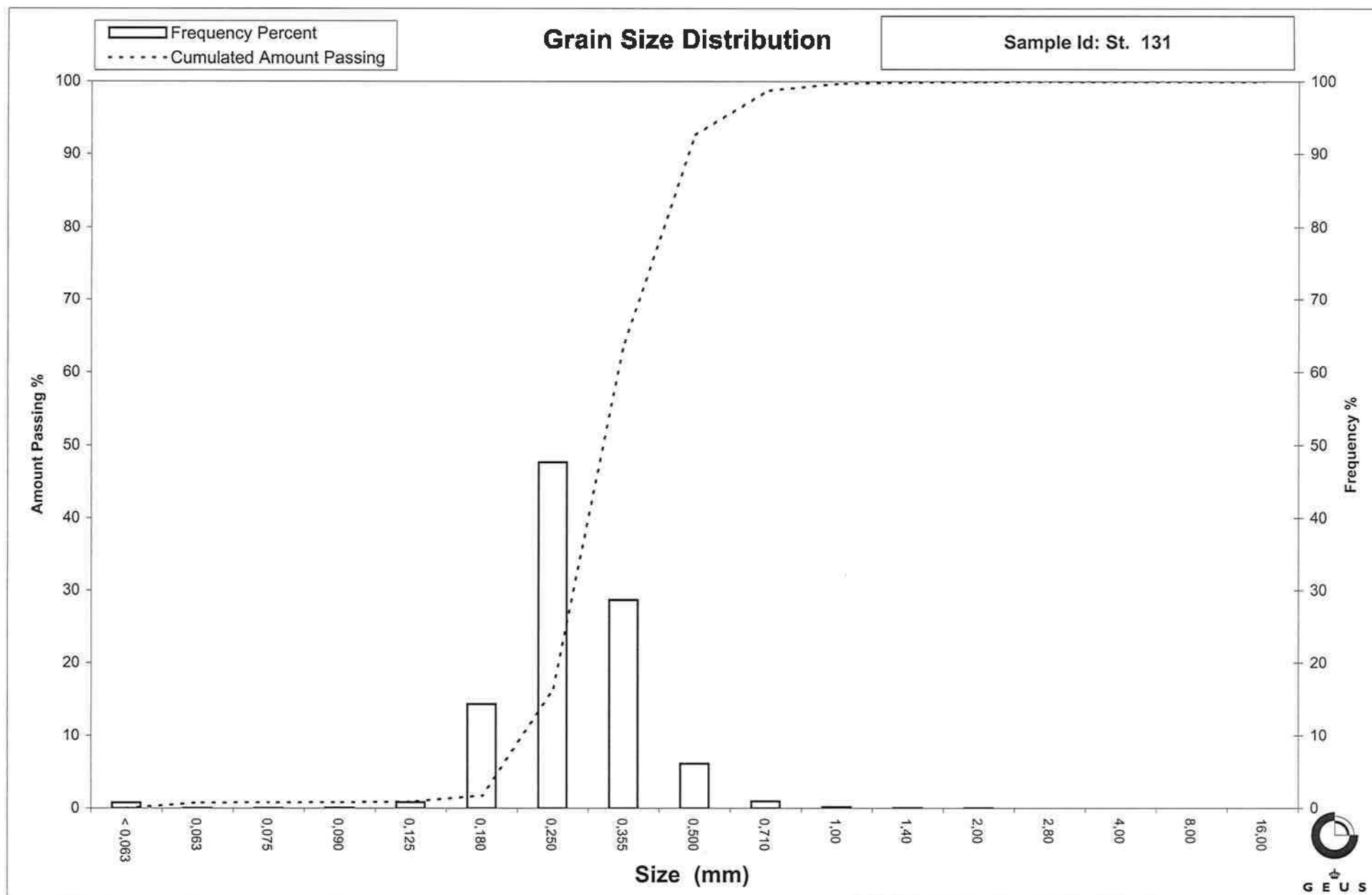
Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 132
Lab. Id: 090262
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 123,99 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,03	0,02	99,98
1,00	0,00	0,11	0,09	99,89
0,710	0,49	0,63	0,51	99,38
0,500	1,00	5,04	4,06	95,31
0,355	1,49	34,08	27,49	67,83
0,250	2,00	62,51	50,42	17,41
0,180	2,47	19,28	15,55	1,86
0,125	3,00	1,15	0,93	0,94
0,090	3,47	0,08	0,06	0,87
0,075	3,74	0,05	0,04	0,83
0,063	3,99	0,04	0,03	0,80
< 0,063	> 3,99	0,99	0,80	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,80
Sand, fine (0,063 mm - 0,200 mm):	5,51
Sand, medium (0,2 mm - 0,6 mm):	90,94
Sand, coarse (0,6 mm - 2 mm):	2,75
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,50	1,00
16%	84%	0,44	1,18
25%	75%	0,39	1,35
40%	60%	0,34	1,56
Median 50%	50%	0,32	1,65
75%	25%	0,27	1,91
84%	16%	0,24	2,04
90%	10%	0,22	2,21
95%	5%	0,19	2,36

Moments Statistics

Mean	1,62
Sorting	0,42
Skewness	-0,03
Kurtosis	0,99
Uniformity Coefficient	1,56

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

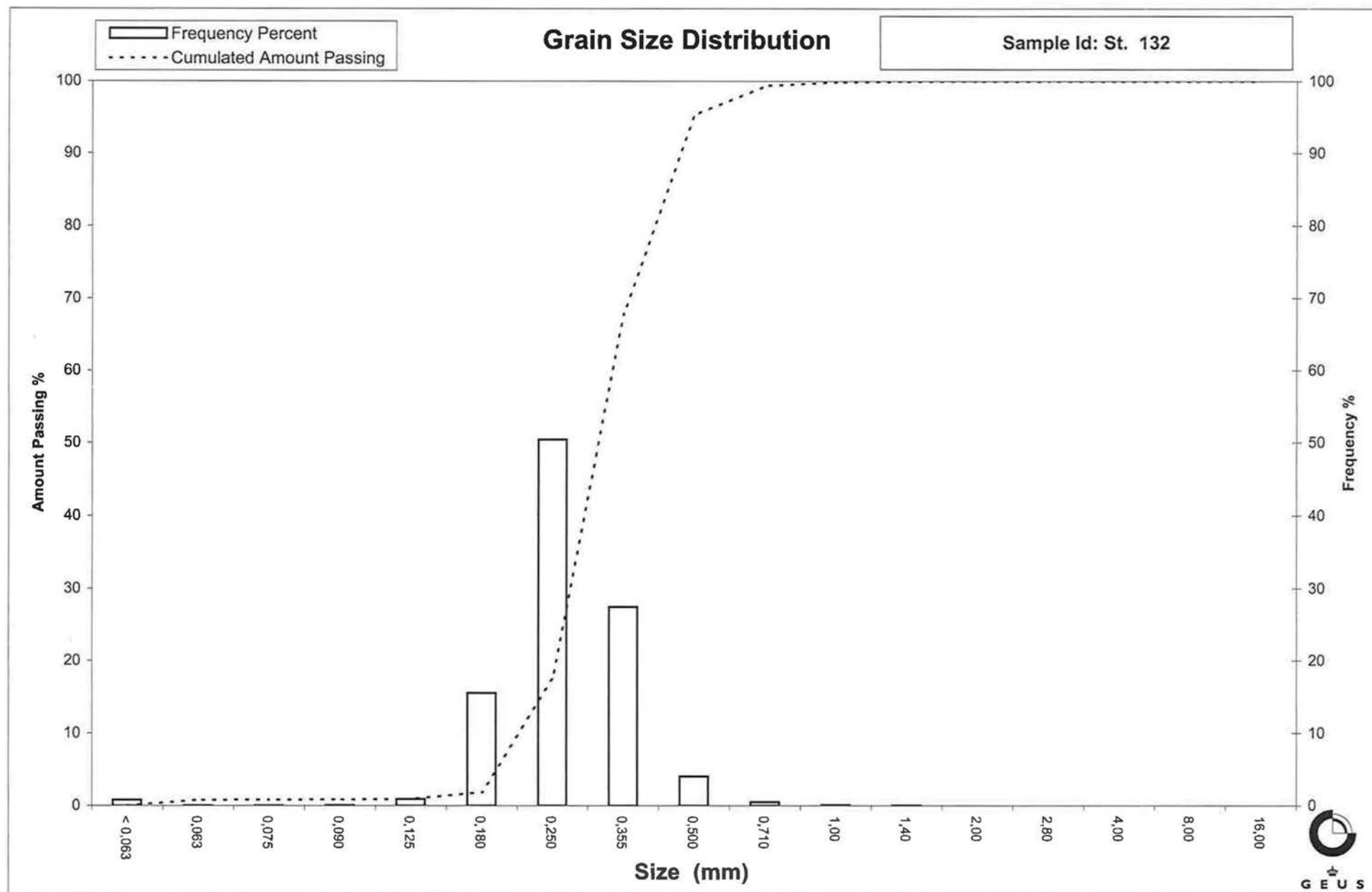
Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 139
Lab. Id: 090263
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 208,02 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,56	0,27	99,73
4,00	-2,00	5,76	2,77	96,96
2,80	-1,49	1,62	0,78	96,18
2,00	-1,00	1,78	0,86	95,33
1,40	-0,49	1,92	0,92	94,40
1,00	0,00	3,54	1,70	92,70
0,710	0,49	9,98	4,80	87,91
0,500	1,00	30,62	14,72	73,19
0,355	1,49	76,16	36,61	36,57
0,250	2,00	58,97	28,35	8,23
0,180	2,47	13,72	6,60	1,63
0,125	3,00	1,85	0,89	0,74
0,090	3,47	0,15	0,07	0,67
0,075	3,74	0,05	0,02	0,64
0,063	3,99	0,03	0,01	0,63
< 0,063	> 3,99	1,31	0,63	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,63
Sand, fine (0,063 mm - 0,200 mm):	2,88
Sand, medium (0,2 mm - 0,6 mm):	76,68
Sand, coarse (0,6 mm - 2 mm):	15,13
Gravel (> 2 mm):	4,67
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,79	-0,84
16%	84%	0,65	0,61
25%	75%	0,53	0,93
40%	60%	0,45	1,16
Median 50%	50%	0,41	1,29
75%	25%	0,31	1,68
84%	16%	0,28	1,84
90%	10%	0,26	1,96
95%	5%	0,22	2,21

Moments Statistics

Mean	1,25
Sorting	0,77
Skewness	-0,25
Kurtosis	1,66
Uniformity Coefficient	1,75

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

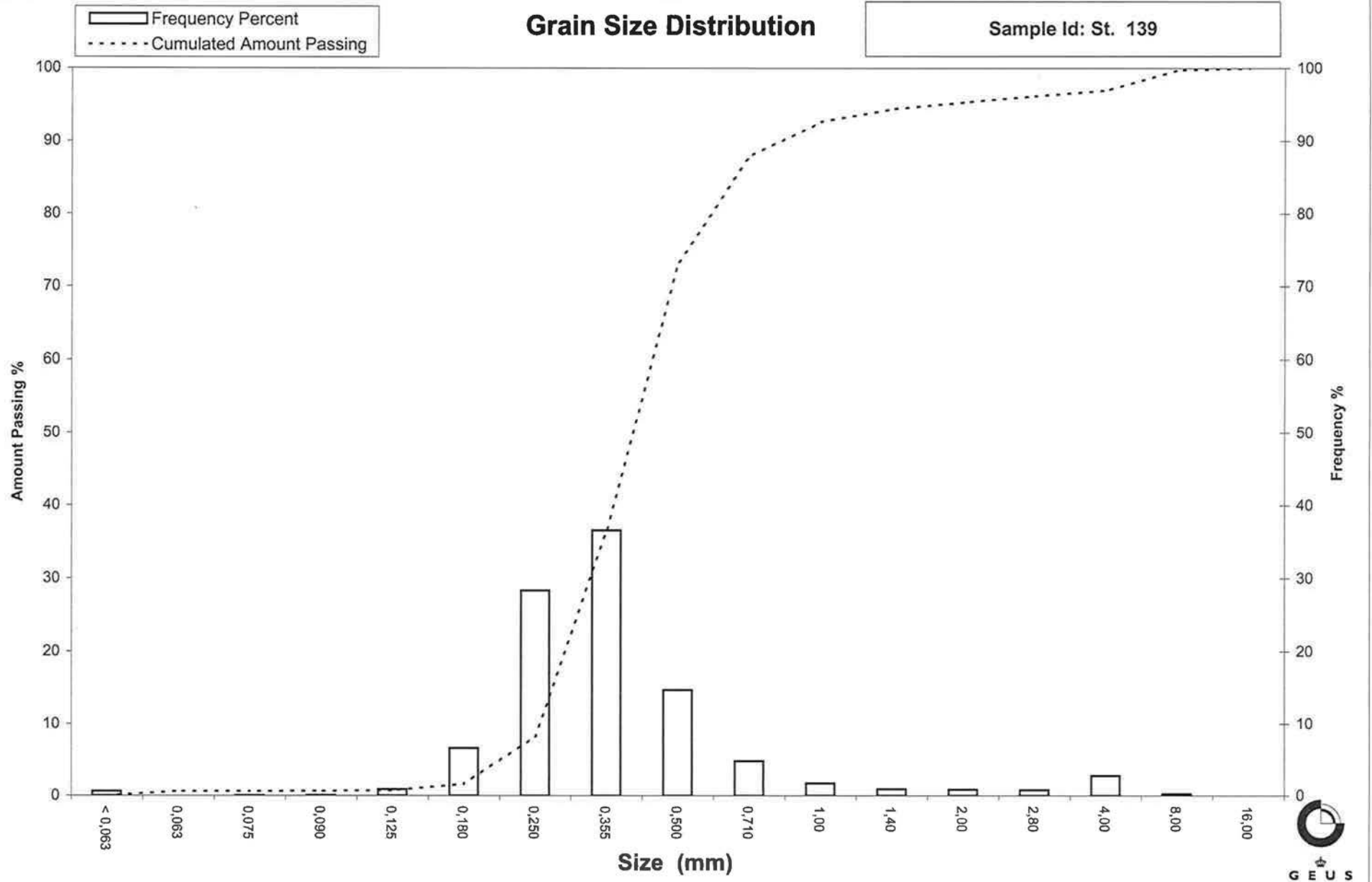
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 139



Grain Size Distribution

Geotechnical

Sample Id: St. 143
Lab. Id: 090264
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 100,44 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,04	0,04	99,96
1,00	0,00	0,05	0,05	99,91
0,710	0,49	0,08	0,08	99,83
0,500	1,00	0,62	0,62	99,21
0,355	1,49	4,62	4,60	94,61
0,250	2,00	34,61	34,46	60,16
0,180	2,47	46,83	46,62	13,53
0,125	3,00	11,11	11,06	2,47
0,090	3,47	0,74	0,74	1,73
0,075	3,74	0,08	0,08	1,65
0,063	3,99	0,06	0,06	1,59
< 0,063	> 3,99	1,60	1,59	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,59
Sand, fine (0,063 mm - 0,200 mm):	25,26
Sand, medium (0,2 mm - 0,6 mm):	72,66
Sand, coarse (0,6 mm - 2 mm):	0,49
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,37	1,45
16%	84%	0,32	1,63
25%	75%	0,30	1,76
40%	60%	0,25	2,00
Median 50%	50%	0,23	2,09
75%	25%	0,20	2,34
84%	16%	0,18	2,44
90%	10%	0,16	2,62
95%	5%	0,14	2,86

Moments Statistics

Mean	2,06
Sorting	0,42
Skewness	-0,02
Kurtosis	1,00
Uniformity Coefficient	1,54

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

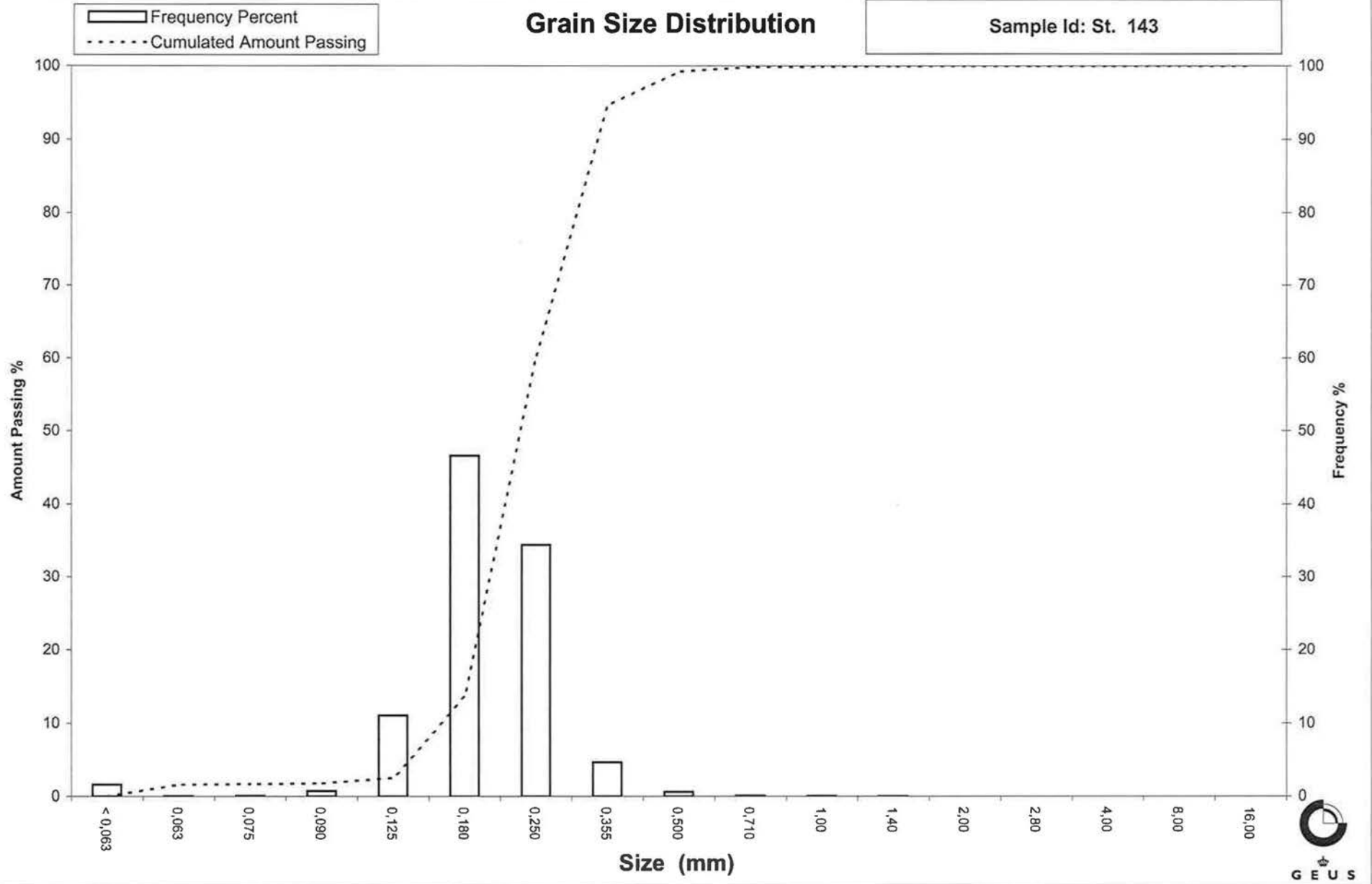
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgg-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 143



Grain Size Distribution

Geotechnical

Sample Id: St. 147
Lab. Id: 090265
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 127,79 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,07	0,05	99,95
2,00	-1,00	0,11	0,09	99,86
1,40	-0,49	0,24	0,19	99,67
1,00	0,00	0,58	0,45	99,22
0,710	0,49	3,51	2,75	96,47
0,500	1,00	16,70	13,07	83,40
0,355	1,49	47,76	37,37	46,03
0,250	2,00	40,03	31,32	14,70
0,180	2,47	13,59	10,63	4,07
0,125	3,00	3,57	2,79	1,28
0,090	3,47	0,31	0,24	1,03
0,075	3,74	0,05	0,04	0,99
0,063	3,99	0,02	0,02	0,98
< 0,063	> 3,99	1,25	0,98	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,98
Sand, fine (0,063 mm - 0,200 mm):	6,13
Sand, medium (0,2 mm - 0,6 mm):	82,52
Sand, coarse (0,6 mm - 2 mm):	10,23
Gravel (> 2 mm):	0,14
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,69	0,54
16%	84%	0,51	0,97
25%	75%	0,47	1,10
40%	60%	0,41	1,29
Median 50%	50%	0,37	1,43
75%	25%	0,28	1,81
84%	16%	0,25	1,98
90%	10%	0,22	2,19
95%	5%	0,19	2,43

Moments Statistics

Mean	1,46
Sorting	0,54
Skewness	0,07
Kurtosis	1,08
Uniformity Coefficient	1,87

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

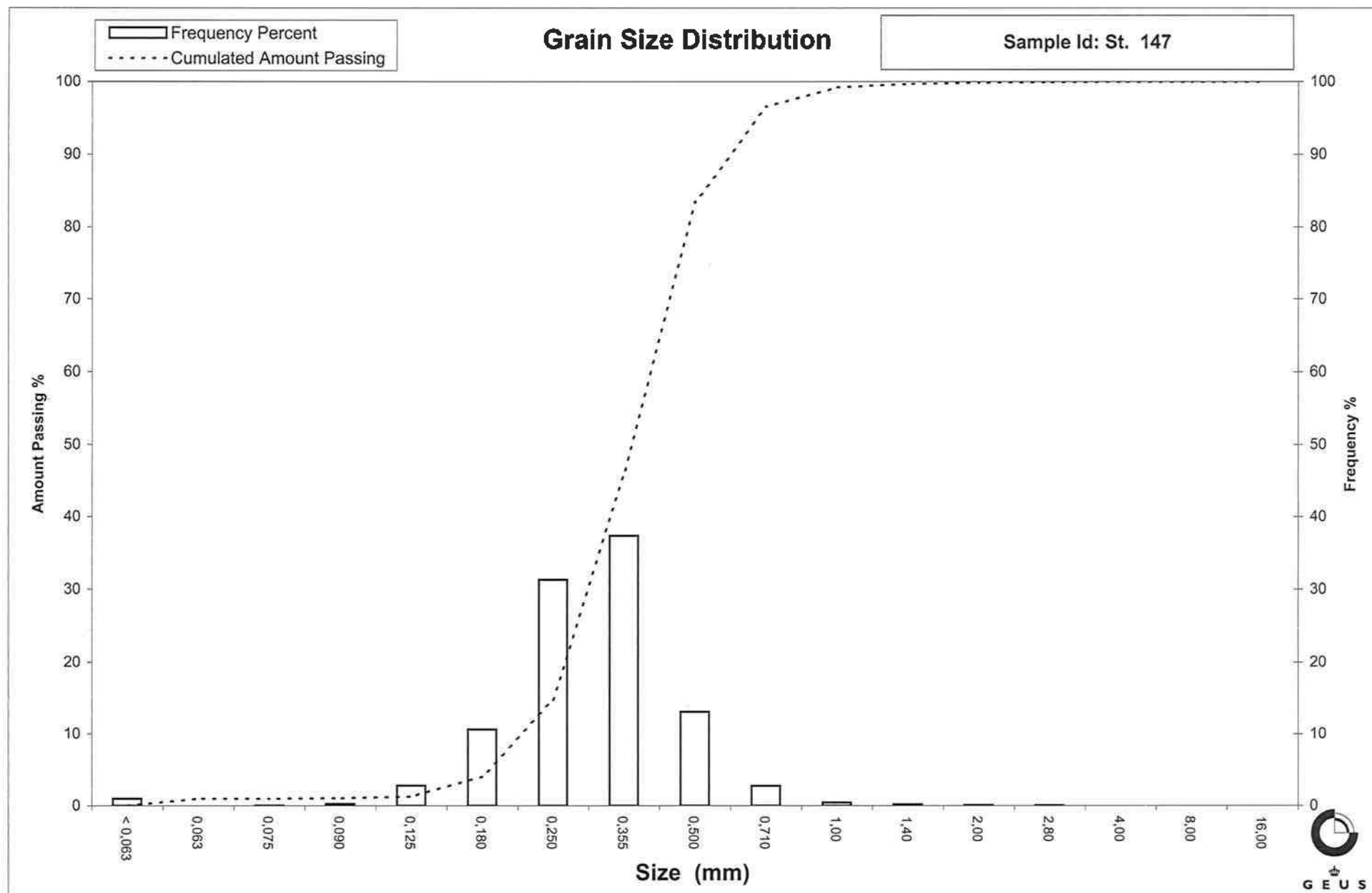
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 151
Lab. Id: 090266
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 113,05 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,05	0,04	99,96
1,00	0,00	0,06	0,05	99,90
0,710	0,49	0,13	0,11	99,79
0,500	1,00	0,56	0,50	99,29
0,355	1,49	2,86	2,53	96,76
0,250	2,00	16,43	14,53	82,23
0,180	2,47	56,98	50,40	31,83
0,125	3,00	32,83	29,04	2,79
0,090	3,47	2,04	1,80	0,98
0,075	3,74	0,12	0,11	0,88
0,063	3,99	0,04	0,04	0,84
< 0,063	> 3,99	0,95	0,84	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,84
Sand, fine (0,063 mm - 0,200 mm):	45,39
Sand, medium (0,2 mm - 0,6 mm):	53,30
Sand, coarse (0,6 mm - 2 mm):	0,47
Gravel (> 2 mm):	0,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,55
16%	84%	0,26	1,93
25%	75%	0,24	2,06
40%	60%	0,22	2,19
Median 50%	50%	0,21	2,28
75%	25%	0,17	2,58
84%	16%	0,15	2,74
90%	10%	0,14	2,85
95%	5%	0,13	2,95

Moments Statistics

Mean	2,32
Sorting	0,42
Skewness	0,03
Kurtosis	1,10
Uniformity Coefficient	1,58

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

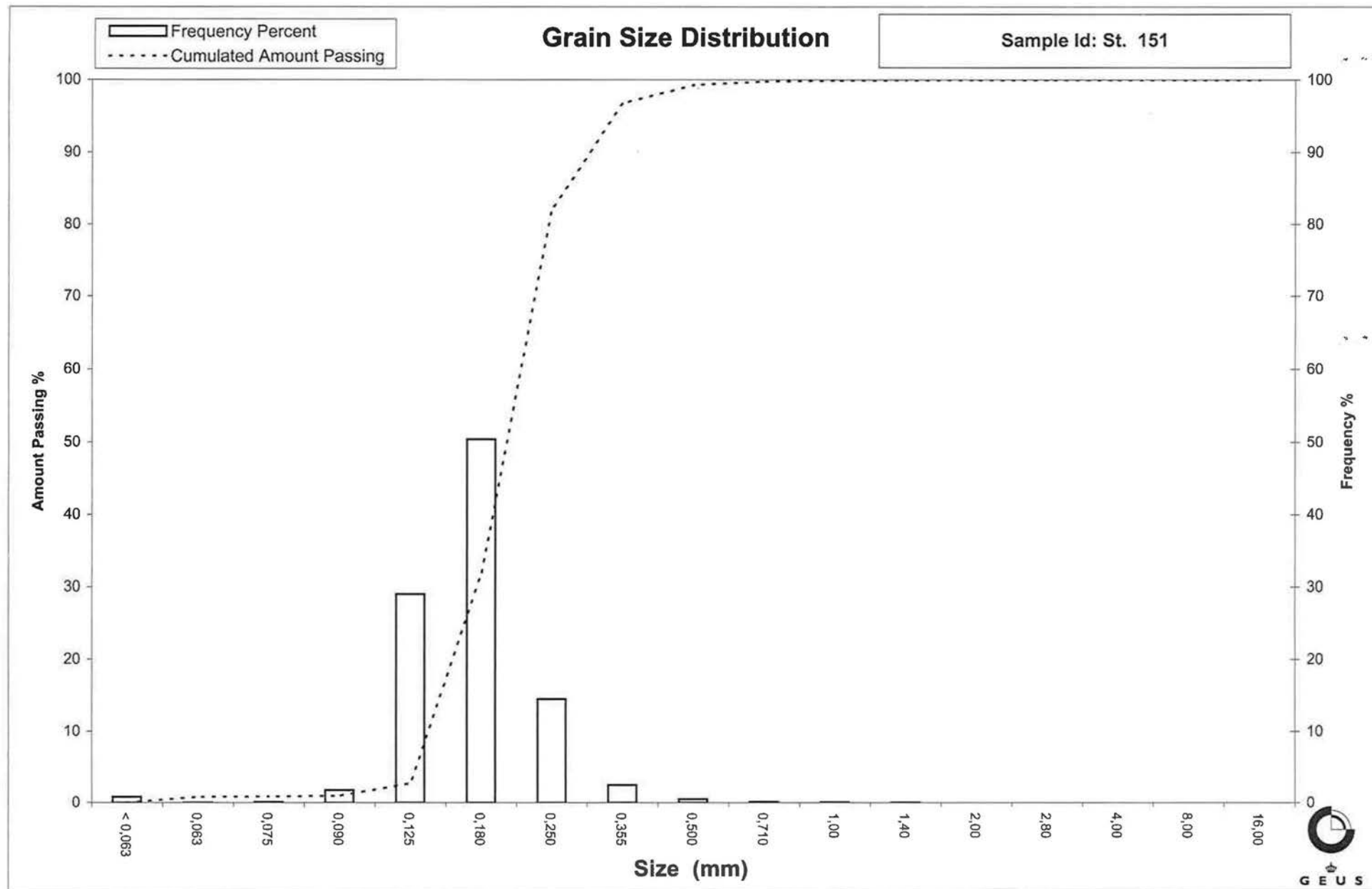
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 155
Lab. Id: 090267
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 150,58 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,36	0,24	99,76
2,80	-1,49	1,05	0,70	99,06
2,00	-1,00	1,14	0,76	98,31
1,40	-0,49	2,83	1,88	96,43
1,00	0,00	6,11	4,06	92,37
0,710	0,49	17,97	11,93	80,44
0,500	1,00	44,46	29,53	50,91
0,355	1,49	45,32	30,10	20,81
0,250	2,00	22,99	15,27	5,55
0,180	2,47	5,65	3,75	1,79
0,125	3,00	1,61	1,07	0,72
0,090	3,47	0,16	0,11	0,62
0,075	3,74	0,06	0,04	0,58
0,063	3,99	0,04	0,03	0,55
< 0,063	> 3,99	0,83	0,55	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,55
Sand, fine (0,063 mm - 0,200 mm):	2,31
Sand, medium (0,2 mm - 0,6 mm):	62,10
Sand, coarse (0,6 mm - 2 mm):	33,34
Gravel (> 2 mm):	1,69
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,26	-0,33
16%	84%	0,80	0,33
25%	75%	0,67	0,57
40%	60%	0,56	0,82
Median 50%	50%	0,50	1,01
75%	25%	0,38	1,41
84%	16%	0,32	1,64
90%	10%	0,28	1,83
95%	5%	0,24	2,06

Moments Statistics

Mean	0,99
Sorting	0,69
Skewness	-0,09
Kurtosis	1,17
Uniformity Coefficient	2,01

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

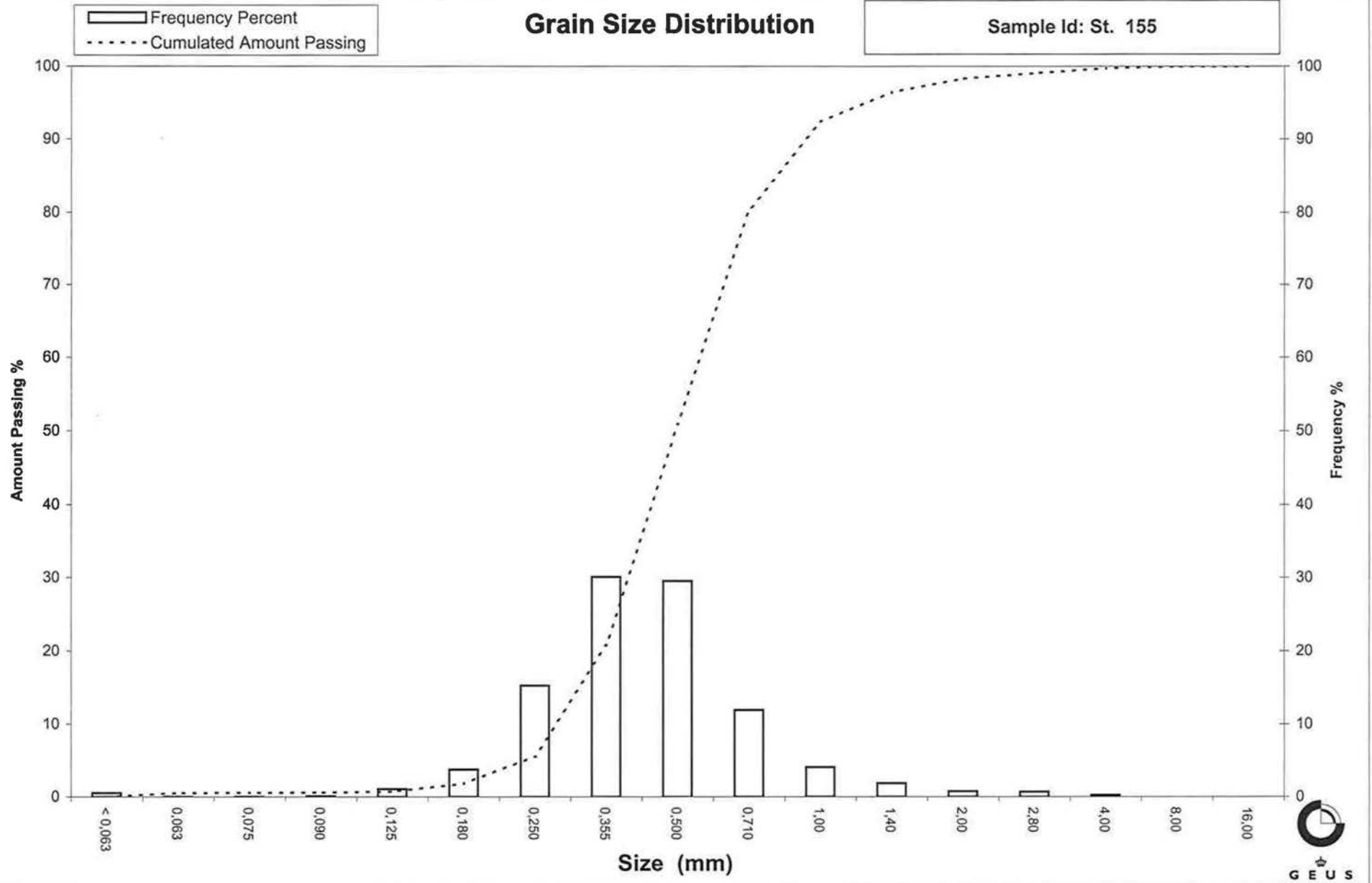
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgg-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 155



Grain Size Distribution

Geotechnical

Sample Id: St. 159
Lab. Id: 090268
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 141,15 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,66	0,47	99,53
2,80	-1,49	0,32	0,23	99,31
2,00	-1,00	0,75	0,53	98,77
1,40	-0,49	1,04	0,74	98,04
1,00	0,00	1,42	1,01	97,03
0,710	0,49	3,75	2,66	94,37
0,500	1,00	17,41	12,33	82,04
0,355	1,49	50,74	35,95	46,09
0,250	2,00	49,51	35,08	11,02
0,180	2,47	12,28	8,70	2,32
0,125	3,00	2,02	1,43	0,89
0,090	3,47	0,24	0,17	0,72
0,075	3,74	0,05	0,04	0,68
0,063	3,99	0,06	0,04	0,64
< 0,063	> 3,99	0,90	0,64	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,64
Sand, fine (0,063 mm - 0,200 mm):	4,16
Sand, medium (0,2 mm - 0,6 mm):	83,11
Sand, coarse (0,6 mm - 2 mm):	10,86
Gravel (> 2 mm):	1,23
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,78	0,36
16%	84%	0,53	0,91
25%	75%	0,47	1,08
40%	60%	0,41	1,28
Median 50%	50%	0,37	1,43
75%	25%	0,29	1,78
84%	16%	0,26	1,92
90%	10%	0,24	2,05
95%	5%	0,20	2,31

Moments Statistics

Mean	1,42
Sorting	0,55
Skewness	-0,07
Kurtosis	1,15
Uniformity Coefficient	1,70

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

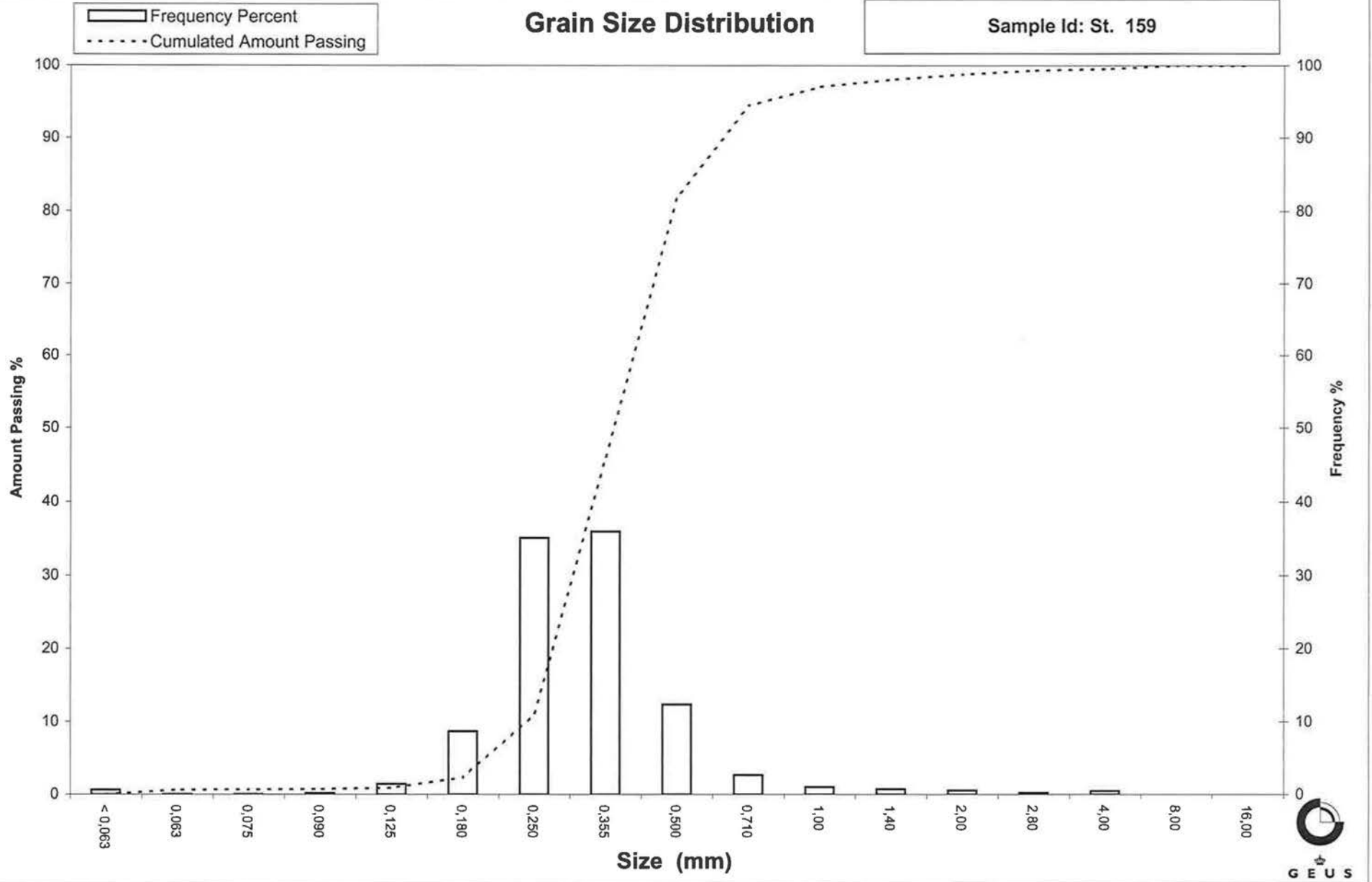
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 159



Grain Size Distribution

Geotechnical

Sample Id: St. 175
Lab. Id: 090269
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 2mm



Total Weight 119,54 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,03	0,03	99,97
2,00	-1,00	0,25	0,21	99,77
1,40	-0,49	0,83	0,69	99,07
1,00	0,00	2,89	2,42	96,65
0,710	0,49	9,60	8,03	88,62
0,500	1,00	41,29	34,54	54,08
0,355	1,49	52,12	43,60	10,48
0,250	2,00	10,93	9,14	1,34
0,180	2,47	1,03	0,86	0,48
0,125	3,00	0,12	0,10	0,38
0,090	3,47	0,03	0,03	0,35
0,075	3,74	0,01	0,01	0,34
0,063	3,99	0,03	0,03	0,32
< 0,063	> 3,99	0,38	0,32	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,32
Sand, fine (0,063 mm - 0,200 mm):	0,41
Sand, medium (0,2 mm - 0,6 mm):	69,81
Sand, coarse (0,6 mm - 2 mm):	29,24
Gravel (> 2 mm):	0,23
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,94	0,09
16%	84%	0,68	0,55
25%	75%	0,63	0,67
40%	60%	0,54	0,90
Median 50%	50%	0,49	1,04
75%	25%	0,40	1,31
84%	16%	0,37	1,42
90%	10%	0,35	1,52
95%	5%	0,29	1,78

Moments Statistics

Mean	1,00
Sorting	0,47
Skewness	-0,12
Kurtosis	1,09
Uniformity Coefficient	1,53

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

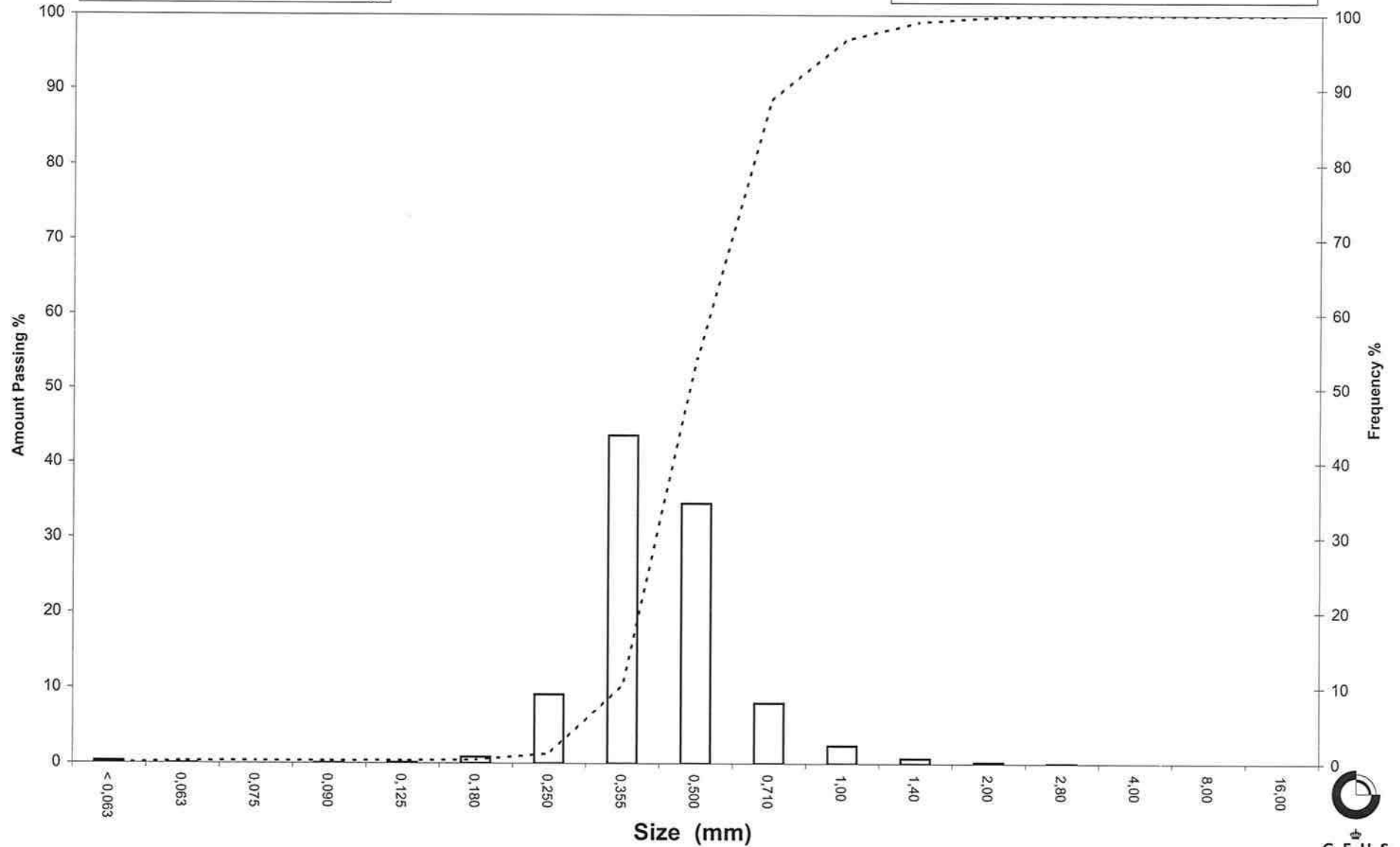
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 175



Grain Size Distribution

Geotechnical

Sample Id: St. 176
Lab. Id: 090270
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 104,81 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,21	0,20	99,80
4,00	-2,00	0,04	0,04	99,76
2,80	-1,49	0,03	0,03	99,73
2,00	-1,00	0,03	0,03	99,70
1,40	-0,49	0,03	0,03	99,68
1,00	0,00	0,11	0,10	99,57
0,710	0,49	0,19	0,18	99,39
0,500	1,00	0,70	0,67	98,72
0,355	1,49	4,33	4,13	94,59
0,250	2,00	21,48	20,49	74,10
0,180	2,47	32,67	31,17	42,93
0,125	3,00	39,97	38,14	4,79
0,090	3,47	3,89	3,71	1,08
0,075	3,74	0,21	0,20	0,88
0,063	3,99	0,02	0,02	0,86
< 0,063	> 3,99	0,90	0,86	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,86
Sand, fine (0,063 mm - 0,200 mm):	50,97
Sand, medium (0,2 mm - 0,6 mm):	47,21
Sand, coarse (0,6 mm - 2 mm):	0,66
Gravel (> 2 mm):	0,30
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,37	1,44
16%	84%	0,30	1,73
25%	75%	0,25	1,97
40%	60%	0,22	2,20
Median 50%	50%	0,20	2,35
75%	25%	0,15	2,70
84%	16%	0,14	2,82
90%	10%	0,13	2,92
95%	5%	0,13	3,00

Moments Statistics

Mean	2,30
Sorting	0,51
Skewness	-0,15
Kurtosis	0,88
Uniformity Coefficient	1,65

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

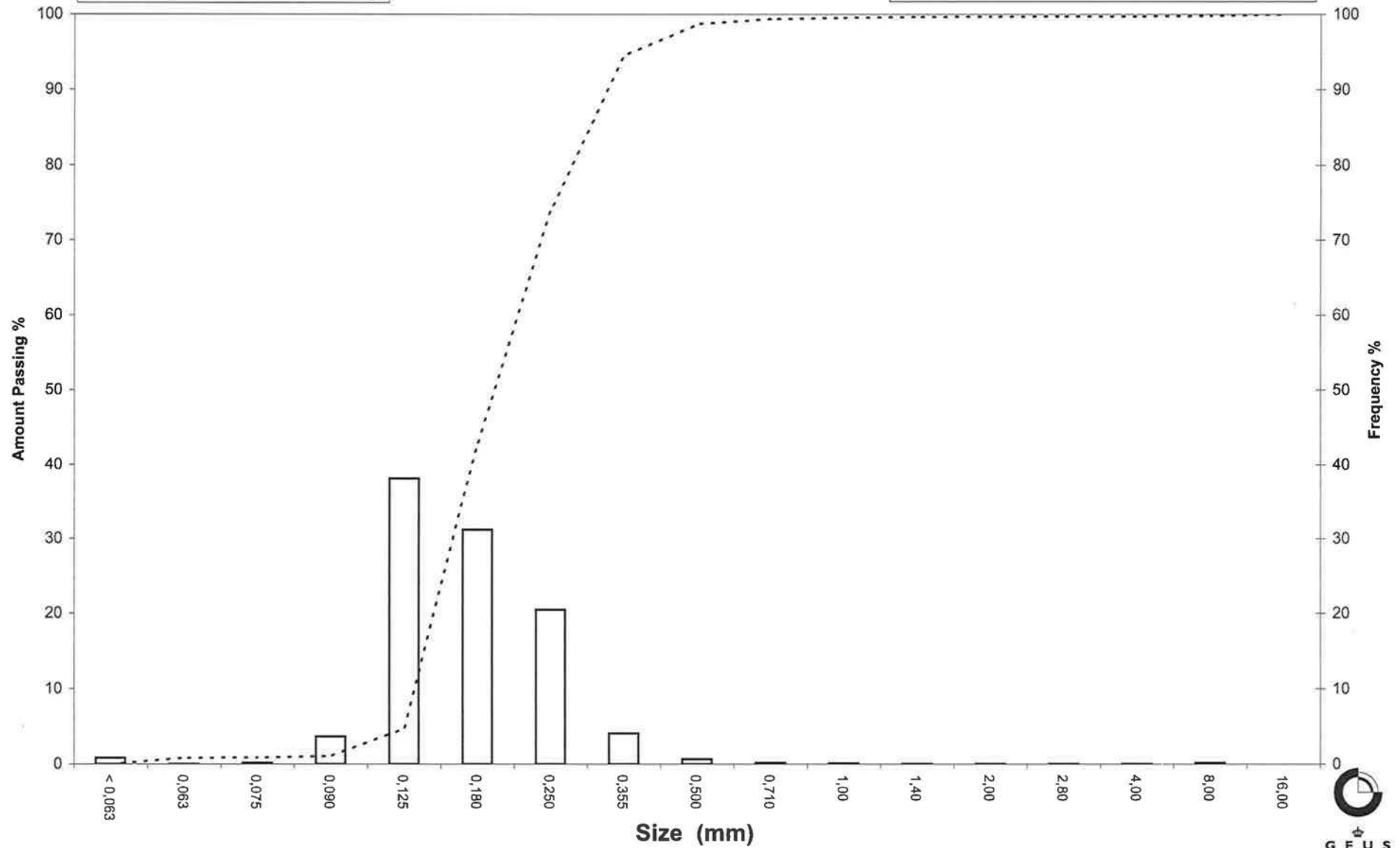
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgg-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 176



Grain Size Distribution

Geotechnical

Sample Id: St. 181
Lab. Id: 090271
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 112,52 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,02	0,02	99,98
2,80	-1,49	0,03	0,03	99,96
2,00	-1,00	0,05	0,04	99,91
1,40	-0,49	0,01	0,01	99,90
1,00	0,00	0,03	0,03	99,88
0,710	0,49	0,07	0,06	99,81
0,500	1,00	0,75	0,67	99,15
0,355	1,49	20,10	17,86	81,28
0,250	2,00	41,08	36,51	44,77
0,180	2,47	37,48	33,31	11,46
0,125	3,00	11,05	9,82	1,64
0,090	3,47	0,53	0,47	1,17
0,075	3,74	0,16	0,14	1,03
0,063	3,99	0,04	0,04	1,00
< 0,063	> 3,99	1,12	1,00	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,00
Sand, fine (0,063 mm - 0,200 mm):	19,99
Sand, medium (0,2 mm - 0,6 mm):	78,48
Sand, coarse (0,6 mm - 2 mm):	0,45
Gravel (> 2 mm):	0,09
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,47	1,10
16%	84%	0,38	1,41
25%	75%	0,34	1,57
40%	60%	0,29	1,77
Median 50%	50%	0,27	1,92
75%	25%	0,21	2,26
84%	16%	0,19	2,40
90%	10%	0,17	2,54
95%	5%	0,14	2,80

Moments Statistics

Mean	1,91
Sorting	0,51
Skewness	0,01
Kurtosis	1,00
Uniformity Coefficient	1,71

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

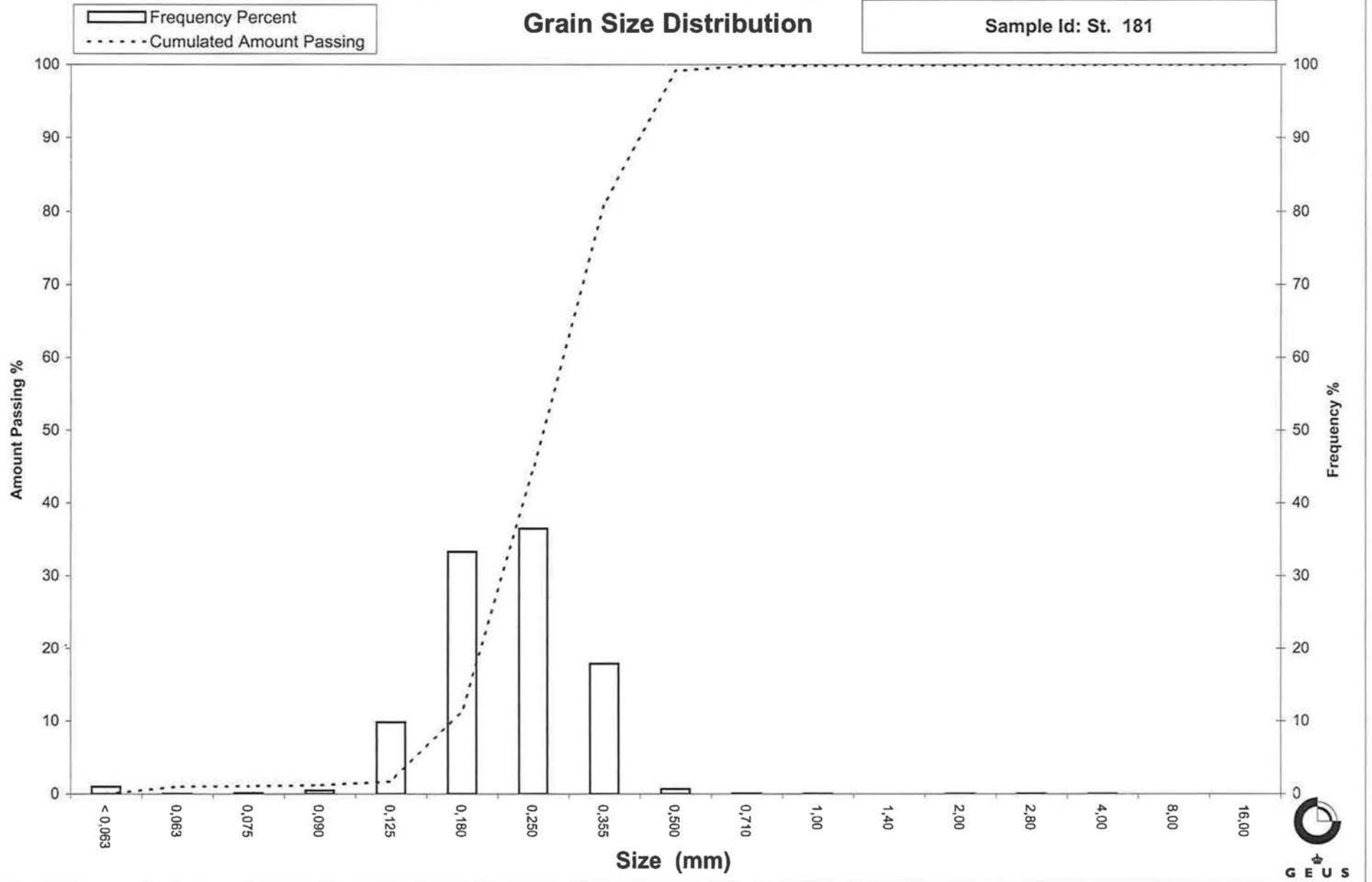
Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)
 Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)
 Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)
 Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)
 Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 181



Grain Size Distribution

Geotechnical

Sample Id: St. 191
Lab. Id: 090272
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 201,85 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,02	0,01	99,99
2,80	-1,49	0,24	0,12	99,87
2,00	-1,00	0,44	0,22	99,65
1,40	-0,49	1,42	0,70	98,95
1,00	0,00	4,52	2,24	96,71
0,710	0,49	13,05	6,47	90,25
0,500	1,00	29,08	14,41	75,84
0,355	1,49	56,81	28,14	47,69
0,250	2,00	65,20	32,30	15,39
0,180	2,47	23,95	11,87	3,53
0,125	3,00	5,59	2,77	0,76
0,090	3,47	0,44	0,22	0,54
0,075	3,74	0,09	0,04	0,50
0,063	3,99	0,03	0,01	0,48
< 0,063	> 3,99	0,97	0,48	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,48
Sand, fine (0,063 mm - 0,200 mm):	6,44
Sand, medium (0,2 mm - 0,6 mm):	75,78
Sand, coarse (0,6 mm - 2 mm):	16,95
Gravel (> 2 mm):	0,35
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,92	0,12
16%	84%	0,62	0,69
25%	75%	0,50	1,01
40%	60%	0,42	1,26
Median 50%	50%	0,37	1,45
75%	25%	0,28	1,83
84%	16%	0,25	1,99
90%	10%	0,22	2,20
95%	5%	0,19	2,41

Moments Statistics

Mean	1,38
Sorting	0,67
Skewness	-0,16
Kurtosis	1,15
Uniformity Coefficient	1,92

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

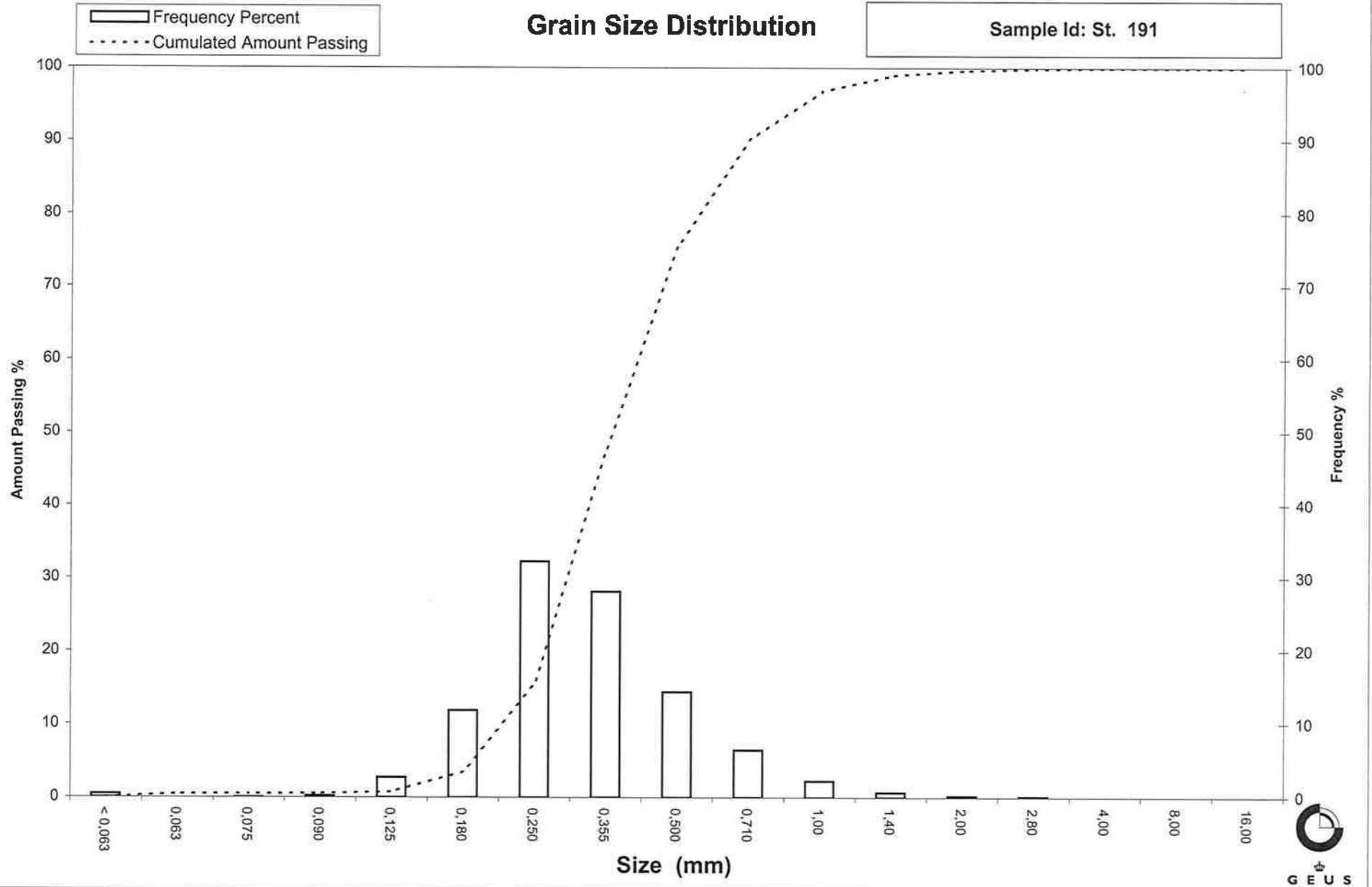
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 191



Grain Size Distribution

Geotechnical

Sample Id: St. 192
Lab. Id: 090273
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 211,48 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,42	0,67	99,33
2,80	-1,49	11,17	5,28	94,05
2,00	-1,00	49,28	23,30	70,74
1,40	-0,49	81,89	38,72	32,02
1,00	0,00	35,88	16,97	15,06
0,710	0,49	11,01	5,21	9,85
0,500	1,00	6,64	3,14	6,71
0,355	1,49	4,94	2,34	4,37
0,250	2,00	4,48	2,12	2,26
0,180	2,47	3,08	1,46	0,80
0,125	3,00	0,91	0,43	0,37
0,090	3,47	0,15	0,07	0,30
0,075	3,74	0,04	0,02	0,28
0,063	3,99	0,03	0,01	0,26
< 0,063	> 3,99	0,56	0,26	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,26
Sand, fine (0,063 mm - 0,200 mm):	0,95
Sand, medium (0,2 mm - 0,6 mm):	6,99
Sand, coarse (0,6 mm - 2 mm):	62,54
Gravel (> 2 mm):	29,26
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,02	-1,59
16%	84%	2,46	-1,30
25%	75%	2,15	-1,10
40%	60%	1,83	-0,87
Median 50%	50%	1,68	-0,75
75%	25%	1,23	-0,30
84%	16%	1,02	-0,03
90%	10%	0,72	0,48
95%	5%	0,39	1,34

Moments Statistics

Mean	-0,69
Sorting	0,76
Skewness	0,28
Kurtosis	1,51
Uniformity Coefficient	2,55

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

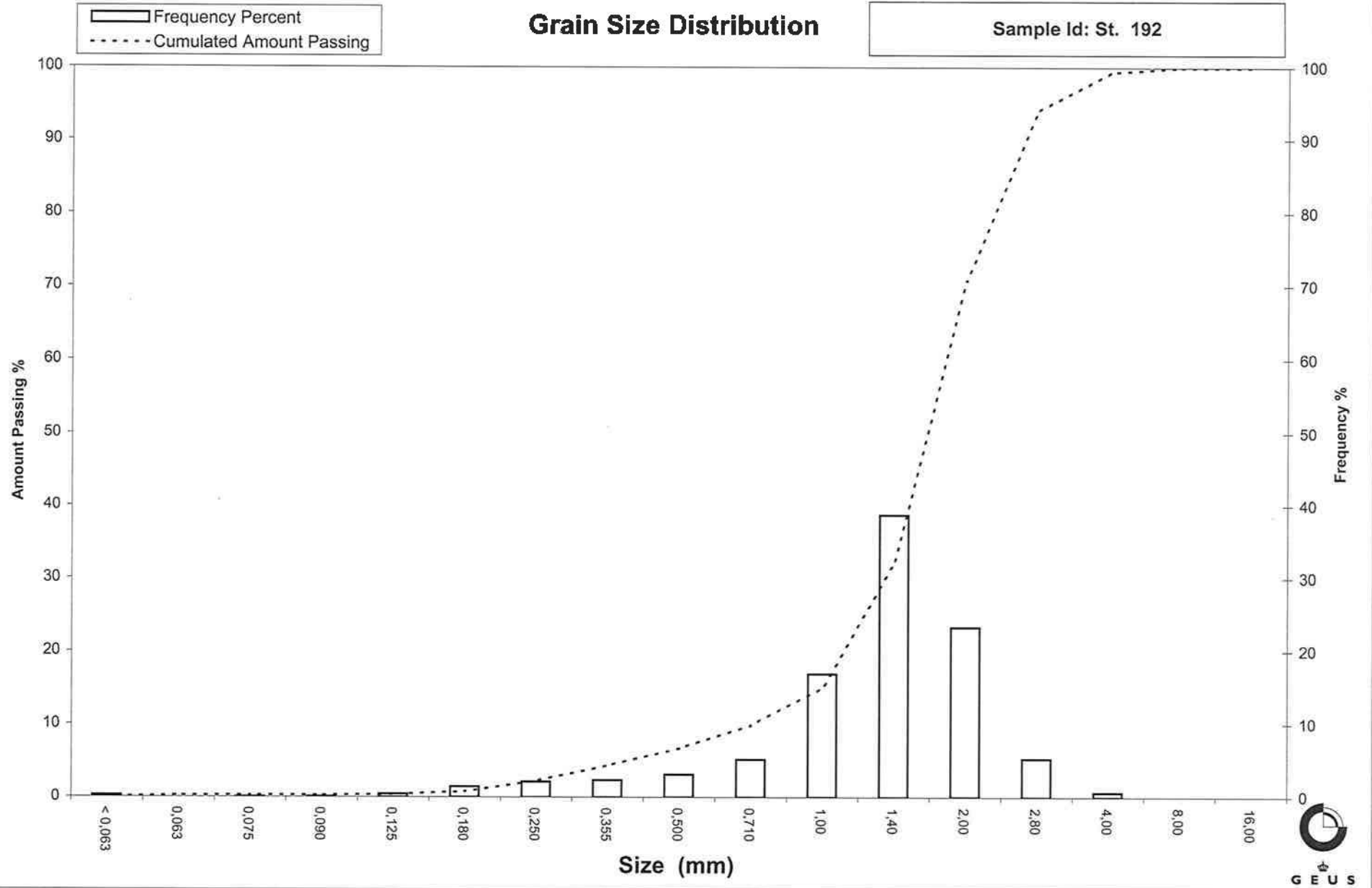
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 192



Grain Size Distribution

Geotechnical

Sample Id: St. 198
Lab. Id: 090274
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 137,64 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,77	1,29	98,71
4,00	-2,00	0,81	0,59	98,13
2,80	-1,49	0,88	0,64	97,49
2,00	-1,00	1,61	1,17	96,32
1,40	-0,49	2,99	2,17	94,14
1,00	0,00	1,60	1,16	92,98
0,710	0,49	0,73	0,53	92,45
0,500	1,00	1,09	0,79	91,66
0,355	1,49	2,39	1,74	89,92
0,250	2,00	7,18	5,22	84,71
0,180	2,47	35,19	25,57	59,14
0,125	3,00	71,02	51,60	7,54
0,090	3,47	8,35	6,07	1,47
0,075	3,74	0,43	0,31	1,16
0,063	3,99	0,10	0,07	1,09
< 0,063	> 3,99	1,50	1,09	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,09
Sand, fine (0,063 mm - 0,200 mm):	65,35
Sand, medium (0,2 mm - 0,6 mm):	25,59
Sand, coarse (0,6 mm - 2 mm):	4,28
Gravel (> 2 mm):	3,68
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,64	-0,71
16%	84%	0,25	2,01
25%	75%	0,22	2,16
40%	60%	0,18	2,46
Median 50%	50%	0,17	2,55
75%	25%	0,14	2,80
84%	16%	0,13	2,90
90%	10%	0,13	2,97
95%	5%	0,11	3,18

Moments Statistics

Mean	2,49
Sorting	0,81
Skewness	-0,45
Kurtosis	2,50
Uniformity Coefficient	1,43

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

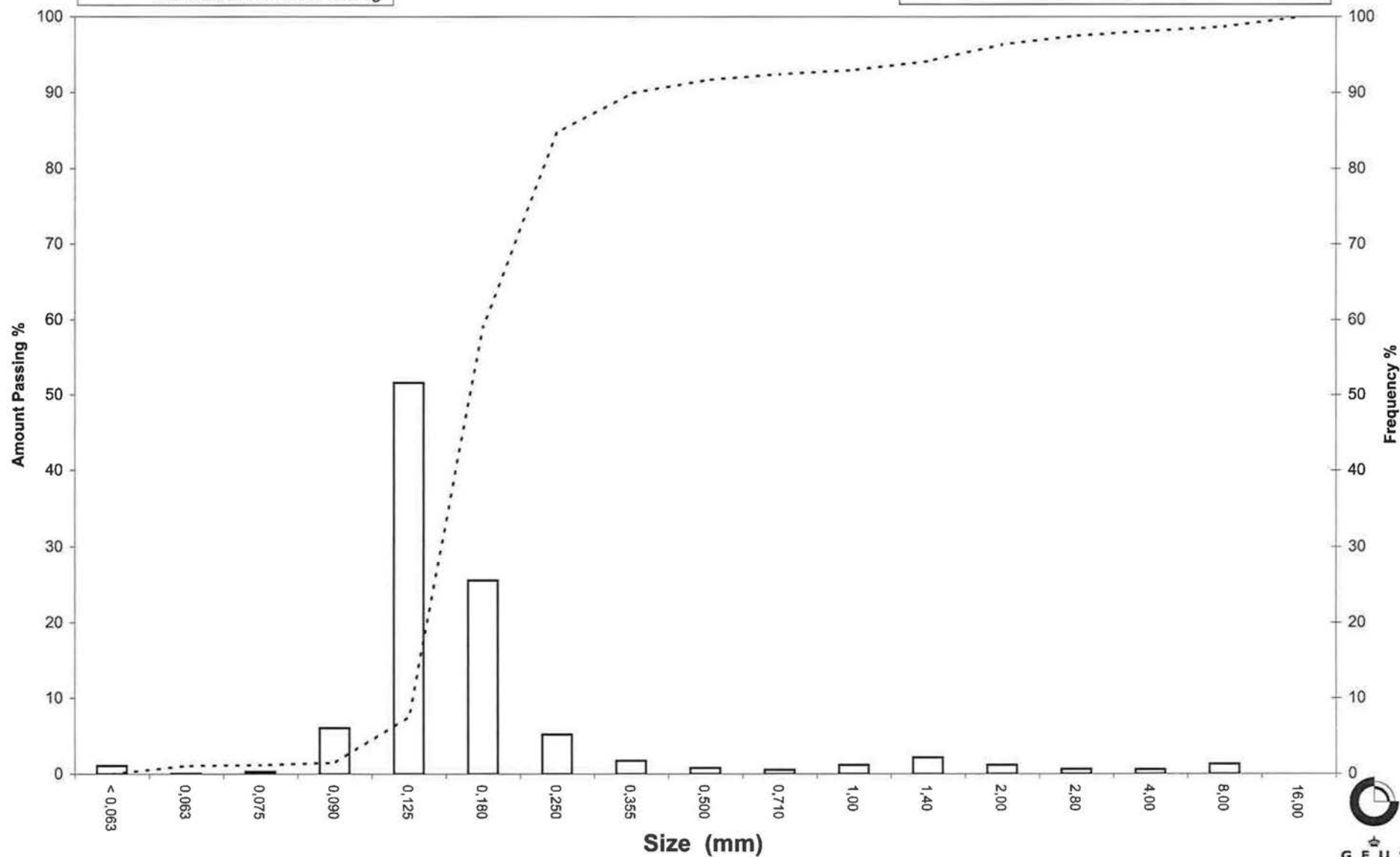
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 198



Grain Size Distribution

Geotechnical

Sample Id: St. 203
Lab. Id: 090275
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 2mm



Total Weight 114,62 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,08	0,07	99,93
2,00	-1,00	0,07	0,06	99,87
1,40	-0,49	0,09	0,08	99,79
1,00	0,00	0,30	0,26	99,53
0,710	0,49	0,63	0,55	98,98
0,500	1,00	1,25	1,09	97,89
0,355	1,49	2,84	2,48	95,41
0,250	2,00	8,06	7,03	88,38
0,180	2,47	23,89	20,84	67,54
0,125	3,00	66,78	58,26	9,27
0,090	3,47	9,32	8,13	1,14
0,075	3,74	0,26	0,23	0,92
0,063	3,99	0,07	0,06	0,85
< 0,063	> 3,99	0,98	0,85	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,85
Sand, fine (0,063 mm - 0,200 mm):	72,64
Sand, medium (0,2 mm - 0,6 mm):	24,92
Sand, coarse (0,6 mm - 2 mm):	1,46
Gravel (> 2 mm):	0,13
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,52
16%	84%	0,24	2,09
25%	75%	0,21	2,29
40%	60%	0,17	2,53
Median 50%	50%	0,16	2,61
75%	25%	0,14	2,84
84%	16%	0,13	2,93
90%	10%	0,13	2,99
95%	5%	0,11	3,23

Moments Statistics

Mean	2,54
Sorting	0,47
Skewness	-0,26
Kurtosis	1,27
Uniformity Coefficient	1,38

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

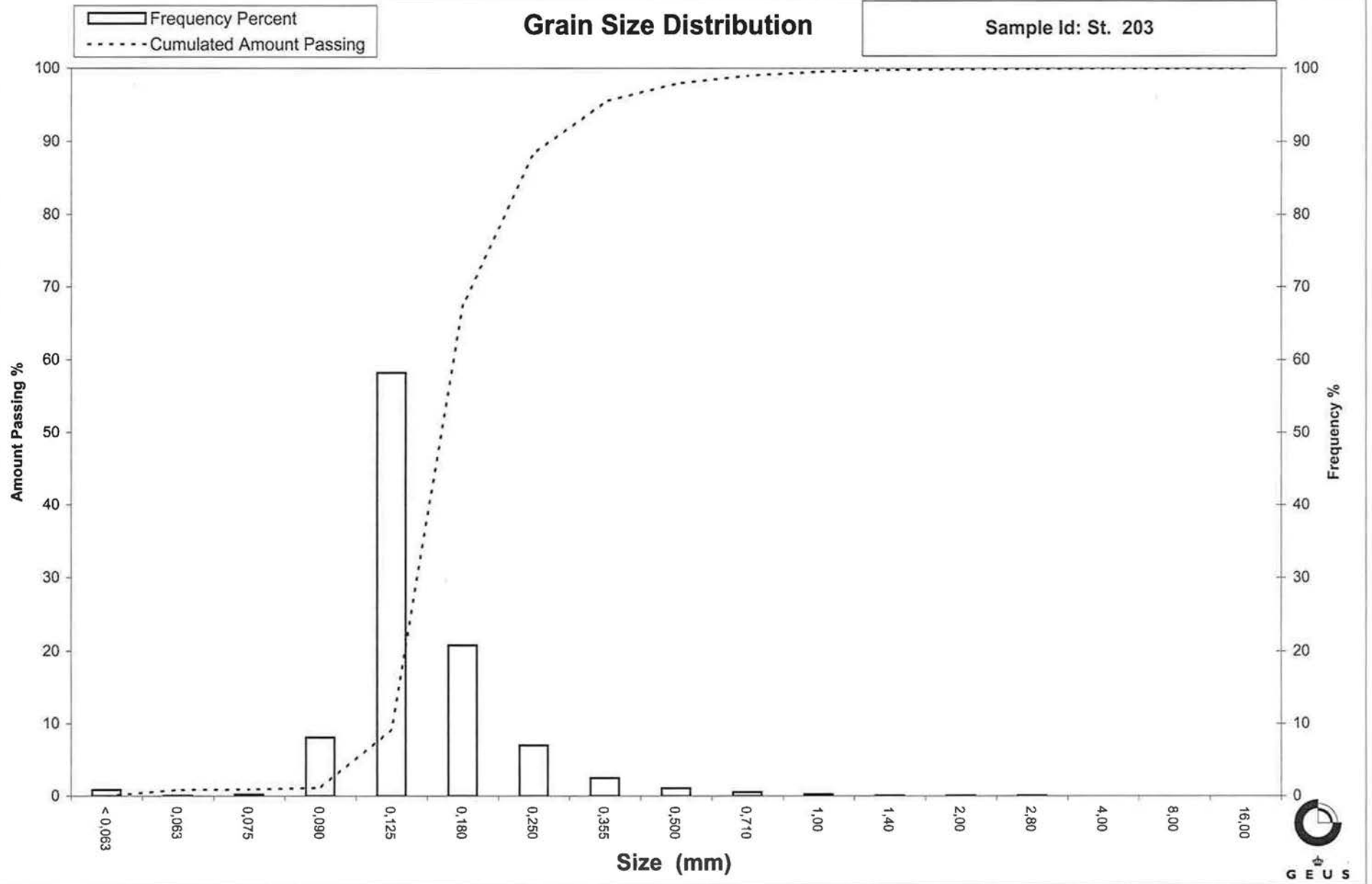
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 203



Grain Size Distribution

Geotechnical

Sample Id: St. 208
Lab. Id: 090276
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 205,48 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,16	0,56	99,44
4,00	-2,00	6,45	3,14	96,30
2,80	-1,49	2,21	1,08	95,22
2,00	-1,00	1,94	0,94	94,28
1,40	-0,49	5,21	2,54	91,74
1,00	0,00	22,13	10,77	80,97
0,710	0,49	49,76	24,22	56,75
0,500	1,00	42,34	20,61	36,15
0,355	1,49	29,53	14,37	21,78
0,250	2,00	18,92	9,21	12,57
0,180	2,47	16,54	8,05	4,52
0,125	3,00	7,19	3,50	1,02
0,090	3,47	0,71	0,35	0,68
0,075	3,74	0,07	0,03	0,64
0,063	3,99	0,05	0,02	0,62
< 0,063	> 3,99	1,27	0,62	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,62
Sand, fine (0,063 mm - 0,200 mm):	6,20
Sand, medium (0,2 mm - 0,6 mm):	39,14
Sand, coarse (0,6 mm - 2 mm):	48,32
Gravel (> 2 mm):	5,72
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,61	-1,39
16%	84%	1,11	-0,15
25%	75%	0,93	0,11
40%	60%	0,75	0,42
Median 50%	50%	0,64	0,64
75%	25%	0,39	1,37
84%	16%	0,29	1,79
90%	10%	0,23	2,14
95%	5%	0,18	2,44

Moments Statistics

Mean	0,76
Sorting	1,07
Skewness	0,06
Kurtosis	1,24
Uniformity Coefficient	3,29

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

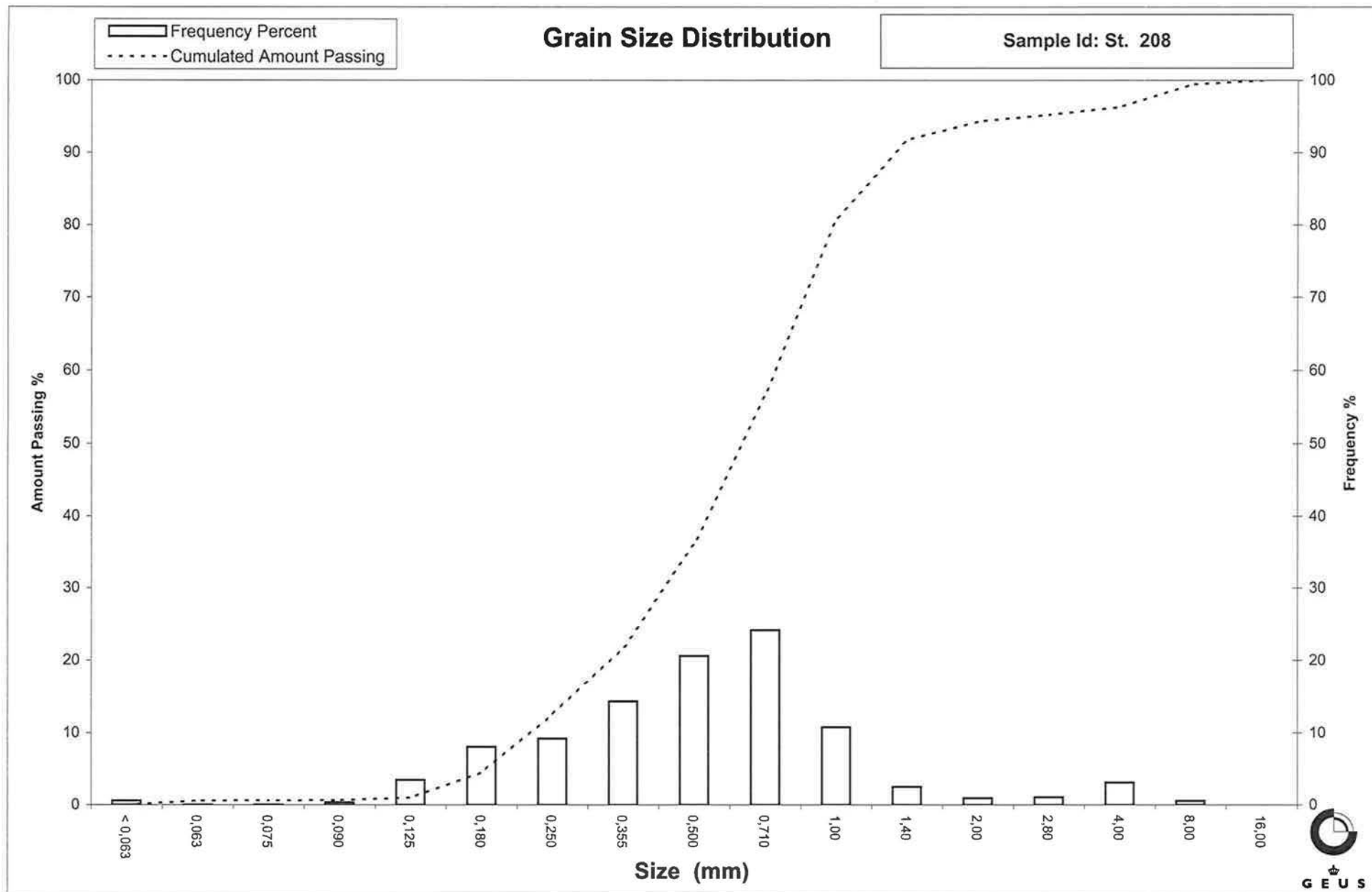
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 213
Lab. Id: 090277
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat.< 8mm



Total Weight 238,78 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	17,84	7,47	92,53
4,00	-2,00	24,87	10,42	82,11
2,80	-1,49	13,92	5,83	76,28
2,00	-1,00	9,34	3,91	72,37
1,40	-0,49	8,91	3,73	68,64
1,00	0,00	11,03	4,62	64,02
0,710	0,49	20,72	8,68	55,34
0,500	1,00	37,23	15,59	39,75
0,355	1,49	47,34	19,83	19,93
0,250	2,00	32,22	13,49	6,43
0,180	2,47	10,28	4,31	2,13
0,125	3,00	3,40	1,42	0,70
0,090	3,47	0,38	0,16	0,54
0,075	3,74	0,04	0,02	0,53
0,063	3,99	0,02	0,01	0,52
< 0,063	> 3,99	1,24	0,52	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,52
Sand, fine (0,063 mm - 0,200 mm):	2,84
Sand, medium (0,2 mm - 0,6 mm):	43,82
Sand, coarse (0,6 mm - 2 mm):	25,20
Gravel (> 2 mm):	27,63
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	10,65	-3,41
16%	84%	4,72	-2,24
25%	75%	2,54	-1,34
40%	60%	0,87	0,21
Median 50%	50%	0,64	0,65
75%	25%	0,39	1,35
84%	16%	0,32	1,62
90%	10%	0,28	1,85
95%	5%	0,23	2,14

Moments Statistics

Mean	0,01
Sorting	1,81
Skewness	-0,48
Kurtosis	0,84
Uniformity Coefficient	3,12

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

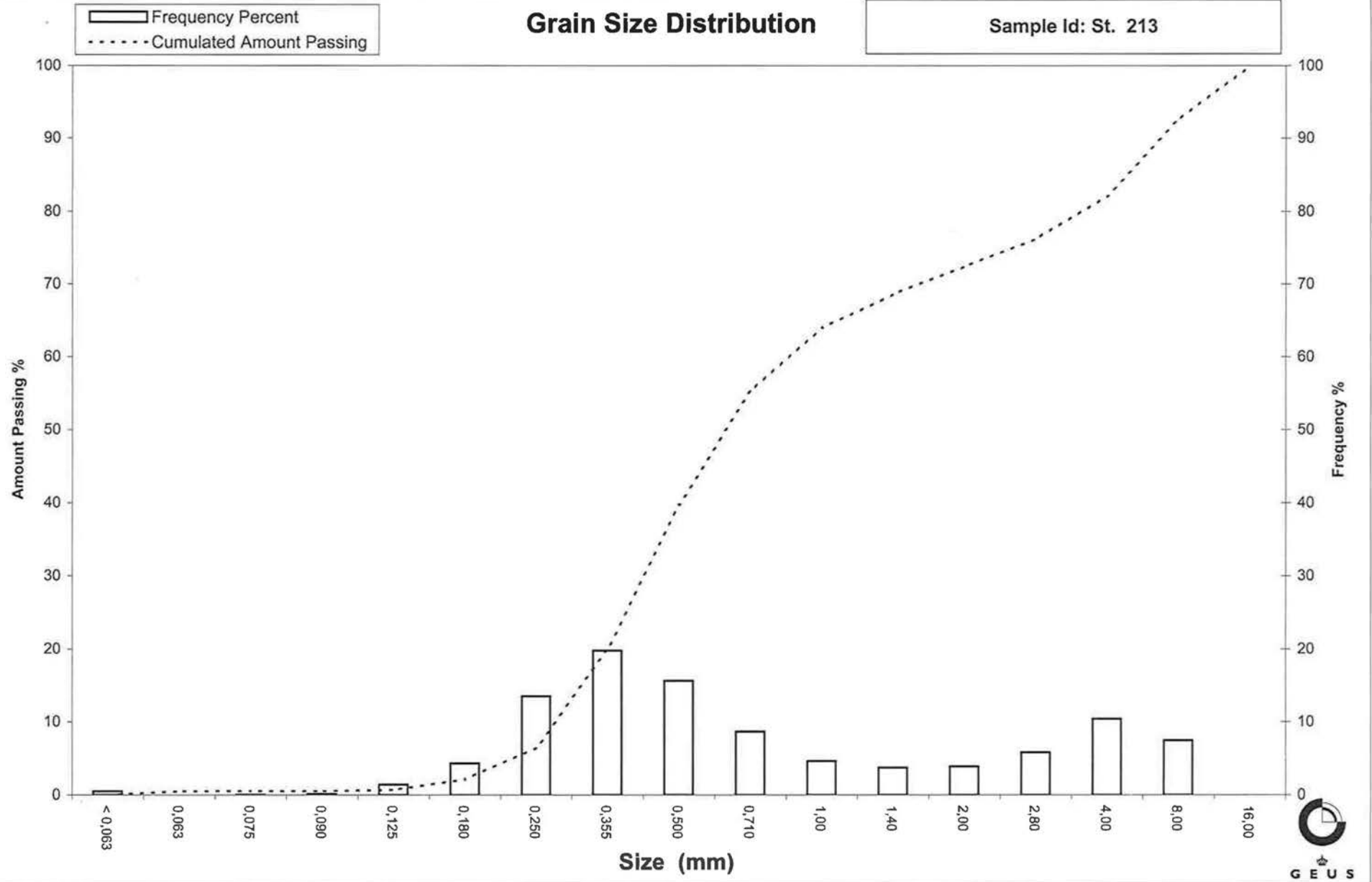
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 213



Grain Size Distribution

Geotechnical

Sample Id: St. 219
Lab. Id: 090278
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 204,83 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	2,35	1,15	98,85
2,80	-1,49	2,62	1,28	97,57
2,00	-1,00	3,27	1,60	95,98
1,40	-0,49	6,13	2,99	92,98
1,00	0,00	8,48	4,14	88,84
0,710	0,49	14,74	7,20	81,65
0,500	1,00	32,08	15,66	65,99
0,355	1,49	78,50	38,32	27,66
0,250	2,00	48,35	23,60	4,06
0,180	2,47	5,83	2,85	1,21
0,125	3,00	1,58	0,77	0,44
0,090	3,47	0,21	0,10	0,34
0,075	3,74	0,04	0,02	0,32
0,063	3,99	0,03	0,01	0,30
< 0,063	> 3,99	0,62	0,30	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,30
Sand, fine (0,063 mm - 0,200 mm):	1,72
Sand, medium (0,2 mm - 0,6 mm):	71,42
Sand, coarse (0,6 mm - 2 mm):	22,53
Gravel (> 2 mm):	4,02
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,80	-0,85
16%	84%	0,80	0,31
25%	75%	0,62	0,69
40%	60%	0,48	1,07
Median 50%	50%	0,44	1,19
75%	25%	0,34	1,54
84%	16%	0,30	1,72
90%	10%	0,28	1,85
95%	5%	0,25	1,98

Moments Statistics

Mean	1,07
Sorting	0,78
Skewness	-0,34
Kurtosis	1,35
Uniformity Coefficient	1,73

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$ (Folk and Ward 1957)

Sorting $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$ (Folk and Ward 1957)

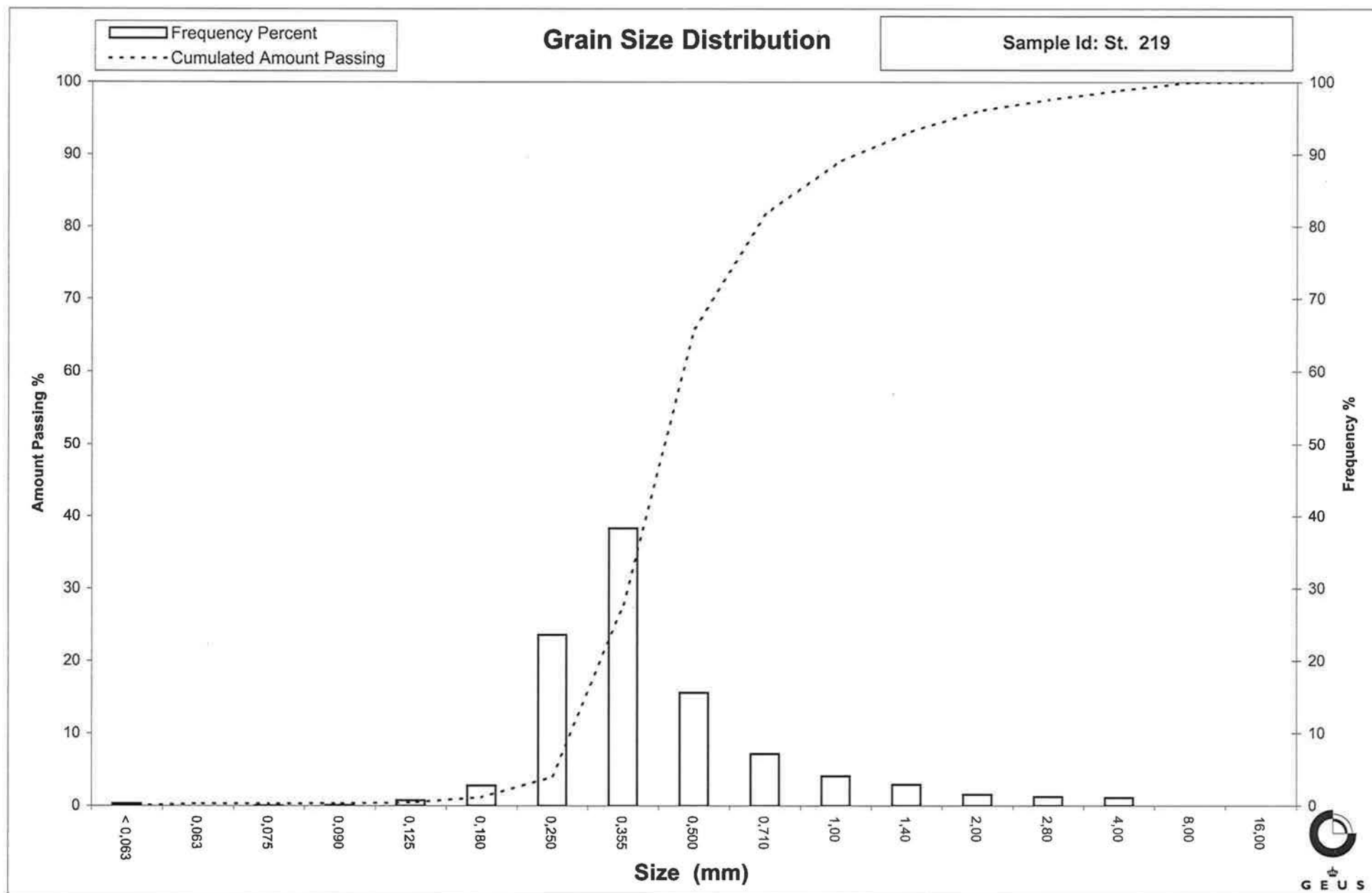
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

Skewness $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$ (Folk and Ward 1957)

Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Geotechnical

Sample Id: St. 222
Lab. Id: 090279
Submitter: DTU Aqua
Subject: Tobistogt L 151 Dec.08
Date: April 2009
Executed: I Nørgaard
Remarks: For mat. < 8mm



Total Weight 209,41 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,38	1,61	98,39
4,00	-2,00	7,82	3,73	94,65
2,80	-1,49	5,97	2,85	91,80
2,00	-1,00	5,66	2,70	89,10
1,40	-0,49	9,04	4,32	84,78
1,00	0,00	13,75	6,57	78,21
0,710	0,49	24,26	11,58	66,63
0,500	1,00	40,81	19,49	47,14
0,355	1,49	49,07	23,43	23,71
0,250	2,00	34,48	16,47	7,24
0,180	2,47	11,92	5,69	1,55
0,125	3,00	2,11	1,01	0,54
0,090	3,47	0,27	0,13	0,42
0,075	3,74	0,06	0,03	0,39
0,063	3,99	0,04	0,02	0,37
< 0,063	> 3,99	0,77	0,37	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,37
Sand, fine (0,063 mm - 0,200 mm):	2,81
Sand, medium (0,2 mm - 0,6 mm):	53,24
Sand, coarse (0,6 mm - 2 mm):	32,68
Gravel (> 2 mm):	10,90
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	4,37	-2,13
16%	84%	1,35	-0,44
25%	75%	0,92	0,12
40%	60%	0,64	0,65
Median 50%	50%	0,53	0,91
75%	25%	0,36	1,46
84%	16%	0,31	1,71
90%	10%	0,27	1,90
95%	5%	0,22	2,17

Moments Statistics

Mean	0,73
Sorting	1,19
Skewness	-0,34
Kurtosis	1,31
Uniformity Coefficient	2,39

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean ($\phi_{16\%} + \phi_{84\%} + \phi_{50\%}$) / 3 (Folk and Ward 1957)

Sorting ($\phi_{84\%} - \phi_{16\%}$) / 4 + ($\phi_{95\%} - \phi_{5\%}$) / 6,6 (Folk and Ward 1957)

Kurtosis ($\phi_{95\%} - \phi_{5\%}$) / (2,44 * ($\phi_{75\%} - \phi_{25\%}$)) (Folk and Ward 1957)

Skewness ($\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{84\%} - \phi_{16\%}$)) + ($\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}$) / (2 * ($\phi_{95\%} - \phi_{5\%}$)) (Folk and Ward 1957)

Uniformity Coefficient (d60% / d10%) (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: St. 222

