

Datarapport Kornstørrelsesanalyser og glødetab

Laboratorieanalyser for Bio/consult A/S

Ingerlise Nørgaard

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Prøvebehandling

GEUS har foretaget analyser på 18 sedimentprøver fra Jyske Rev november 2005.

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

- dato
- lokalitet
- fortløbende laboratorienummer
- rekvirent
- analysekrav

Resterende analysemateriale bortkastes 14 dage efter afrapportering.

Stationer Jyske Rev		nov-05	
	<i>Eastern</i>	<i>Nothern</i>	
station	WGS_84_X_MIN	WGS_84_Y_MIN	til GEUS
1_1	7°29,178	56°44,755	nej
1_2	7°29,195	56°45,153	ja
1_3	7°29,429	56°45,879	ja
1_4	7°30,494	56°47,216	ja
1_5	7°31,565	56°48,405	ja
1_6	7°31,957	56°49,519	ja
1_7	7°31,957	56°50,538	ja
1_8	7°26,884	56°49,759	ja
1_9	7°28,628	56°51,762	ja
1_10	7°33,249	56°51,141	ja
1_11	7°34,564	56°51,928	ja
2_1	7°51,049	56°47,230	ja
2_2	7°53,980	56°47,299	ja
2_3	7°57,853	56°47,507	nej
2_4	7°56,051	56°48,293	ja
2_5	7°56,546	56°49,399	nej
2_6	7°56,617	56°50,939	ja
2_7	7°53,329	56°51,328	ja
2_8	7°56,041	56°52,165	ja
2_9	7°54,778	56°53,196	ja
2_10	7°53,401	56°53,856	ja

Analysemetoder

Glødetabsbestemmelse:

Det organiske indhold samt kemisk bundet vand i lermineralelementerne bestemmes ved glødetabsanalysen. Glødetabet bestemmes i vægt % af materiale tørret ved 105 C. Analyserne foretages ved anvendelse af DS 204.

Sigteanalyse:

Totalprøven er tørret og sigtet gennem en sigtesøjle fra 32 mm ned til 0,063 mm med 1/2 phi intervaller. Metoden er tillempet i forhold til DS /EN 933-1 idet der er indføjet flere sigter end der beskrives i denne standard.

Kornkurven:

Som udgangspunkt for kornstørrelsesanalysen er anvendt DS /EN 933-1.

Resultater

I tabel 1 er listet resultaterne af glødetabsbestemmelserne.

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

Referencer

Dansk Standard DS 204. Tørstof og gløderest. Dansk Standardiseringsråd, Kbh. 1980.

Dansk Standard DS /EN 933-1. Bestemmelse af kornstørrelsesfordeling – Sigteanalyse. Dansk Standard. 2004

TABEL 1

Jyske Rev nov-05

Glødetab

DS 204

Station	Glødetab i %	Gløderest i %
1_2	0,66	99,34
1_3	0,45	99,55
1_4	0,39	99,61
1_5	0,54	99,46
1_6	0,51	99,49
1_7	0,26	99,74
1_8	0,22	99,78
1_9	0,33	99,67
1_10	0,29	99,71
1_11	0,53	99,47
2_1	0,38	99,62
2_2	0,23	99,77
2_4	0,24	99,76
2_6	0,26	99,74
2_7	0,40	99,60
2_8	0,31	99,69
2_9	0,24	99,76
2_10	0,33	99,67

BILAG 1

Grain Size Distribution

Geotechnical

Sample Id: Station 1_2
Lab. Id: 050820
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks:



Total Weight 3644,05 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	65,15	1,79	98,21
8,00	-3,00	416,21	11,42	86,79
4,00	-2,00	467,87	12,84	73,95
2,80	-1,49	121,47	3,33	70,62
2,00	-1,00	47,38	1,30	69,32
1,40	-0,49	20,62	0,57	68,75
1,00	0,00	9,21	0,25	68,50
0,710	0,49	10,31	0,28	68,22
0,500	1,00	27,64	0,76	67,46
0,355	1,49	85,11	2,34	65,12
0,250	2,00	187,99	5,16	59,96
0,180	2,47	853,10	23,41	36,55
0,125	3,00	1108,88	30,43	6,12
0,090	3,47	164,96	4,53	1,60
0,075	3,74	24,35	0,67	0,93
0,063	3,99	11,63	0,32	0,61
< 0,063	> 3,99	22,16	0,61	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,61
Sand, fine (0,063 mm - 0,200 mm):	42,63
Sand, medium (0,2 mm - 0,6 mm):	24,58
Sand, coarse (0,6 mm - 2 mm):	1,50
Gravel (> 2 mm):	30,68
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	13,75	-3,78
16%	84%	7,13	-2,83
25%	75%	4,33	-2,11
40%	60%	0,25	2,00
Median 50%	50%	0,22	2,18
75%	25%	0,16	2,65
84%	16%	0,14	2,81
90%	10%	0,13	2,92
95%	5%	0,12	3,10

Moments Statistics

Mean	0,72
Sorting	2,45
Skewness	-0,76
Kurtosis	0,59
Uniformity Coefficient	1,90

The analysis is executed according to DS/EN 933-1 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)

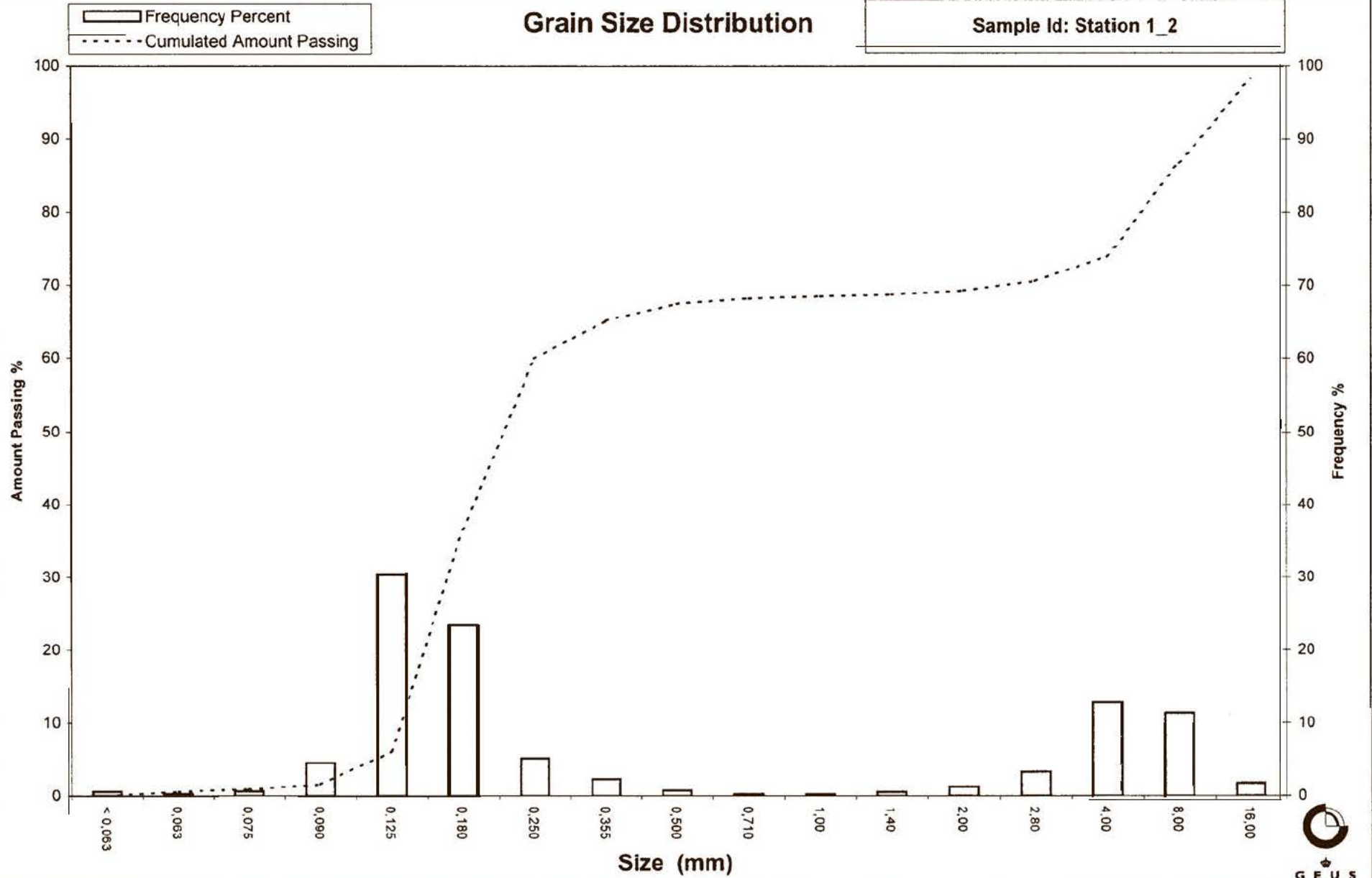
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_2



Grain Size Distribution

Geotechnical

Sample Id: Station 1_3
 Lab. Id: 050821
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 218,62 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	0,00	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	0,12	0,05	99,95
0,710	0,49	2,06	0,94	99,00
0,500	1,00	9,28	4,24	94,76
0,355	1,49	51,64	23,62	71,14
0,250	2,00	84,78	38,78	32,36
0,180	2,47	47,70	21,82	10,54
0,125	3,00	15,72	7,19	3,35
0,090	3,47	4,72	2,16	1,19
0,075	3,74	0,62	0,28	0,91
0,063	3,99	0,22	0,10	0,81
< 0,063	> 3,99	1,76	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):	15,97
Sand, medium (0,2 mm - 0,6 mm):	80,01
Sand, coarse (0,6 mm - 2 mm):	3,22
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%	0,51	0,97
16%	84%	0,43	1,20
25%	75%	0,38	1,40
40%	60%	0,32	1,62
Median 50%	50%	0,30	1,75
75%	25%	0,23	2,14
84%	16%	0,20	2,34
90%	10%	0,18	2,51
95%	5%	0,14	2,86

Moments Statistics

Mean	1,76
Sorting	0,57
Skewness	0,11
Kurtosis	1,05
Uniformity Coefficient	1,85

The analysis is executed according to DS/EN 933-1 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)

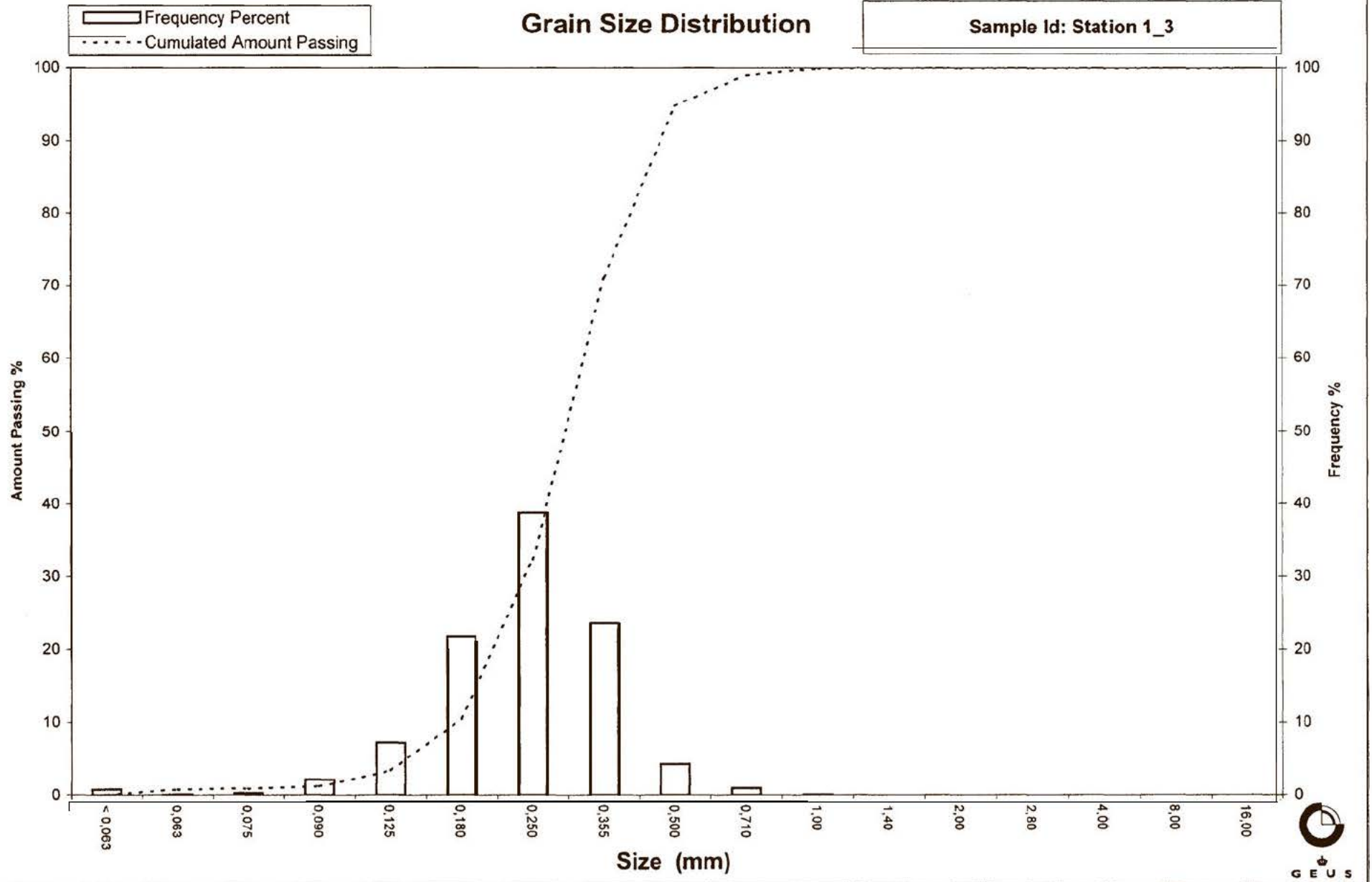
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_3



Grain Size Distribution

Geotechnical

Sample Id: Station 1_4
Lab. Id: 050822
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks: For mat. < 32 mm. 331,12 g.> 32 mm.
er tillagt 16 mm fraktionen



Total Weight 2883,77 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	845,09	29,31	70,69
8,00	-3,00	699,17	24,24	46,45
4,00	-2,00	387,77	13,45	33,00
2,80	-1,49	100,58	3,49	29,52
2,00	-1,00	61,75	2,14	27,37
1,40	-0,49	52,96	1,84	25,54
1,00	0,00	39,60	1,37	24,16
0,710	0,49	44,64	1,55	22,62
0,500	1,00	58,52	2,03	20,59
0,355	1,49	72,48	2,51	18,07
0,250	2,00	132,25	4,59	13,49
0,180	2,47	231,84	8,04	5,45
0,125	3,00	122,08	4,23	1,21
0,090	3,47	22,02	0,76	0,45
0,075	3,74	4,05	0,14	0,31
0,063	3,99	1,21	0,04	0,27
< 0,063	> 3,99	7,74	0,27	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,27
Sand, fine (0,063 mm - 0,200 mm):	7,48
Sand, medium (0,2 mm - 0,6 mm):	13,81
Sand, coarse (0,6 mm - 2 mm):	5,82
Gravel (> 2 mm):	72,63
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	-----	-----
40%	60%	12,47	-3,64
Median 50%	50%	9,17	-3,20
75%	25%	1,24	-0,31
84%	16%	0,31	1,70
90%	10%	0,22	2,19
95%	5%	0,17	2,52

Moments Statistics

Mean	-0,75
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	56,78

The analysis is executed according to DS/EN 933-1 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)

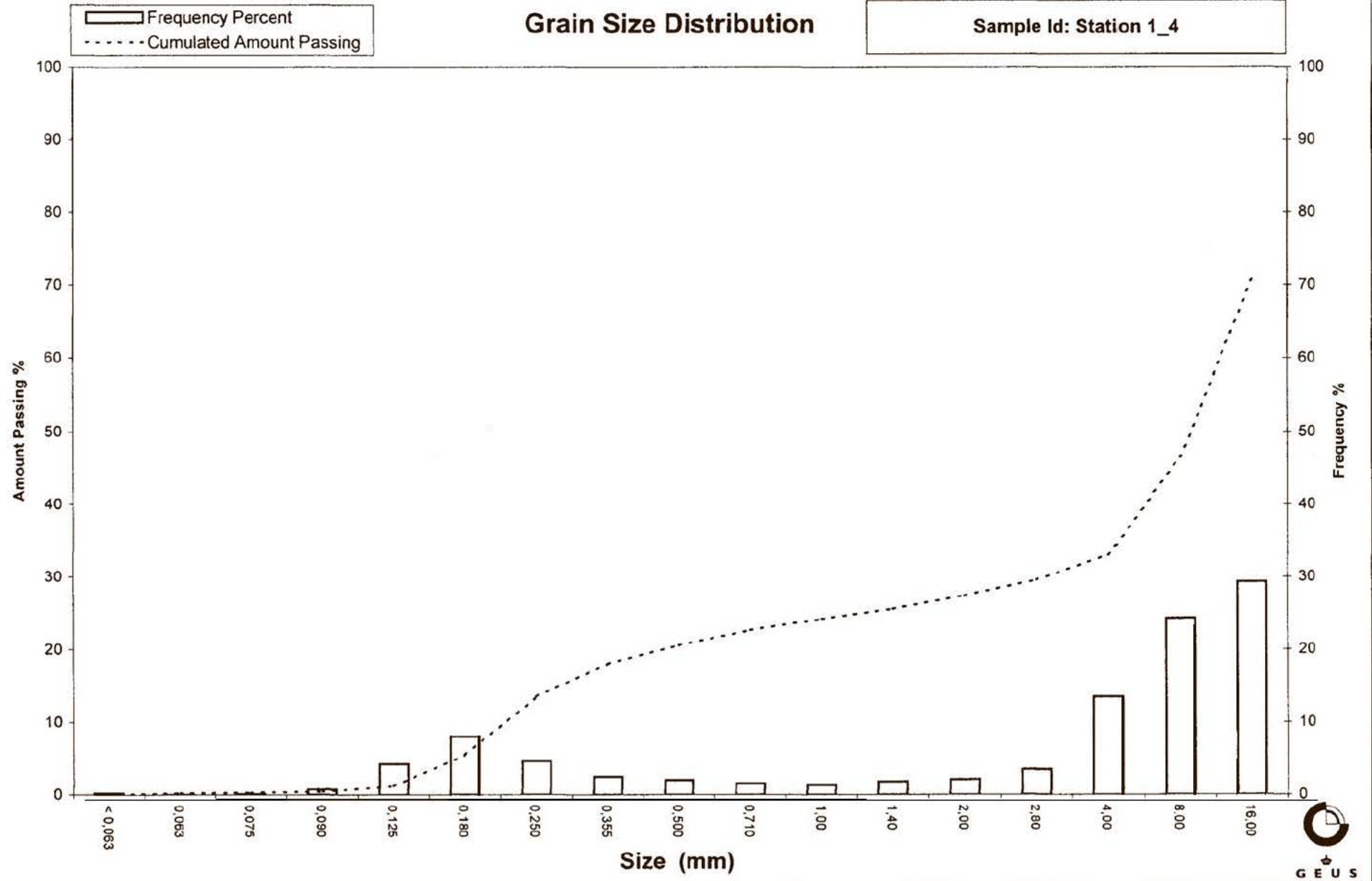
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_4



Grain Size Distribution

Geotechnical

Sample Id: Station 1_5
 Lab. Id: 050823
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 220,1 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	0,04	0,02	99,98
0,710	0,49	0,62	0,28	99,70
0,500	1,00	3,58	1,63	98,07
0,355	1,49	18,78	8,53	89,54
0,250	2,00	61,02	27,72	61,82
0,180	2,47	87,76	39,87	21,94
0,125	3,00	40,78	18,53	3,42
0,090	3,47	5,84	2,65	0,76
0,075	3,74	0,82	0,37	0,39
0,063	3,99	0,30	0,14	0,25
< 0,063	> 3,99	0,56	0,25	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,25
Sand, fine (0,063 mm - 0,200 mm):	33,08
Sand, medium (0,2 mm - 0,6 mm):	65,51
Sand, coarse (0,6 mm - 2 mm):	1,15
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%	0,45	1,16
16%	84%	0,33	1,58
25%	75%	0,30	1,74
40%	60%	0,25	2,02
Median 50%	50%	0,23	2,12
75%	25%	0,19	2,43
84%	16%	0,16	2,62
90%	10%	0,14	2,79
95%	5%	0,13	2,95

Moments Statistics

Mean	2,11
Sorting	0,53
Skewness	-0,06
Kurtosis	1,06
Uniformity Coefficient	1,71

The analysis is executed according to DS/EN 933-1 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)

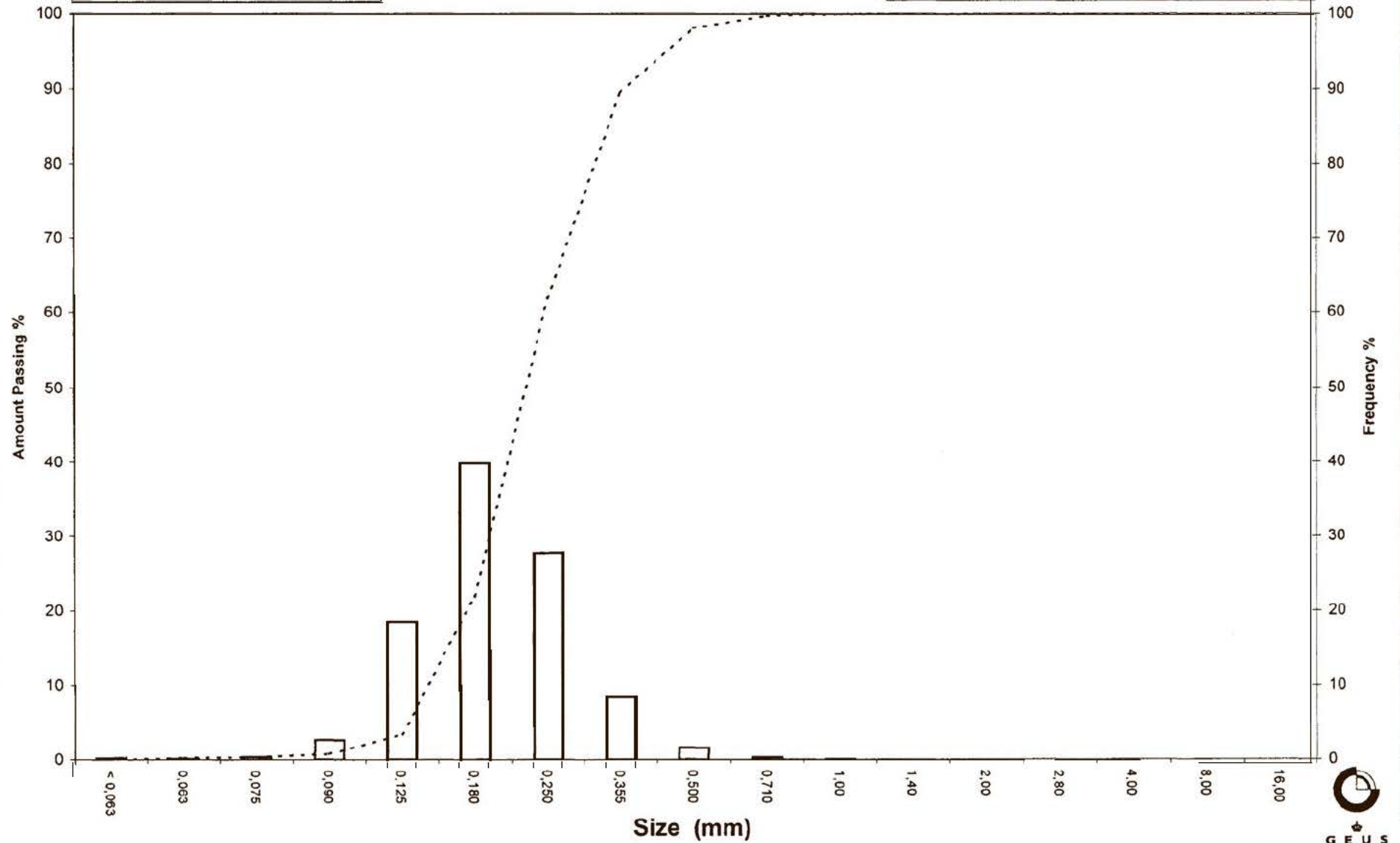
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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Grain Size Distribution

Sample Id: Station 1_5

Frequency Percent
Cumulated Amount Passing



Grain Size Distribution

Geotechnical

Sample Id: Station 1_6
 Lab. Id: 050824
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 206,9 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	0,12	0,06	99,94
0,710	0,49	0,22	0,11	99,84
0,500	1,00	1,10	0,53	99,30
0,355	1,49	9,44	4,56	94,74
0,250	2,00	32,10	15,51	79,23
0,180	2,47	56,16	27,14	52,08
0,125	3,00	93,56	45,22	6,86
0,090	3,47	10,96	5,30	1,57
0,075	3,74	1,26	0,61	0,96
0,063	3,99	0,36	0,17	0,78
< 0,063	> 3,99	1,62	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):	59,06
Sand, medium (0,2 mm - 0,6 mm):	39,72
Sand, coarse (0,6 mm - 2 mm):	0,44
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%	0,36	1,46
16%	84%	0,28	1,82
25%	75%	0,24	2,06
40%	60%	0,20	2,32
Median 50%	50%	0,18	2,49
75%	25%	0,15	2,77
84%	16%	0,14	2,88
90%	10%	0,13	2,96
95%	5%	0,11	3,15

Moments Statistics

Mean	2,40
Sorting	0,52
Skewness	-0,25
Kurtosis	0,99
Uniformity Coefficient	1,56

The analysis is executed according to DS/EN 933-1 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)

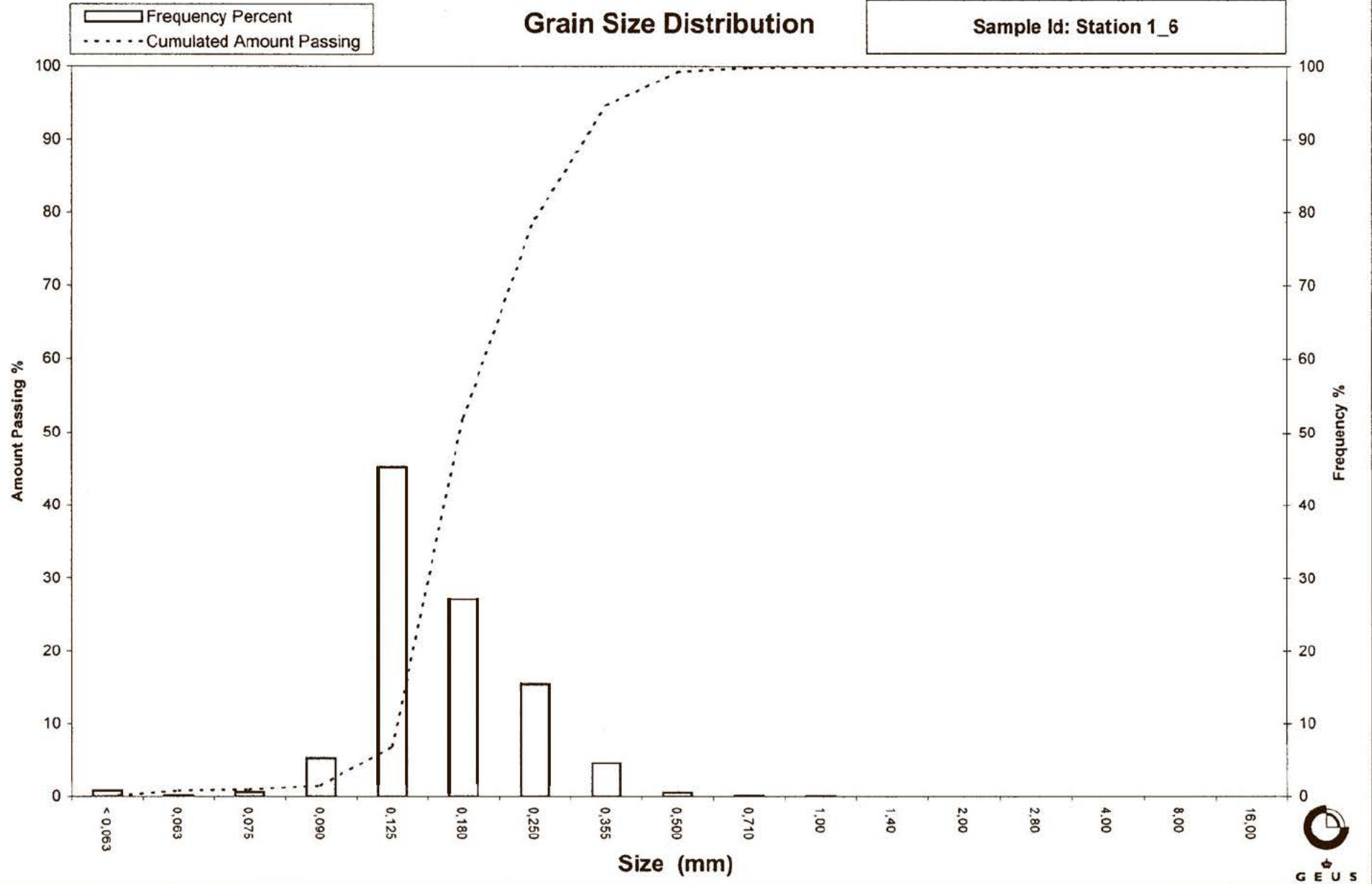
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_6



Grain Size Distribution

Geotechnical

Sample Id: Station 1_7
 Lab. Id: 050825
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 211,24 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	0,08	0,04	99,96
0,710	0,49	0,82	0,39	99,57
0,500	1,00	7,06	3,34	96,23
0,355	1,49	46,80	22,15	74,08
0,250	2,00	96,16	45,52	28,56
0,180	2,47	41,52	19,66	8,90
0,125	3,00	12,92	6,12	2,78
0,090	3,47	4,36	2,06	0,72
0,075	3,74	0,62	0,29	0,43
0,063	3,99	0,18	0,09	0,34
< 0,063	> 3,99	0,72	0,34	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,34
Sand, fine (0,063 mm - 0,200 mm):	14,17
Sand, medium (0,2 mm - 0,6 mm):	83,31
Sand, coarse (0,6 mm - 2 mm):	2,18
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%	0,49	1,02
16%	84%	0,42	1,25
25%	75%	0,36	1,47
40%	60%	0,32	1,63
Median 50%	50%	0,30	1,74
75%	25%	0,24	2,07
84%	16%	0,21	2,28
90%	10%	0,18	2,44
95%	5%	0,14	2,79

Moments Statistics

Mean	1,76
Sorting	0,53
Skewness	0,12
Kurtosis	1,19
Uniformity Coefficient	1,75

The analysis is executed according to DS/EN 933-1 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)

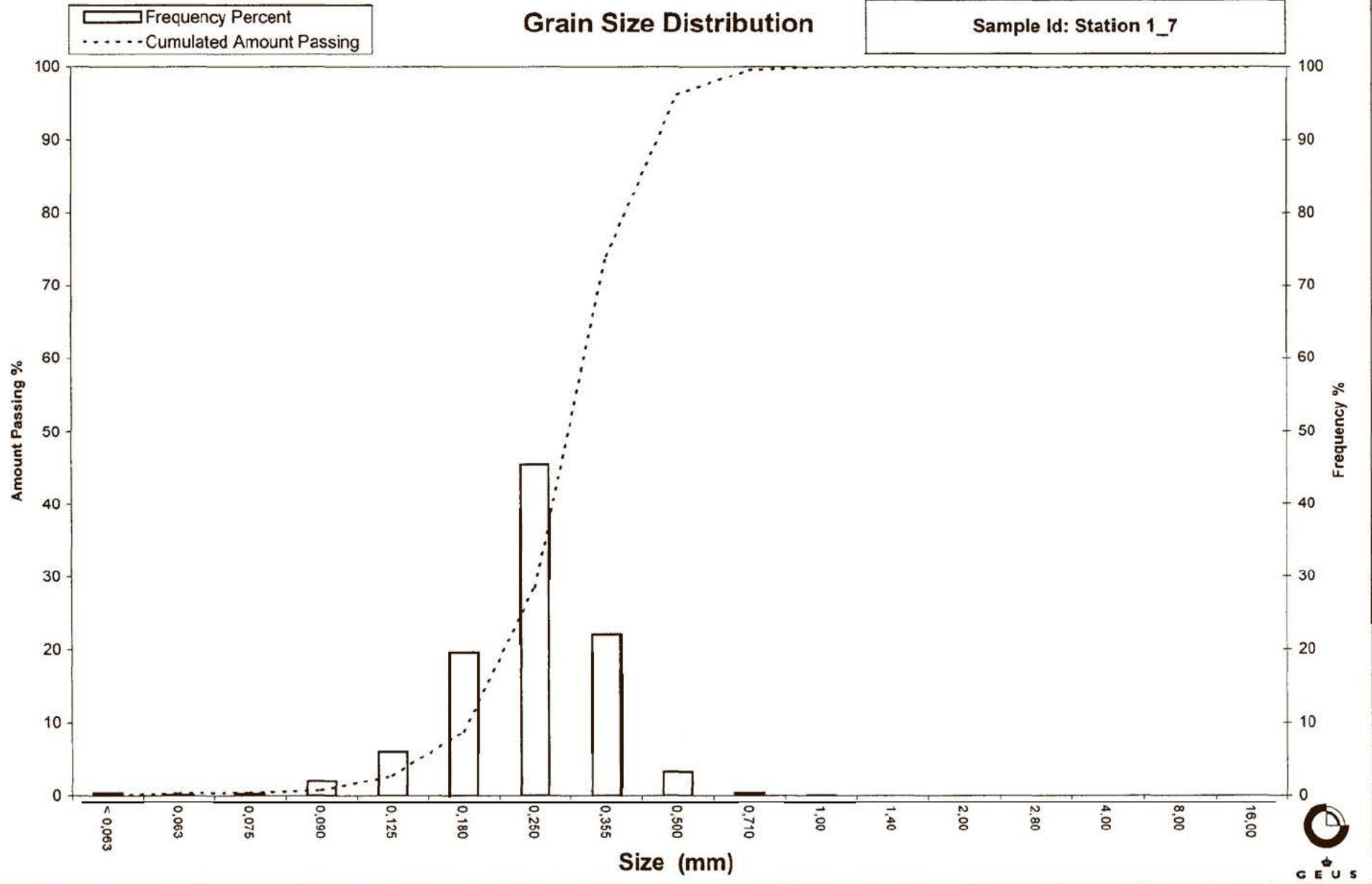
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_7



Grain Size Distribution

Geotechnical

Sample Id: Station 1_8
Lab. Id: 050826
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks: For mat. < 32 mm. 97,49 g. > 32 mm. er tillagt 16 mm fraktionen



Total Weight 3433,4 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	109,93	3,20	96,80
8,00	-3,00	1,62	0,05	96,75
4,00	-2,00	22,91	0,67	96,08
2,80	-1,49	21,11	0,61	95,47
2,00	-1,00	16,22	0,47	95,00
1,40	-0,49	24,71	0,72	94,28
1,00	0,00	44,28	1,29	92,99
0,710	0,49	45,82	1,33	91,65
0,500	1,00	214,44	6,25	85,41
0,355	1,49	1007,06	29,33	56,08
0,250	2,00	1377,24	40,11	15,96
0,180	2,47	402,10	11,71	4,25
0,125	3,00	90,36	2,63	1,62
0,090	3,47	27,54	0,80	0,82
0,075	3,74	4,38	0,13	0,69
0,063	3,99	1,03	0,03	0,66
< 0,063	> 3,99	22,65	0,66	0,00

Sieve Analysis

Gravel
Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,66
Sand, fine (0,063 mm - 0,200 mm):	6,94
Sand, medium (0,2 mm - 0,6 mm):	80,78
Sand, coarse (0,6 mm - 2 mm):	6,62
Gravel (> 2 mm):	5,00
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,01	-1,00
16%	84%	0,49	1,02
25%	75%	0,45	1,16
40%	60%	0,37	1,42
Median 50%	50%	0,34	1,56
75%	25%	0,27	1,87
84%	16%	0,25	2,00
90%	10%	0,21	2,22
95%	5%	0,18	2,44

Moments Statistics

Mean	1,53
Sorting	0,77
Skewness	-0,30
Kurtosis	1,98
Uniformity Coefficient	1,75

The analysis is executed according to DS/EN 933-1 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)

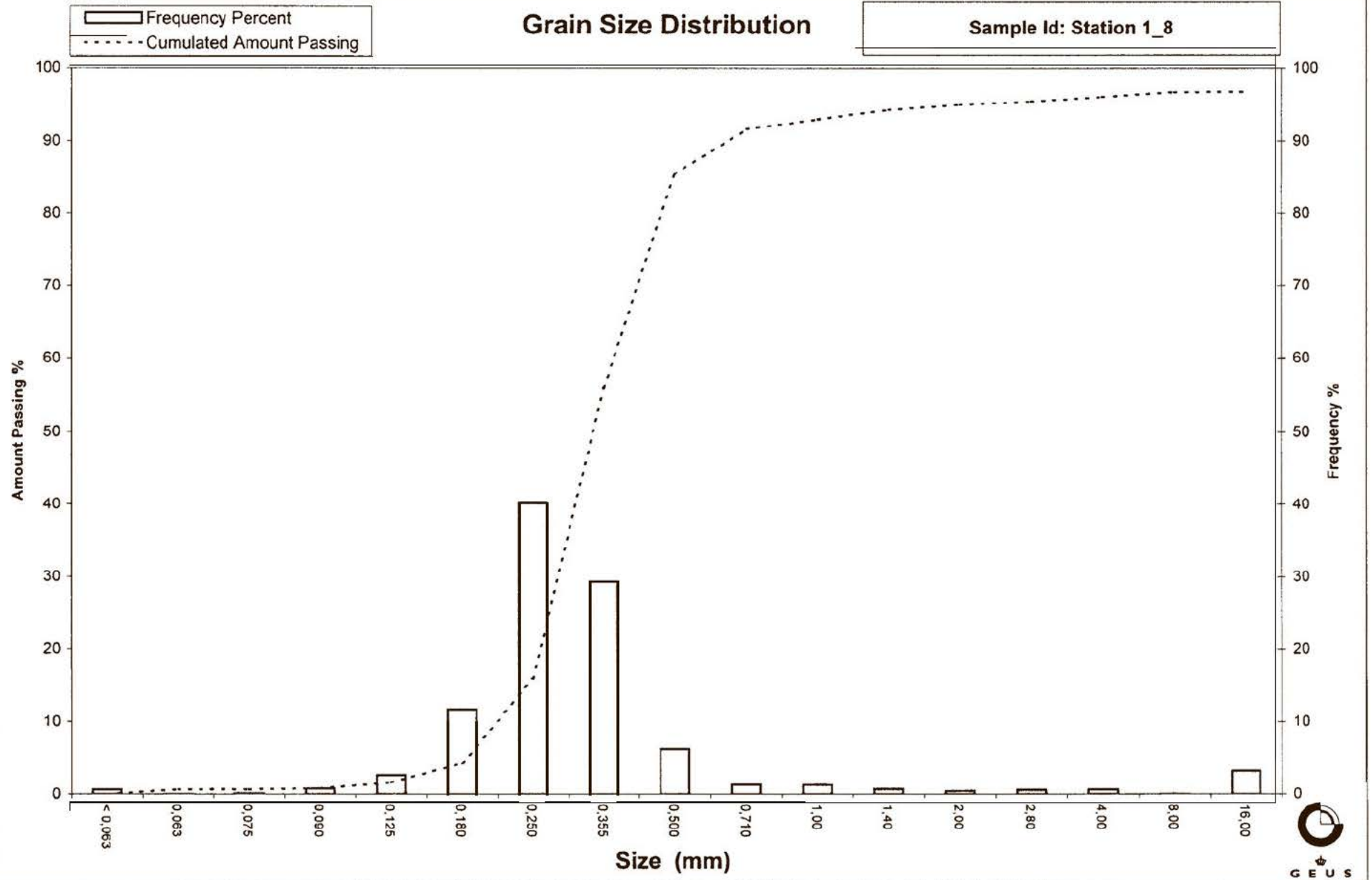
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_8



Grain Size Distribution

Geotechnical

Sample Id: Station 1_9
 Lab. Id: 050827
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 3705,68 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	35,19	0,95	99,05
8,00	-3,00	358,56	9,68	89,37
4,00	-2,00	1026,02	27,69	61,69
2,80	-1,49	514,74	13,89	47,80
2,00	-1,00	315,24	8,51	39,29
1,40	-0,49	161,14	4,35	34,94
1,00	0,00	100,67	2,72	32,22
0,710	0,49	129,81	3,50	28,72
0,500	1,00	231,32	6,24	22,48
0,355	1,49	306,53	8,27	14,21
0,250	2,00	315,74	8,52	5,69
0,180	2,47	144,89	3,91	1,78
0,125	3,00	35,68	0,96	0,81
0,090	3,47	11,56	0,31	0,50
0,075	3,74	3,69	0,10	0,40
0,063	3,99	1,84	0,05	0,35
< 0,063	> 3,99	13,07	0,35	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,35
Sand, fine (0,063 mm - 0,200 mm):	2,54
Sand, medium (0,2 mm - 0,6 mm):	22,56
Sand, coarse (0,6 mm - 2 mm):	13,84
Gravel (> 2 mm):	60,71
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	12,65	-3,66
16%	84%	7,22	-2,85
25%	75%	5,92	-2,57
40%	60%	3,85	-1,95
Median 50%	50%	2,99	-1,58
75%	25%	0,58	0,77
84%	16%	0,39	1,37
90%	10%	0,30	1,72
95%	5%	0,24	2,07

Moments Statistics

Mean	-1,02
Sorting	1,92
Skewness	0,34
Kurtosis	0,70
Uniformity Coefficient	12,71

The analysis is executed according to DS/EN 933-1 extended by sieves to the 1/4 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)

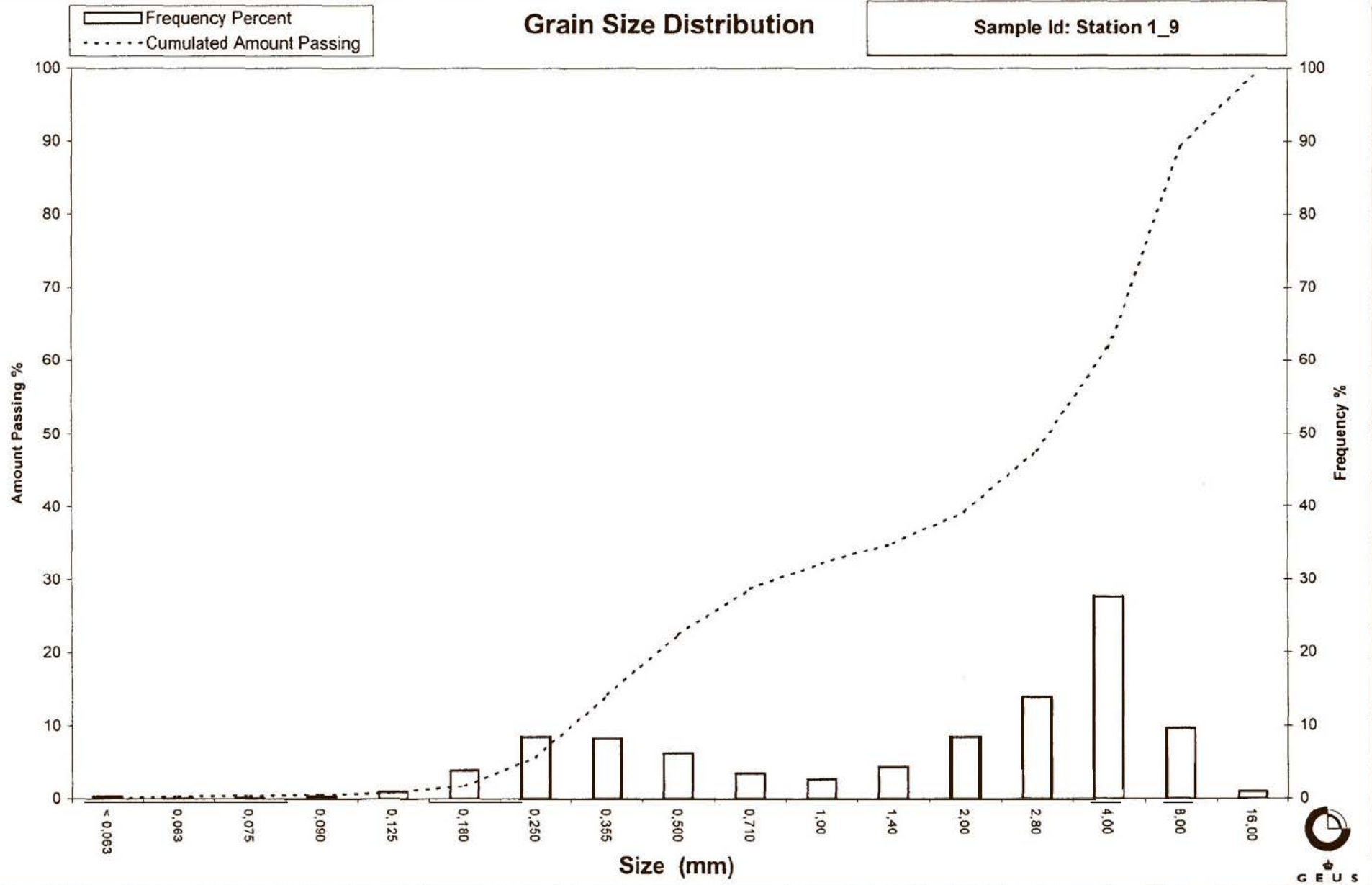
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_9



Grain Size Distribution

Geotechnical

Sample Id: Station 1_10
 Lab. Id: 050828
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 244,54 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	0,04	0,02	99,98
2,00	-1,00	0,14	0,06	99,93
1,40	-0,49	0,18	0,07	99,85
1,00	0,00	0,34	0,14	99,71
0,710	0,49	1,94	0,79	98,92
0,500	1,00	11,56	4,73	94,19
0,355	1,49	49,20	20,12	74,07
0,250	2,00	83,48	34,14	39,94
0,180	2,47	63,76	26,07	13,86
0,125	3,00	26,84	10,98	2,89
0,090	3,47	4,18	1,71	1,18
0,075	3,74	0,56	0,23	0,95
0,063	3,99	0,22	0,09	0,86
< 0,063	> 3,99	2,10	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):	20,45
Sand, medium (0,2 mm - 0,6 mm):	75,13
Sand, coarse (0,6 mm - 2 mm):	3,48
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%	0,54	0,90
16%	84%	0,43	1,23
25%	75%	0,36	1,47
40%	60%	0,31	1,68
Median 50%	50%	0,28	1,83
75%	25%	0,21	2,25
84%	16%	0,19	2,43
90%	10%	0,16	2,64
95%	5%	0,14	2,88

Moments Statistics

Mean	1,83
Sorting	0,60
Skewness	0,03
Kurtosis	1,04
Uniformity Coefficient	1,94

The analysis is executed according to DS/EN 933-1 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)

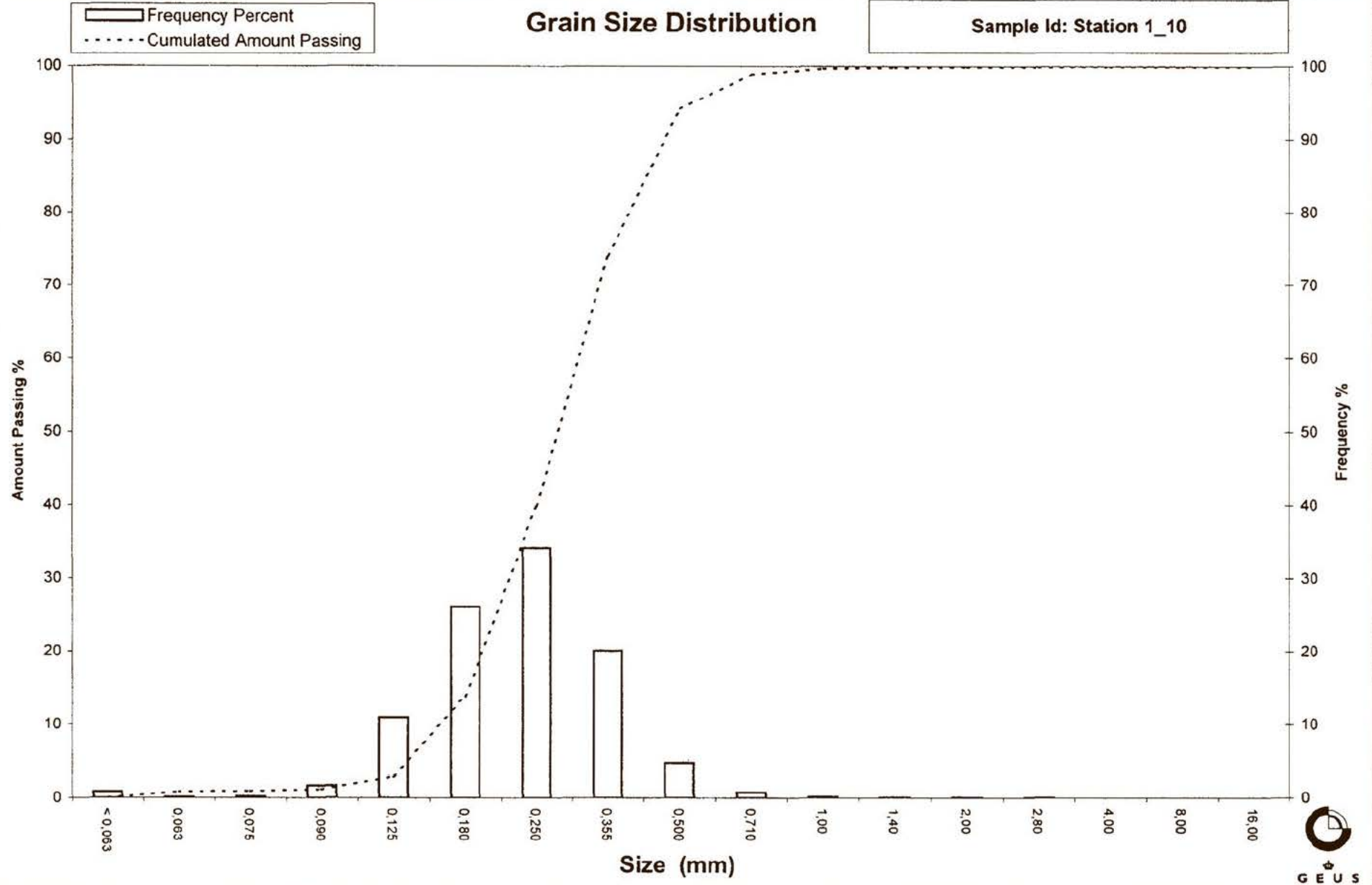
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 1_10



Grain Size Distribution

Geotechnical

Sample Id: Station 1_11
Lab. Id: 050829
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks:



Total Weight 626,94 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	0,33	0,05	99,95
4,00	-2,00	0,27	0,04	99,90
2,80	-1,49	0,12	0,02	99,89
2,00	-1,00	0,06	0,01	99,88
1,40	-0,49	0,60	0,10	99,78
1,00	0,00	0,78	0,12	99,66
0,710	0,49	1,26	0,20	99,45
0,500	1,00	3,90	0,62	98,83
0,355	1,49	17,28	2,76	96,08
0,250	2,00	69,30	11,05	85,02
0,180	2,47	176,76	28,19	56,83
0,125	3,00	293,28	46,78	10,05
0,090	3,47	48,54	7,74	2,31
0,075	3,74	7,98	1,27	1,03
0,063	3,99	1,86	0,30	0,74
< 0,063	> 3,99	4,62	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):	64,15
Sand, medium (0,2 mm - 0,6 mm):	34,24
Sand, coarse (0,6 mm - 2 mm):	0,75
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%	0,34	1,54
16%	84%	0,25	2,01
25%	75%	0,23	2,15
40%	60%	0,19	2,41
Median 50%	50%	0,17	2,54
75%	25%	0,14	2,81
84%	16%	0,13	2,92
90%	10%	0,12	3,00
95%	5%	0,10	3,29

Moments Statistics

Mean	2,49
Sorting	0,49
Skewness	-0,15
Kurtosis	1,09
Uniformity Coefficient	1,51

The analysis is executed according to DS/EN 933-1 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)

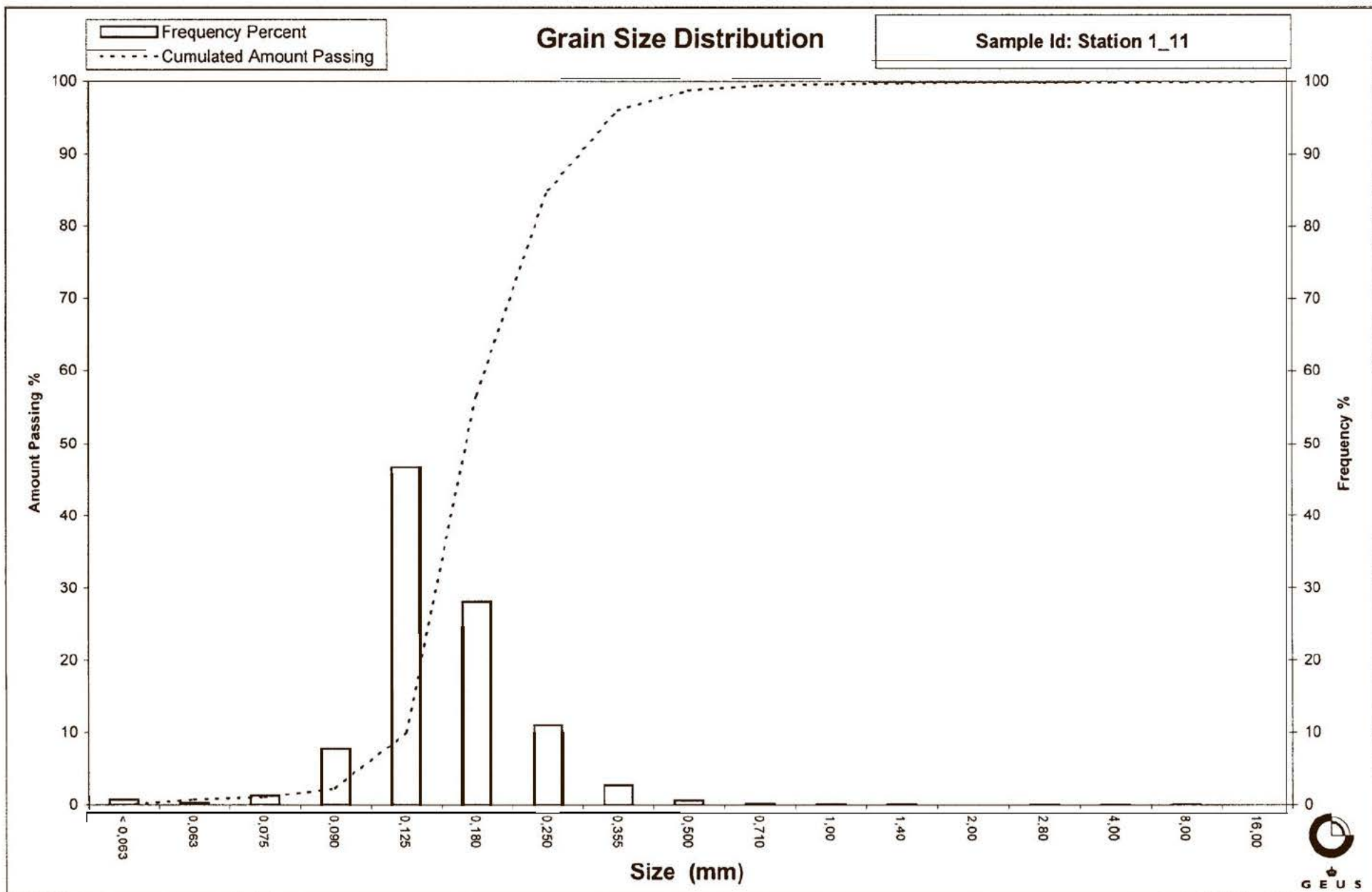
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

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: Station 2_1
 Lab. Id: 050830
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 663,18 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	0,73	0,11	99,89
4,00	-2,00	0,00	0,00	99,89
2,80	-1,49	0,00	0,00	99,89
2,00	-1,00	0,00	0,00	99,89
1,40	-0,49	0,00	0,00	99,89
1,00	0,00	0,60	0,09	99,80
0,710	0,49	21,00	3,17	96,63
0,500	1,00	92,16	13,90	82,74
0,355	1,49	172,50	26,01	56,73
0,250	2,00	213,06	32,13	24,60
0,180	2,47	135,24	20,39	4,21
0,125	3,00	20,88	3,15	1,06
0,090	3,47	3,48	0,52	0,53
0,075	3,74	0,90	0,14	0,40
0,063	3,99	0,54	0,08	0,32
< 0,063	> 3,99	2,09	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):	9,72
Sand, medium (0,2 mm - 0,6 mm):	79,32
Sand, coarse (0,6 mm - 2 mm):	10,54
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%	0,69	0,55
16%	84%	0,52	0,95
25%	75%	0,46	1,13
40%	60%	0,37	1,42
Median 50%	50%	0,33	1,59
75%	25%	0,25	1,99
84%	16%	0,22	2,18
90%	10%	0,20	2,32
95%	5%	0,18	2,45

Moments Statistics

Mean	1,57
Sorting	0,60
Skewness	-0,06
Kurtosis	0,91
Uniformity Coefficient	1,87

The analysis is executed according to DS/EN 933-1 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)

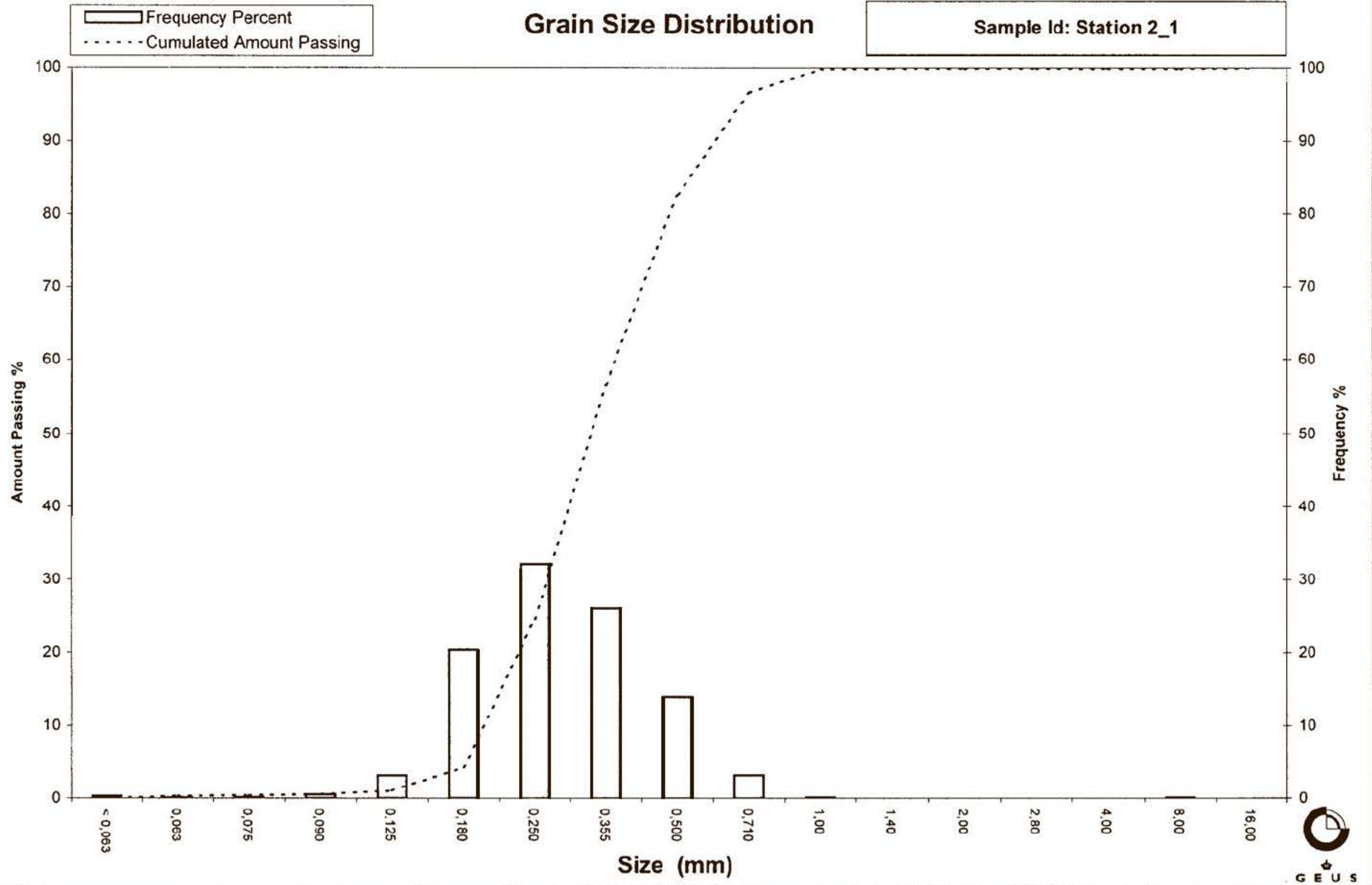
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 2_1



Grain Size Distribution

Geotechnical

Sample Id: Station 2_2
 Lab. Id: 050831
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 600,48 g

Size Fractions

Size	Size	Weight	Weight	Cumulated
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,45	0,57	99,43
4,00	-2,00	0,39	0,06	99,36
2,80	-1,49	0,66	0,11	99,25
2,00	-1,00	4,05	0,67	98,58
1,40	-0,49	9,51	1,58	96,99
1,00	0,00	14,94	2,49	94,50
0,710	0,49	21,24	3,54	90,97
0,500	1,00	41,58	6,92	84,04
0,355	1,49	176,82	29,45	54,60
0,250	2,00	252,12	41,99	12,61
0,180	2,47	59,58	9,92	2,69
0,125	3,00	12,03	2,00	0,68
0,090	3,47	2,46	0,41	0,27
0,075	3,74	0,63	0,10	0,17
0,063	3,99	0,24	0,04	0,13
< 0,063	> 3,99	0,78	0,13	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,13
Sand, fine (0,063 mm - 0,200 mm):	5,39
Sand, medium (0,2 mm - 0,6 mm):	81,82
Sand, coarse (0,6 mm - 2 mm):	11,24
Gravel (> 2 mm):	1,42
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,08	-0,11
16%	84%	0,50	1,00
25%	75%	0,46	1,13
40%	60%	0,38	1,39
Median 50%	50%	0,34	1,54
75%	25%	0,28	1,83
84%	16%	0,26	1,95
90%	10%	0,23	2,11
95%	5%	0,20	2,35

Moments Statistics

Mean	1,50
Sorting	0,61
Skewness	-0,24
Kurtosis	1,45
Uniformity Coefficient	1,65

The analysis is executed according to DS/EN 933-1 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)

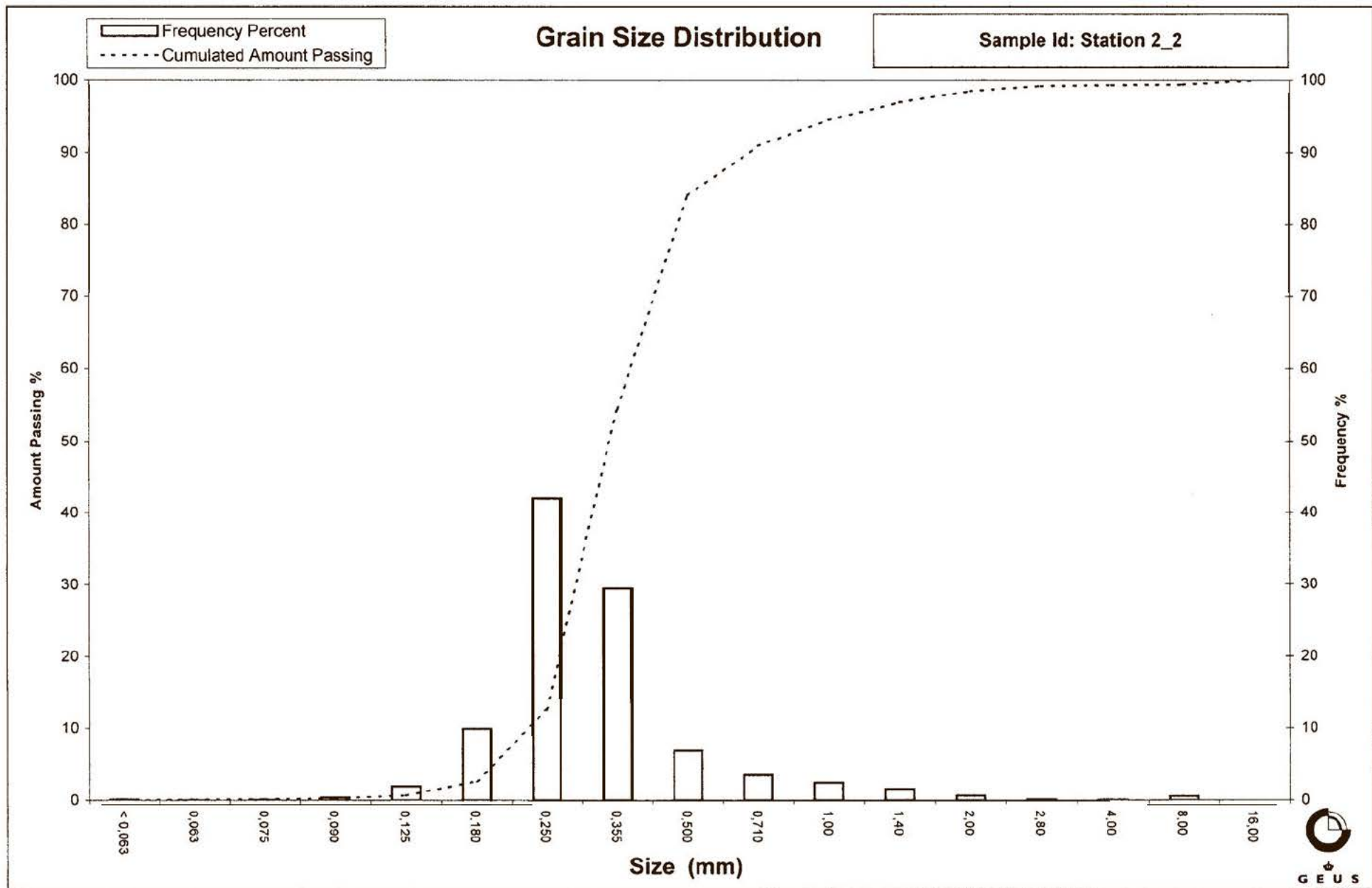
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

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: Station 2_4
 Lab. Id: 050832
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 666,84 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	0,78	0,12	99,88
4,00	-2,00	3,81	0,57	99,31
2,80	-1,49	8,16	1,22	98,09
2,00	-1,00	2,34	0,35	97,74
1,40	-0,49	2,22	0,33	97,40
1,00	0,00	2,73	0,41	96,99
0,710	0,49	4,86	0,73	96,27
0,500	1,00	17,19	2,58	93,69
0,355	1,49	73,83	11,07	82,62
0,250	2,00	303,03	45,44	37,17
0,180	2,47	190,53	28,57	8,60
0,125	3,00	46,77	7,01	1,59
0,090	3,47	5,49	0,82	0,76
0,075	3,74	0,96	0,14	0,62
0,063	3,99	0,39	0,06	0,56
< 0,063	> 3,99	3,75	0,56	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,56
Sand, fine (0,063 mm - 0,200 mm):	16,20
Sand, medium (0,2 mm - 0,6 mm):	78,15
Sand, coarse (0,6 mm - 2 mm):	2,82
Gravel (> 2 mm):	2,26
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,61	0,72
16%	84%	0,37	1,42
25%	75%	0,34	1,57
40%	60%	0,30	1,72
Median 50%	50%	0,28	1,84
75%	25%	0,22	2,18
84%	16%	0,20	2,34
90%	10%	0,18	2,45
95%	5%	0,15	2,72

Moments Statistics

Mean	1,87
Sorting	0,53
Skewness	-0,01
Kurtosis	1,33
Uniformity Coefficient	1,65

The analysis is executed according to DS/EN 933-1 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)

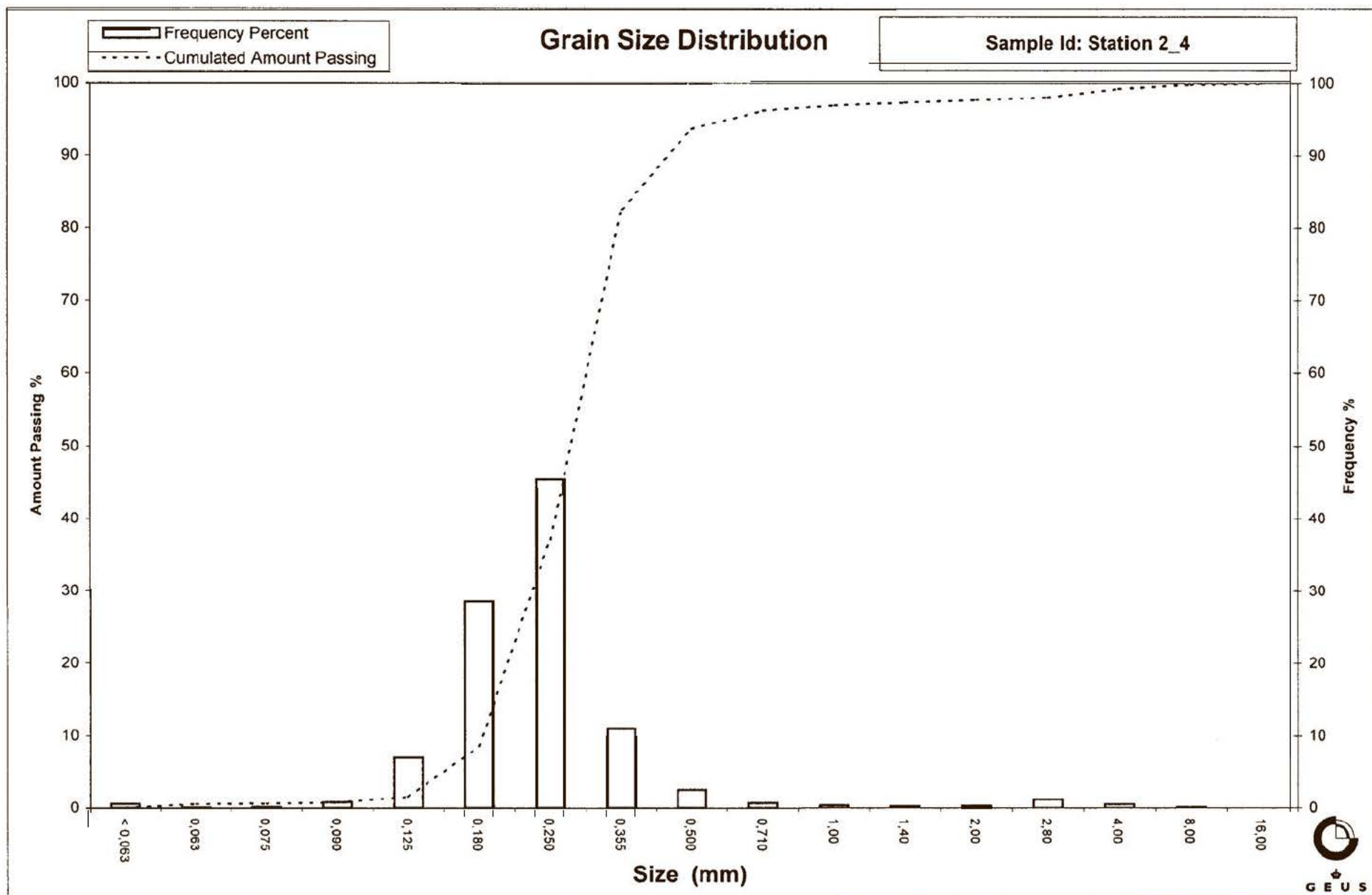
Kurtosis $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$ (Folk and Ward 1957)

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: Station 2_6
 Lab. Id: 050833
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 3617,83 g

Size Fractions

Size	Size	Weight	Weight	Cumulated
mm	Φ	g	%	amount passing
16,00	-4,00	15,50	0,43	99,57
8,00	-3,00	29,11	0,80	98,77
4,00	-2,00	53,55	1,48	97,29
2,80	-1,49	18,65	0,52	96,77
2,00	-1,00	19,30	0,53	96,24
1,40	-0,49	16,24	0,45	95,79
1,00	0,00	28,78	0,80	94,99
0,710	0,49	70,91	1,96	93,03
0,500	1,00	238,78	6,60	86,43
0,355	1,49	1076,53	29,76	56,68
0,250	2,00	1375,29	38,01	18,66
0,180	2,47	564,88	15,61	3,05
0,125	3,00	86,83	2,40	0,65
0,090	3,47	13,02	0,36	0,29
0,075	3,74	3,38	0,09	0,20
0,063	3,99	1,61	0,04	0,15
< 0,063	> 3,99	5,46	0,15	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,15
Sand, fine (0,063 mm - 0,200 mm):	7,36
Sand, medium (0,2 mm - 0,6 mm):	82,07
Sand, coarse (0,6 mm - 2 mm):	6,66
Gravel (> 2 mm):	3,76
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,00	0,00
16%	84%	0,49	1,03
25%	75%	0,44	1,17
40%	60%	0,37	1,43
Median 50%	50%	0,34	1,57
75%	25%	0,27	1,90
84%	16%	0,24	2,07
90%	10%	0,21	2,24
95%	5%	0,19	2,41

Moments Statistics

Mean	1,56
Sorting	0,62
Skewness	-0,17
Kurtosis	1,35
Uniformity Coefficient	1,76

The analysis is executed according to DS/EN 933-1 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)

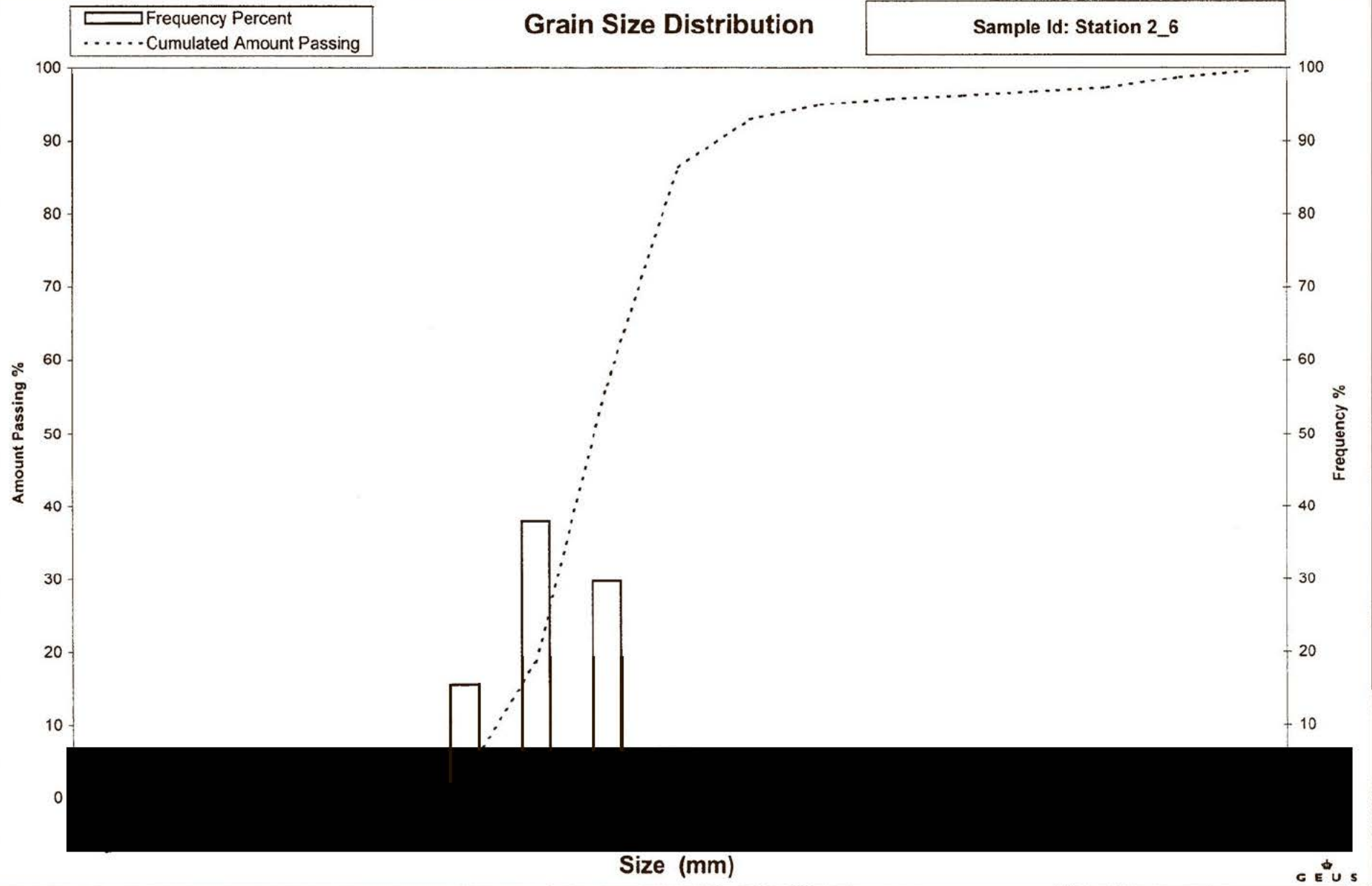
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 2_6



Grain Size Distribution

Geotechnical

Sample Id: Station 2_7
Lab. Id: 050834
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks: For mat. <16 mm. 596,72 g. > 32 mm er tillagt 16 mm fraktionen



Total Weight 2124,73 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	1005,49	47,32	52,68
8,00	-3,00	527,35	24,82	27,86
4,00	-2,00	177,23	8,34	19,52
2,80	-1,49	43,32	2,04	17,48
2,00	-1,00	25,23	1,19	16,29
1,40	-0,49	20,57	0,97	15,32
1,00	0,00	16,41	0,77	14,55
0,710	0,49	20,26	0,95	13,60
0,500	1,00	52,49	2,47	11,13
0,355	1,49	123,74	5,82	5,30
0,250	2,00	78,33	3,69	1,61
0,180	2,47	22,51	1,06	0,55
0,125	3,00	6,94	0,33	0,23
0,090	3,47	1,28	0,06	0,17
0,075	3,74	0,22	0,01	0,16
0,063	3,99	0,14	0,01	0,15
< 0,063	> 3,99	3,21	0,15	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,15
Sand, fine (0,063 mm - 0,200 mm):	0,71
Sand, medium (0,2 mm - 0,6 mm):	11,44
Sand, coarse (0,6 mm - 2 mm):	3,99
Gravel (> 2 mm):	83,71
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	-----	-----
40%	60%	-----	-----
Median 50%	50%	15,14	-3,92
75%	25%	6,63	-2,73
84%	16%	1,82	-0,86
90%	10%	0,47	1,08
95%	5%	0,35	1,53

Moments Statistics

Mean	-2,39
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS/EN 933-1 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)

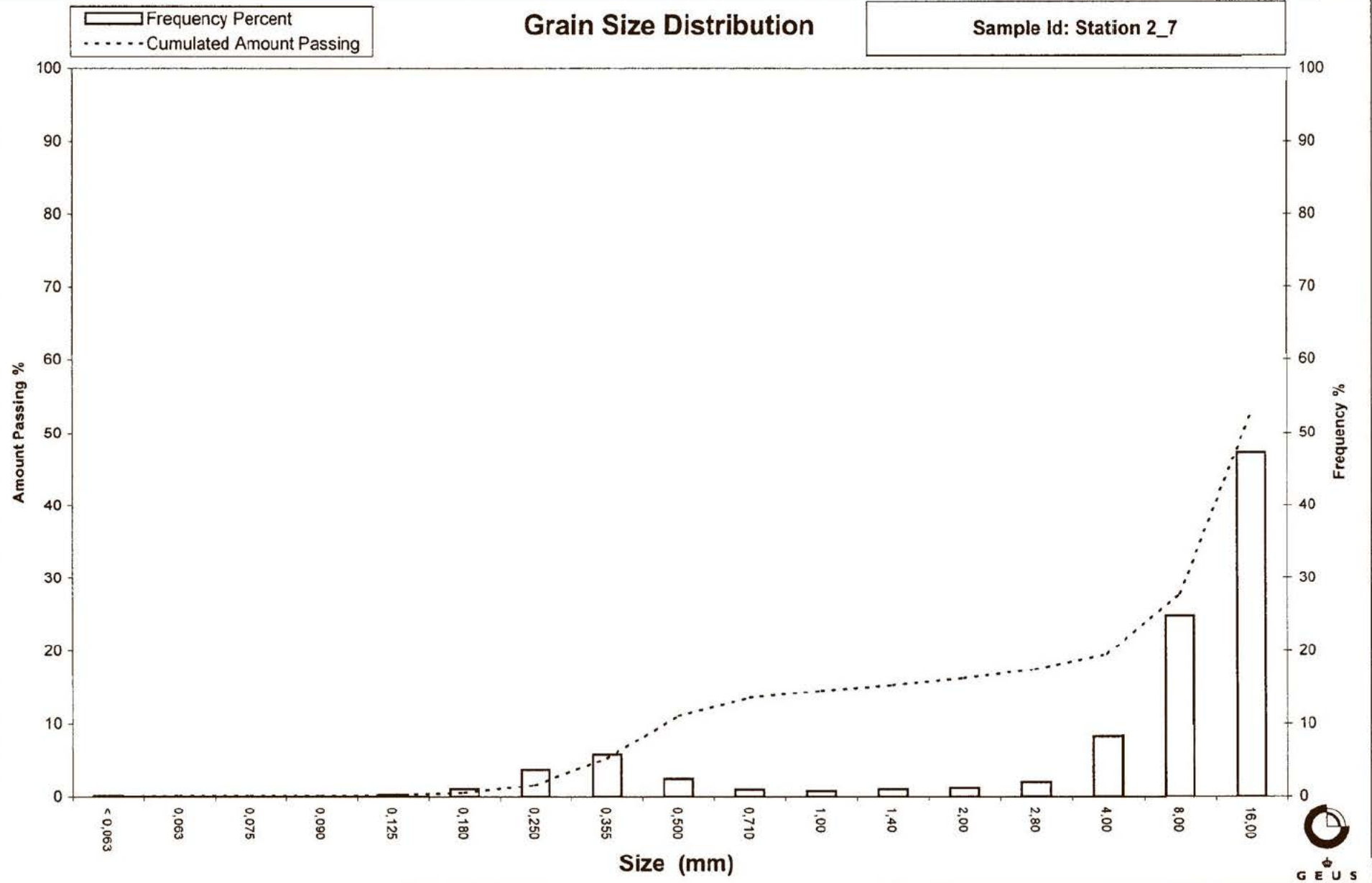
Uniformity Coefficient ($d_{60\%} / d_{10\%}$) (dgf-Bulletin 1988)

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: Station 2_7



Grain Size Distribution

Geotechnical

Sample Id: Station 2_8
Lab. Id: 050835
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks: For mat. < 32 mm. 1504,32 g. > 32 mm
er tillagt 16 mm fraktionen



Total Weight 3102,4 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	1570,10	50,61	49,39
8,00	-3,00	9,54	0,31	49,08
4,00	-2,00	4,23	0,14	48,95
2,80	-1,49	0,80	0,03	48,92
2,00	-1,00	3,72	0,12	48,80
1,40	-0,49	6,34	0,20	48,60
1,00	0,00	19,11	0,62	47,98
0,710	0,49	82,70	2,67	45,31
0,500	1,00	255,26	8,23	37,09
0,355	1,49	489,73	15,79	21,30
0,250	2,00	404,40	13,04	8,27
0,180	2,47	203,11	6,55	1,72
0,125	3,00	31,21	1,01	0,71
0,090	3,47	6,93	0,22	0,49
0,075	3,74	1,68	0,05	0,44
0,063	3,99	0,88	0,03	0,41
< 0,063	> 3,99	12,66	0,41	0,00

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,41
Sand, fine (0,063 mm - 0,200 mm):	3,18
Sand, medium (0,2 mm - 0,6 mm):	37,41
Sand, coarse (0,6 mm - 2 mm):	7,80
Gravel (> 2 mm):	51,20
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	-----	-----
40%	60%	-----	-----
Median 50%	50%	-----	-----
75%	25%	0,39	1,36
84%	16%	0,31	1,68
90%	10%	0,26	1,92
95%	5%	0,22	2,22

Moments Statistics

Mean	1,68
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS/EN 933-1 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)

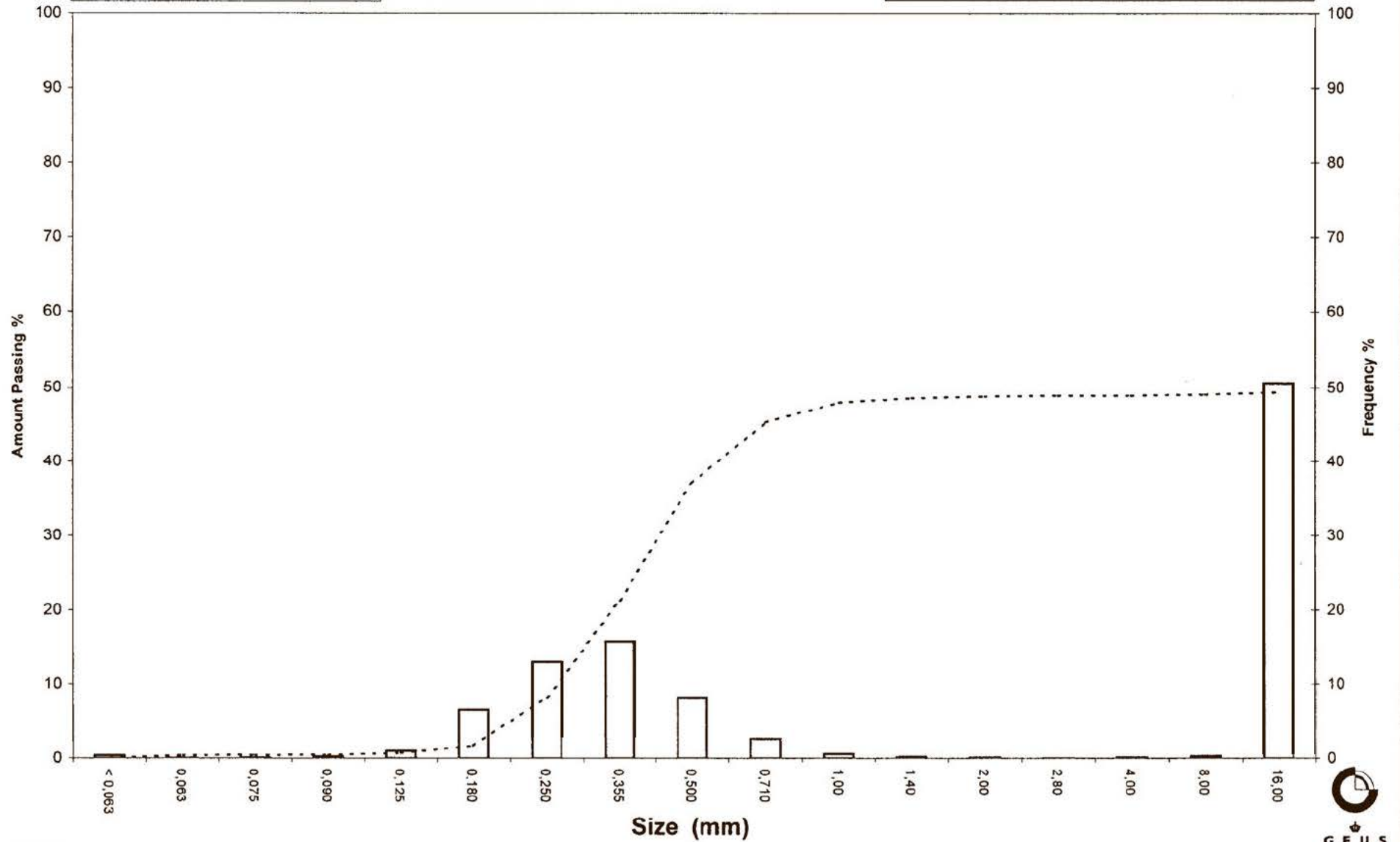
Mean, sorting, skewness and kurtosis are based on
"Amount in sieve". Uniformity coefficient is based on
"Amount passing".

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Grain Size Distribution

Sample Id: Station 2_8

Frequency Percent
Cumulated Amount Passing



Grain Size Distribution

Geotechnical

Sample Id: Station 2_9
 Lab. Id: 050836
 Submitter: Bio/consult
 Subject: Jyske Rev
 Date: December 2005
 Executed: I. Nørgaard
 Remarks:



Total Weight 3708,85 g

Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	150,08	4,05	95,95
8,00	-3,00	145,85	3,93	92,02
4,00	-2,00	76,66	2,07	89,95
2,80	-1,49	48,39	1,30	88,65
2,00	-1,00	51,43	1,39	87,26
1,40	-0,49	88,80	2,39	84,87
1,00	0,00	154,60	4,17	80,70
0,710	0,49	325,50	8,78	71,92
0,500	1,00	851,11	22,95	48,98
0,355	1,49	1093,08	29,47	19,50
0,250	2,00	500,38	13,49	6,01
0,180	2,47	145,82	3,93	2,08
0,125	3,00	51,11	1,38	0,70
0,090	3,47	10,38	0,28	0,42
0,075	3,74	1,92	0,05	0,37
0,063	3,99	1,44	0,04	0,33
< 0,063	> 3,99	12,30	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):	2,87
Sand, medium (0,2 mm - 0,6 mm):	56,70
Sand, coarse (0,6 mm - 2 mm):	27,36
Gravel (> 2 mm):	12,74
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	14,06	-3,81
16%	84%	1,32	-0,40
25%	75%	0,81	0,30
40%	60%	0,60	0,73
Median 50%	50%	0,51	0,97
75%	25%	0,38	1,39
84%	16%	0,33	1,61
90%	10%	0,28	1,83
95%	5%	0,23	2,11

Moments Statistics

Mean	0,73
Sorting	1,40
Skewness	-0,49
Kurtosis	2,23
Uniformity Coefficient	2,14

The analysis is executed according to DS/EN 933-1 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)

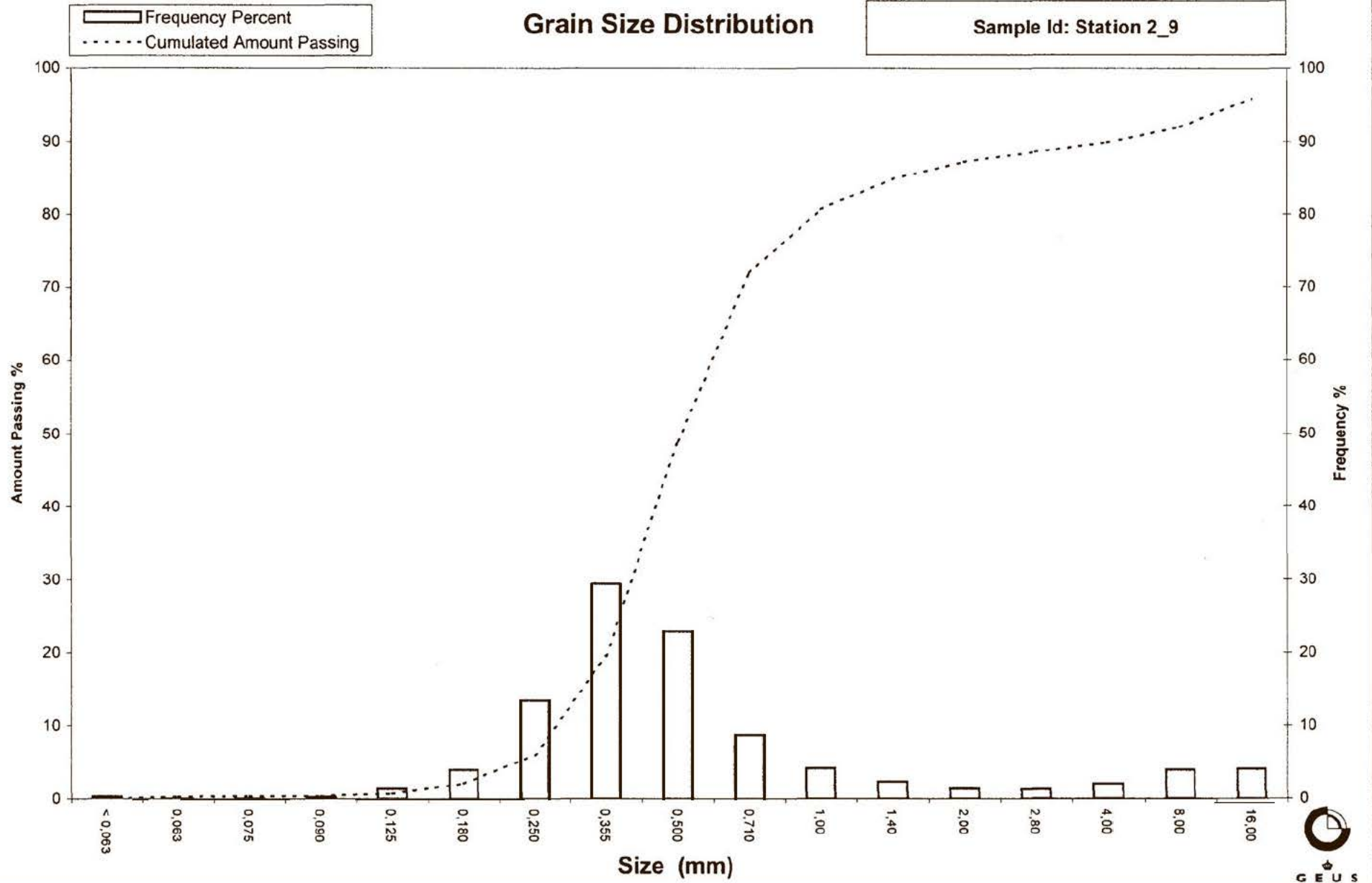
Uniformity Coefficient $(d_{60\%} / d_{10\%})$ (dgf-Bulletin 1988)

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: Station 2_9



Grain Size Distribution

Geotechnical

Sample Id: Station 2_10
Lab. Id: 050837
Submitter: Bio/consult
Subject: Jyske Rev
Date: December 2005
Executed: I. Nørgaard
Remarks:



Total Weight 209,56 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	0,96	0,46	99,54
2,80	-1,49	0,30	0,14	99,40
2,00	-1,00	0,46	0,22	99,18
1,40	-0,49	0,92	0,44	98,74
1,00	0,00	1,16	0,55	98,19
0,710	0,49	2,70	1,29	96,90
0,500	1,00	9,84	4,70	92,20
0,355	1,49	35,80	17,08	75,12
0,250	2,00	104,38	49,81	25,31
0,180	2,47	41,56	19,83	5,48
0,125	3,00	7,98	3,81	1,67
0,090	3,47	1,34	0,64	1,03
0,075	3,74	0,22	0,10	0,93
0,063	3,99	0,10	0,05	0,88
< 0,063	> 3,99	1,84	0,88	0,00

Sieve Analysis

Gravel

Sand

Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,88
Sand, fine (0,063 mm - 0,200 mm):	10,27
Sand, medium (0,2 mm - 0,6 mm):	83,29
Sand, coarse (0,6 mm - 2 mm):	4,74
Gravel (> 2 mm):	0,82
Sum:	100,00

Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,63	0,68
16%	84%	0,43	1,22
25%	75%	0,35	1,50
40%	60%	0,32	1,63
Median 50%	50%	0,30	1,73
75%	25%	0,25	2,01
84%	16%	0,22	2,20
90%	10%	0,20	2,35
95%	5%	0,17	2,53

Moments Statistics

Mean	1,72
Sorting	0,53
Skewness	-0,08
Kurtosis	1,49
Uniformity Coefficient	1,65

The analysis is executed according to DS/EN 933-1 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 $(d_{60\%} / d_{10\%})$ (dgr-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: Station 2_10

Frequency Percent
Cumulated Amount Passing

