4DANMARKS OG GRØNLANDS GEOLOGISKE UNDERSØGELSE RAPPORT 2014/60

Datarapport: Kornstørrelsesanalyser
Laboratorie analyse af Grabprøver for Naturstyrelsen

Råstofprojekt 2014

I. Nørgaard & M. Engqvist

DE NATIONALE GEOLOGISKE UNDERSØGELSER
FOR DANMARK OG GRØNLAND,
KLIMA-, ENERGI- OG BYGNINGSMINISTERIET

GEUS

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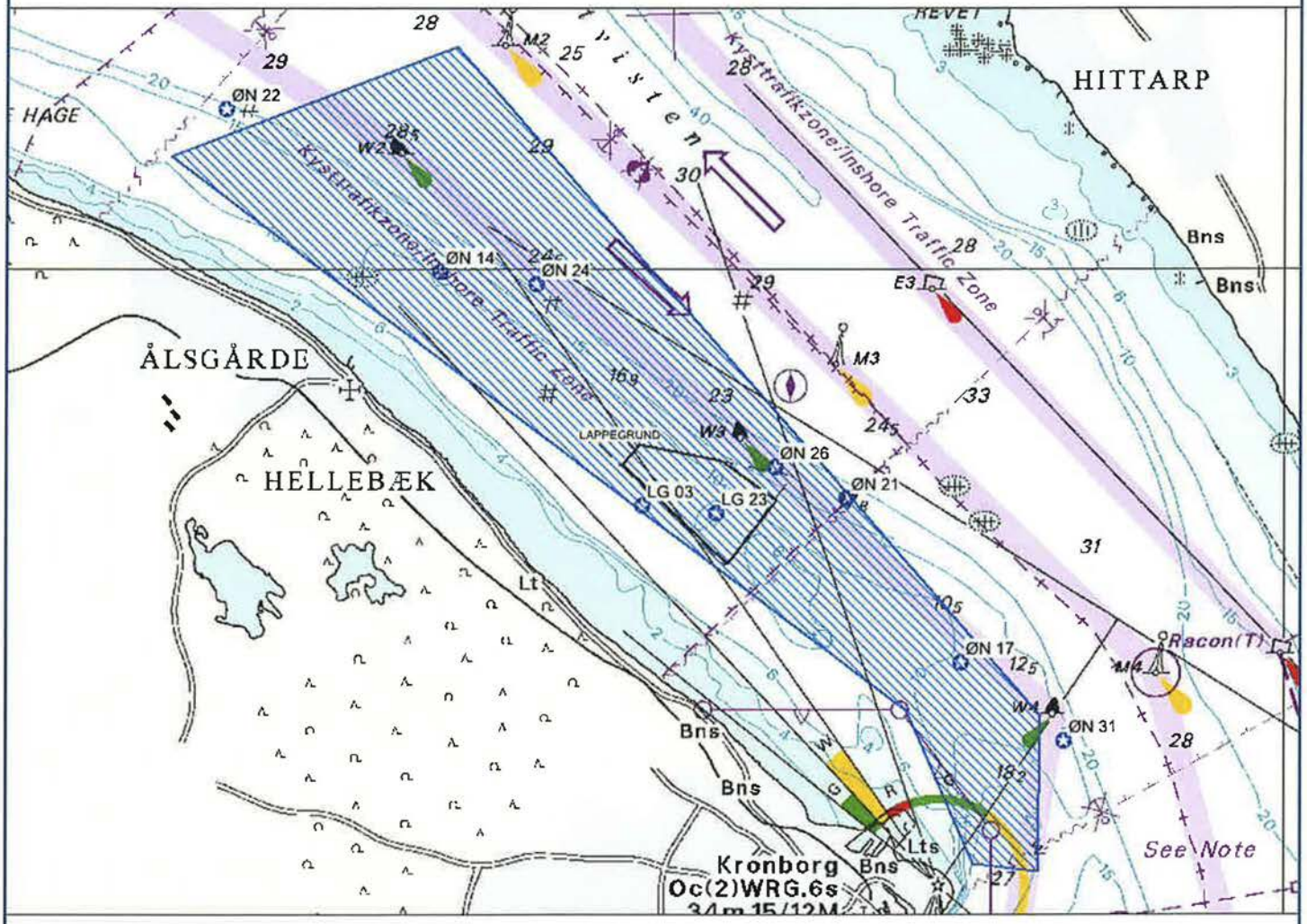
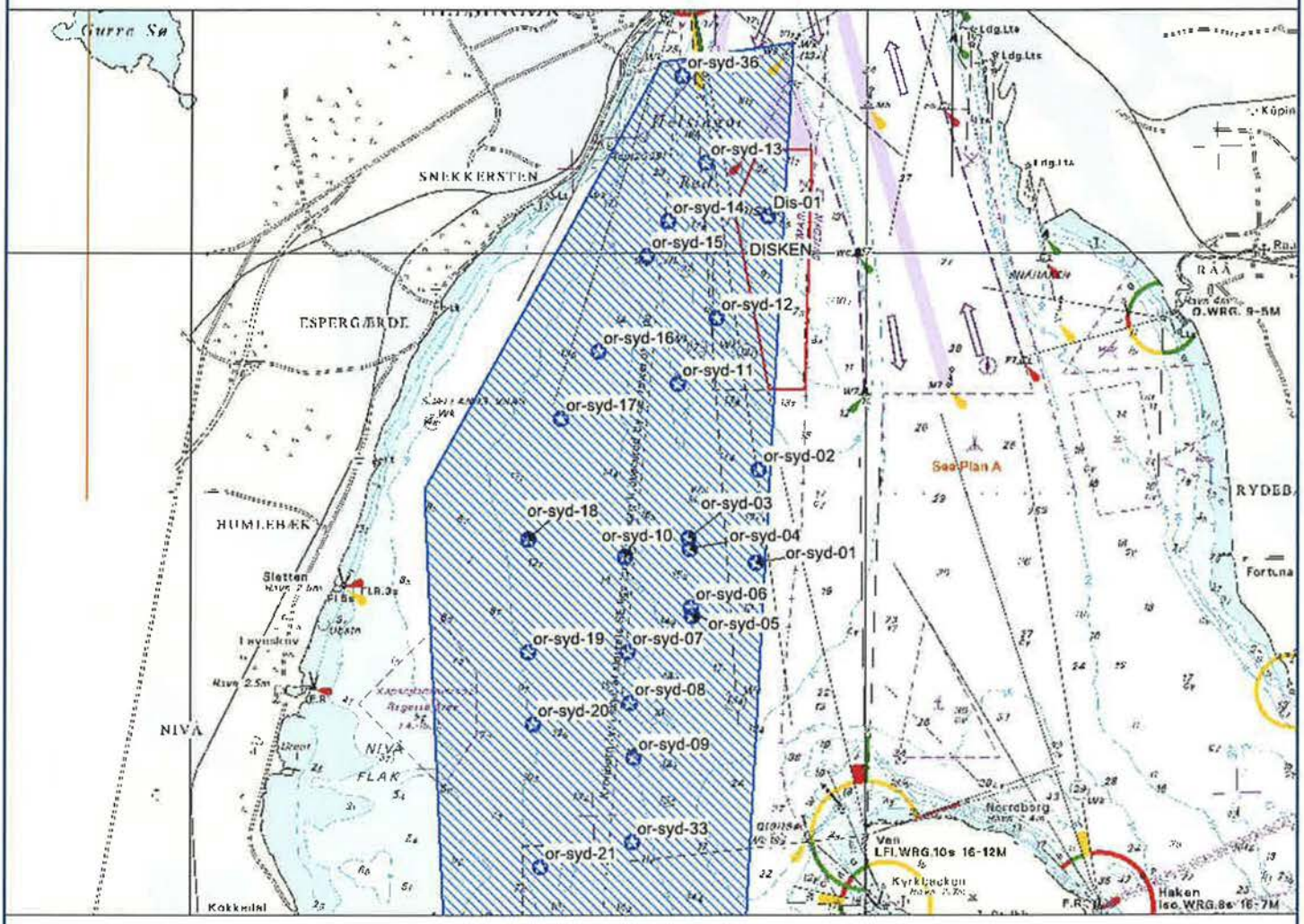
Råstofkortlægning 2014



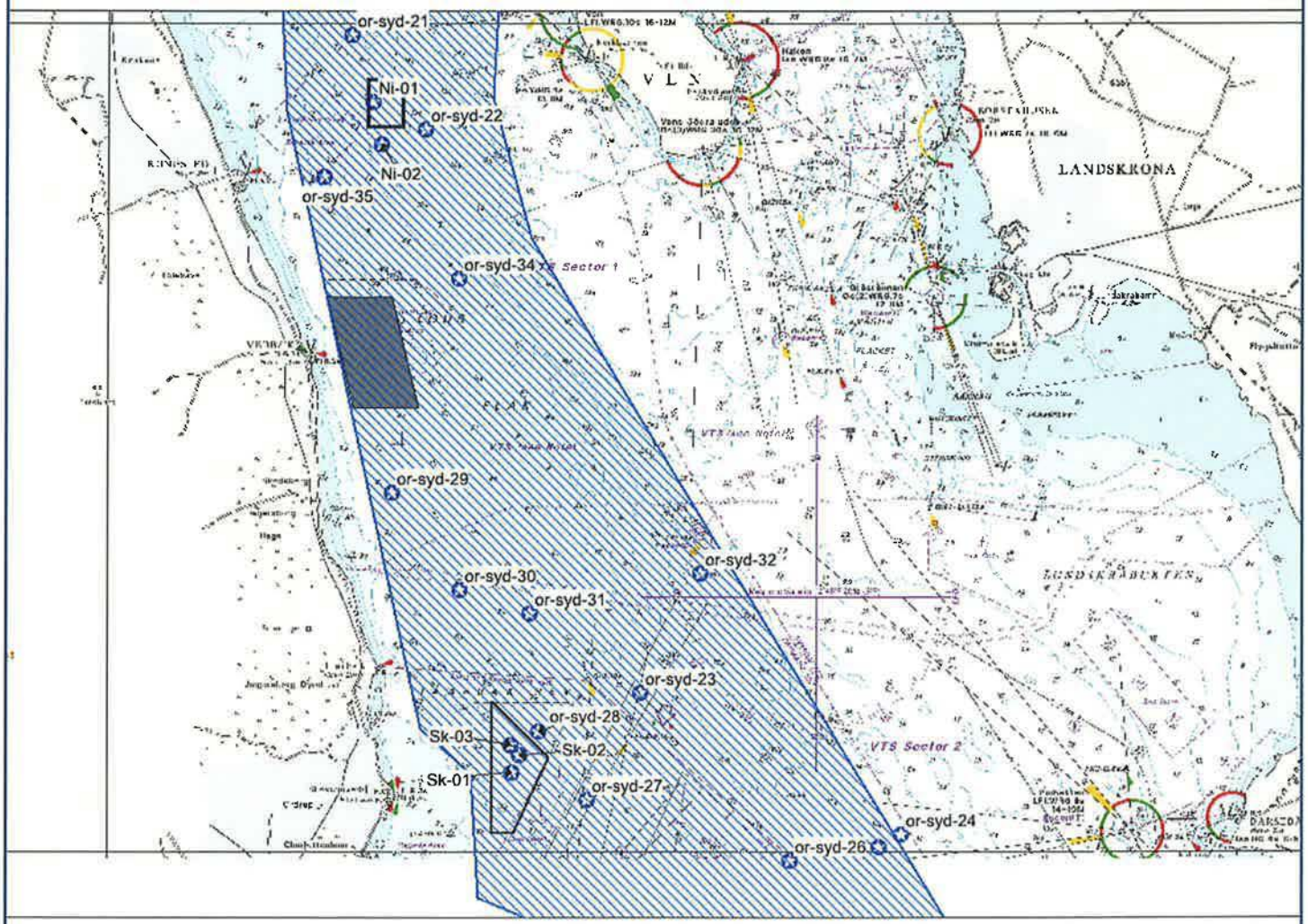
Figur 1 Grab positioner i Øresund Nord samt Lappegrund

Råstofkortlægning 2014



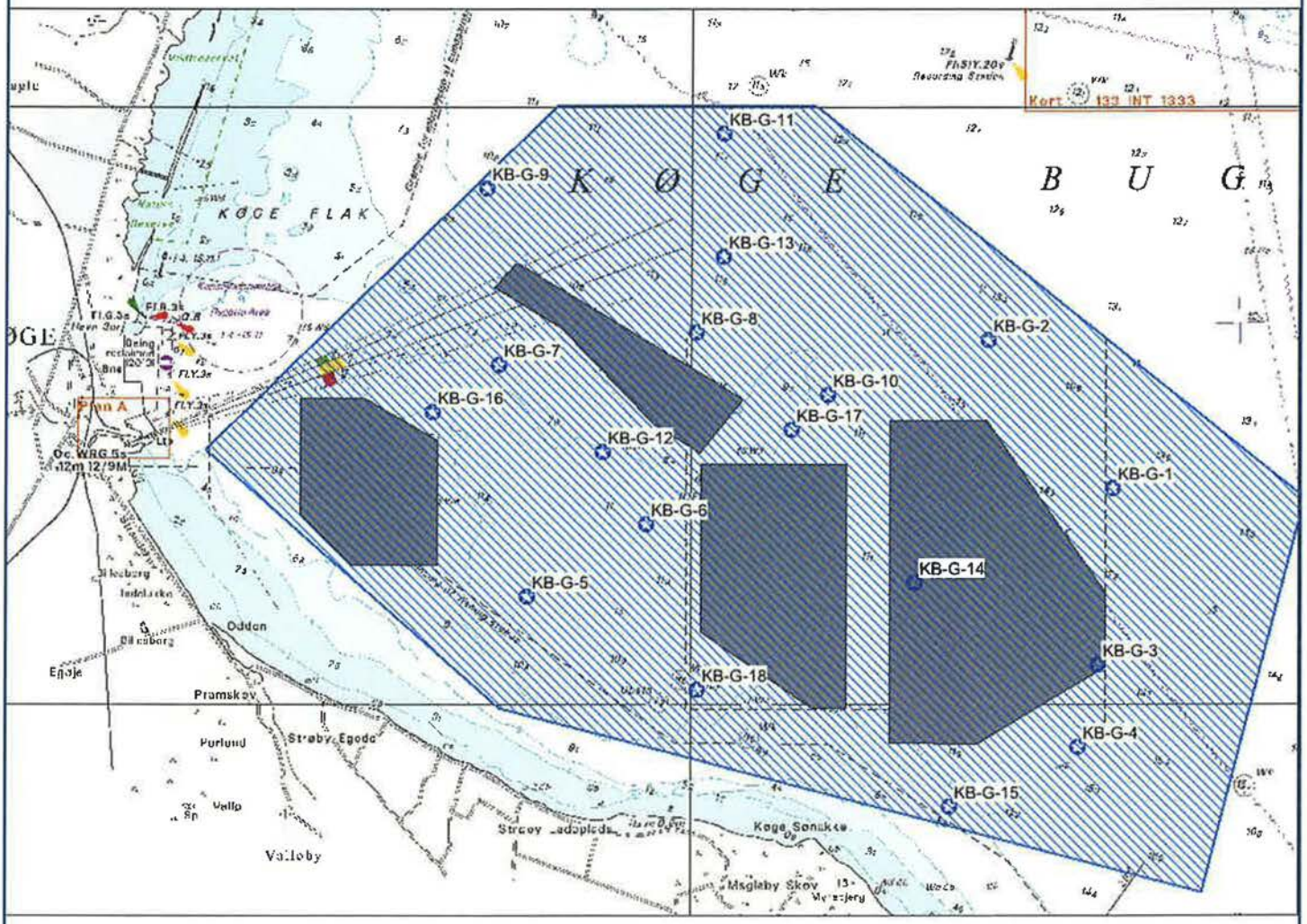
Figur 2 Grab positioner i Øresund Syd_ nordlig del samt Disken

Råstofkortlægning 2014



Figur 3 Grab positioner i Øresund Syd_ sydlig del samt Nivå Flak og Skovshoved

Råstofkortlægning 2014



Figur 4 Grab positioner i Køge Bugt

Target No.	UTM32_E	UTM32_N	LAT	LONG	LAT	LONG	
KB-G-1	717373	6149884	55° 26.807	012° 26.229'			
KB-G-2	715301	6152097	55° 28.053	012° 24.370'			
KB-G-3	717287	6147135	55° 25.330	012° 26.019'			
KB-G-4	717043	6145841	55° 24.640	012° 25.728'			
KB-G-5	708338	6147771	55° 25.906	012° 17.579'			
KB-G-6	710129	6148974	55° 26.507	012° 19.328'			
KB-G-7	707725	6151352	55° 27.845	012° 17.159'			
KB-G-8	710756	6152007	55° 28.123	012° 20.060'			
KB-G-9	707386	6154083	55° 29.327	012° 16.960'			
KB-G-10	712859	6151119	55° 27.597	012° 22.011'			
KB-G-11	711032	6155113	55° 29.788	012° 20.463'			
KB-G-12	709390	6150062	55° 27.112	012° 18.678'			
KB-G-13	711127	6153202	55° 28.757	012° 20.466'			
KB-G-14	714354	6148278	55° 26.023	012° 23.296'			
KB-G-15	715070	6144799	55° 24.132	012° 23.813'			Sten og muslinger kan ikke sigtes
KB-G-16	706721	6150555	55° 27.445	012° 16.172'			
KB-G-17	712327	6150551	55° 27.295	012° 21.481'			
KB-G-18	711040	6146442	55° 25.127	012° 20.076'			
Or-Syd-01	727176	6207288	55° 57.427	012° 38.364'			
Or-Syd-02	727140	6208720	55° 58.198	012° 38.402'			
Or-Syd-03	726123	6207610	55° 57.630	012° 37.371'			
Or-Syd-04	726152	6207439	55° 57.537	012° 37.390'			
Or-Syd-05	726233	6206407	55° 56.975	012° 37.416'			
Or-Syd-06	726220	6206532	55° 57.047	012° 37.409'			
Or-Syd-07	725258	6205792	55° 56.676	012° 36.450'			
Or-Syd-08	725337	6205017	55° 56.257	012° 36.487'			
Or-Syd-09	725446	6204165	55° 55.795	012° 36.549'			
Or-Syd-10	725151	6207283	55° 57.487	012° 36.422'			
Or-Syd-11	725810	6209980	55° 58.914	012° 37.190'			
Or-Syd-12	726354	6211042	55° 59.470	012° 37.765'			
Or-Syd-13	726056	6213424	56° 00.760	012° 37.599'			
Or-Syd-14	725534	6212494	56° 00.274	012° 37.051'			
Or-Syd-15	725233	6211933	55° 59.987	012° 36.734'			
Or-Syd-16	724570	6210428	55° 59.190	012° 36.022'			
Or-Syd-17	724037	6209360	55° 58.630	012° 35.457'			
Or-Syd-18	723630	6207460	55° 57.615	012° 34.972'			
Or-Syd-19	723729	6205713	55° 56.676	012° 34.980'			
Or-Syd-20	723865	6204604	55° 56.076	012° 35.055'			
Or-Syd-21	724090	6202390	55° 54.878	012° 35.161'			
Or-Syd-22	725862	6200367	55° 53.740	012° 36.757'			
Or-Syd-23	731330	6187992	55° 46.927	012° 41.360'			
Or-Syd-24	737334	6185119	55° 45.207	012° 46.942'			mangler
Or-Syd-25	736857	6184817	55° 45.058	012° 46.471'			mangler
Or-Syd-26	734900	6184384	55° 44.883	012° 44.582'			
Or-Syd-27	730260	6185510	55° 45.622	012° 40.213'			
Or-Syd-28	729104	6186997	55° 46.455	012° 39.185'			
Or-Syd-29	725539	6192188	55° 49.345	012° 36.040'			
Or-Syd-30	727172	6190094	55° 48.176	012° 37.496'			
Or-Syd-31	728768	6189639	55° 47.886	012° 38.997'			
Or-Syd-32	732530	6190731	55° 48.366	012° 42.646'			
Or-Syd-33	725501	6202853	55° 55.088	012° 36.536'			
Or-Syd-34	726774	6197064	55° 51.937	012° 37.464'			
Or-Syd-35	723645	6199188	55° 53.168	012° 34.576'			
Or-Syd-36	725631	6214742	56° 01.487	012° 37.258'			
Ni-01	724650	6200910	55° 54.066	012° 35.62	NF-01		Nyt navn
Ni-02	724901	6199983	55° 53.560	012° 35.81	NF-02		Nyt navn
Sk-01	728561	6186044	55° 45.958	012° 38.619'			

Sk-02	728714	6186451	55° 46.17	012° 38.785'		
Sk-03	728488	6186668	55° 46.29	012° 38.580'		
Dis-01	727065	6212643	56° 00.31	012° 38.529'		
LG 03	723115	6219265	56° 03.98	012° 35.066'		
LG 23	723696	6219239	56° 03.95	012° 35.624'		
ØN 21	724725	6219415	56° 04.02	012° 36.62	Or-Nord 21	Nyt navn
ØN 22	719634	6222251	56° 05.68	012° 31.86	Or-Nord 22	Nyt navn
ØN 14	721408	6221041	56° 04.98	012° 33.51	Or-Nord 14	Nyt navn
ØN 24	722173	6220982	56° 04.93	012° 34.24	Or-Nord 24	Nyt navn
ØN 17	725710	6218155	56° 03.31	012° 37.50	Or-Nord 17	Nyt navn
ØN 31	726569	6217575	56° 02.97	012° 38.30	Or-Nord 31	Nyt navn
ØN 26	724147	6219633	56° 04.15	012° 36.07	Or-Nord 26	Nyt navn

Prøvebehandling

GEUS har foretaget sigteanalyse på 66 grabprøver fra Råstofptojekt 2014 for Naturstyrelsen .
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 ½ phi intervaller, hvilket svarer til 16 sigter. Metoden er tillempet i forhold til DS 405.9 DS/EN 933-1 idet der er indføjet flere sigter end der beskrives i denne standard.
Kornkurven:
Som udgangspunkt for kornstørrelsesanalysen er anvendt DS405.9, DS/EN 933-1. idet der er indføjet flere sigter end der beskrives i denne standard.

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, DS/EN 933-1.Kornstørrelsesfordeling bestemt ved sigteanalyse. Dansk Standardiseringsråd, Kbh. 1978.

Bilag 1

Grain Size Distribution
Geotechnical

Sample Id: KB-G-1
Lab. Id: 14016
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 113,03 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,14	0,12	99,88
	1,00	0,00	0,05	0,04	99,83
	0,710	0,49	0,00	0,00	99,83
	0,500	1,00	0,00	0,00	99,83
	0,355	1,49	0,00	0,00	99,83
	0,250	2,00	0,07	0,06	99,77
	0,180	2,47	0,41	0,36	99,41
	0,125	3,00	1,93	1,71	97,70
	0,090	3,47	7,66	6,78	90,92
	0,075	3,74	15,88	14,05	76,87
	0,063	3,99	30,35	26,85	50,02
	< 0,063	> 3,99	56,54	50,02	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	50,02
Sand, fine	(0,063 mm - 0,200 mm):	49,49
Sand, medium	(0,2 mm - 0,6 mm):	0,32
Sand, coarse	(0,6 mm - 2 mm):	0,17
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,11	3,17
16%	84%	0,08	3,60
25%	75%	0,07	3,75
40%	60%	0,07	3,89
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,60
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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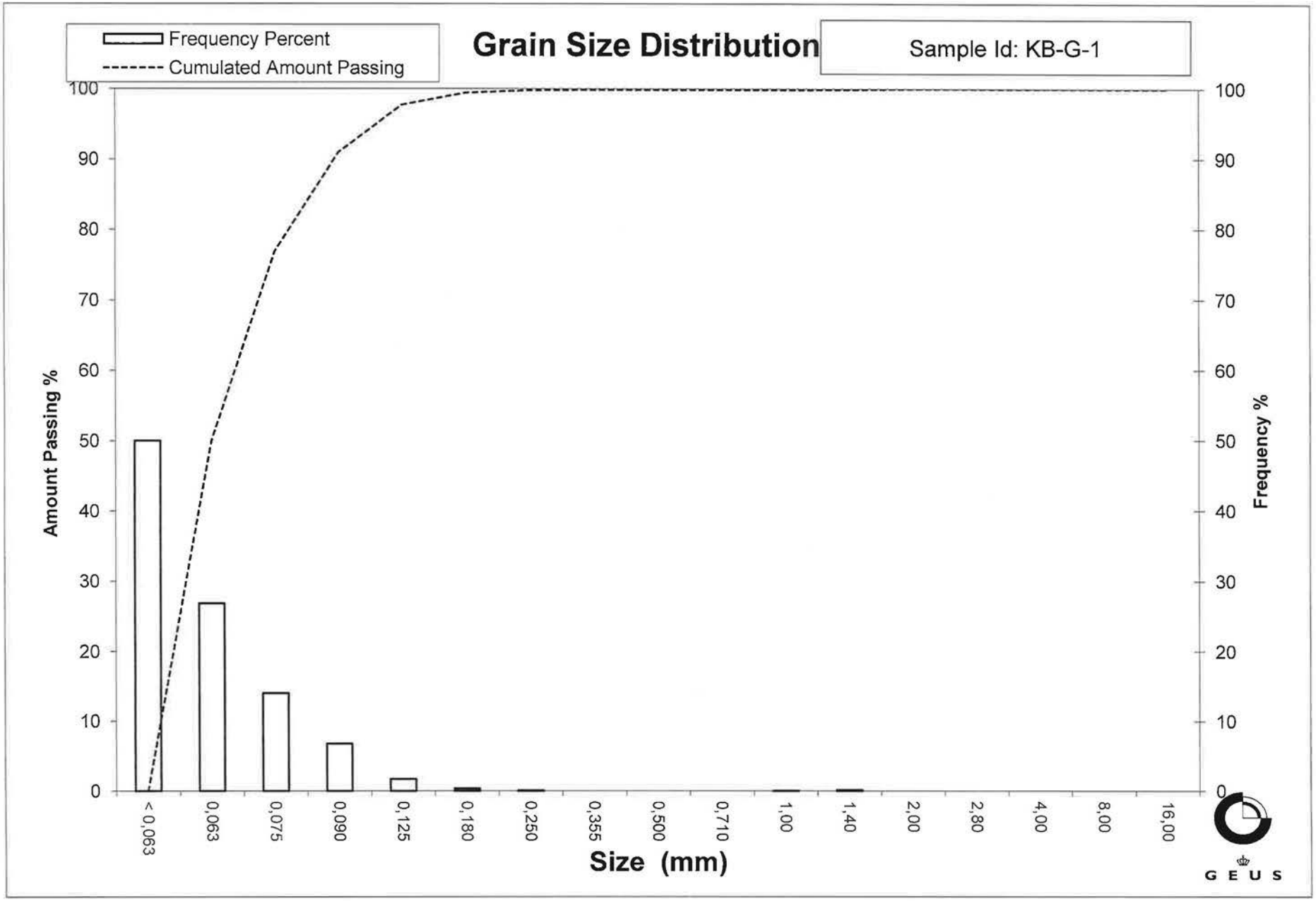
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-1
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-2
Lab. Id: 14017
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 117,69 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,71	0,60	99,40
	2,80	-1,49	0,06	0,05	99,35
	2,00	-1,00	0,00	0,00	99,35
Sand	1,40	-0,49	0,04	0,03	99,31
	1,00	0,00	0,02	0,02	99,29
	0,710	0,49	0,04	0,03	99,26
	0,500	1,00	0,07	0,06	99,20
	0,355	1,49	0,08	0,07	99,13
	0,250	2,00	0,29	0,25	98,89
	0,180	2,47	1,04	0,88	98,00
	0,125	3,00	10,75	9,13	88,87
	0,090	3,47	62,98	53,51	35,36
	0,075	3,74	17,78	15,11	20,25
	0,063	3,99	12,58	10,69	9,56
	< 0,063	> 3,99	11,25	9,56	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	9,56
Sand, fine	(0,063 mm - 0,200 mm):	88,70
Sand, medium	(0,2 mm - 0,6 mm):	0,97
Sand, coarse	(0,6 mm - 2 mm):	0,12
Gravel	(> 2 mm):	0,65
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,16	2,63
16%	84%	0,12	3,04
25%	75%	0,12	3,11
40%	60%	0,11	3,24
Median 50%	50%	0,10	3,33
75%	25%	0,08	3,65
84%	16%	0,07	3,83
90%	10%	0,06	3,98
95%	5%	-------	-------

Moments Statistics

Mean	3,40
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,67

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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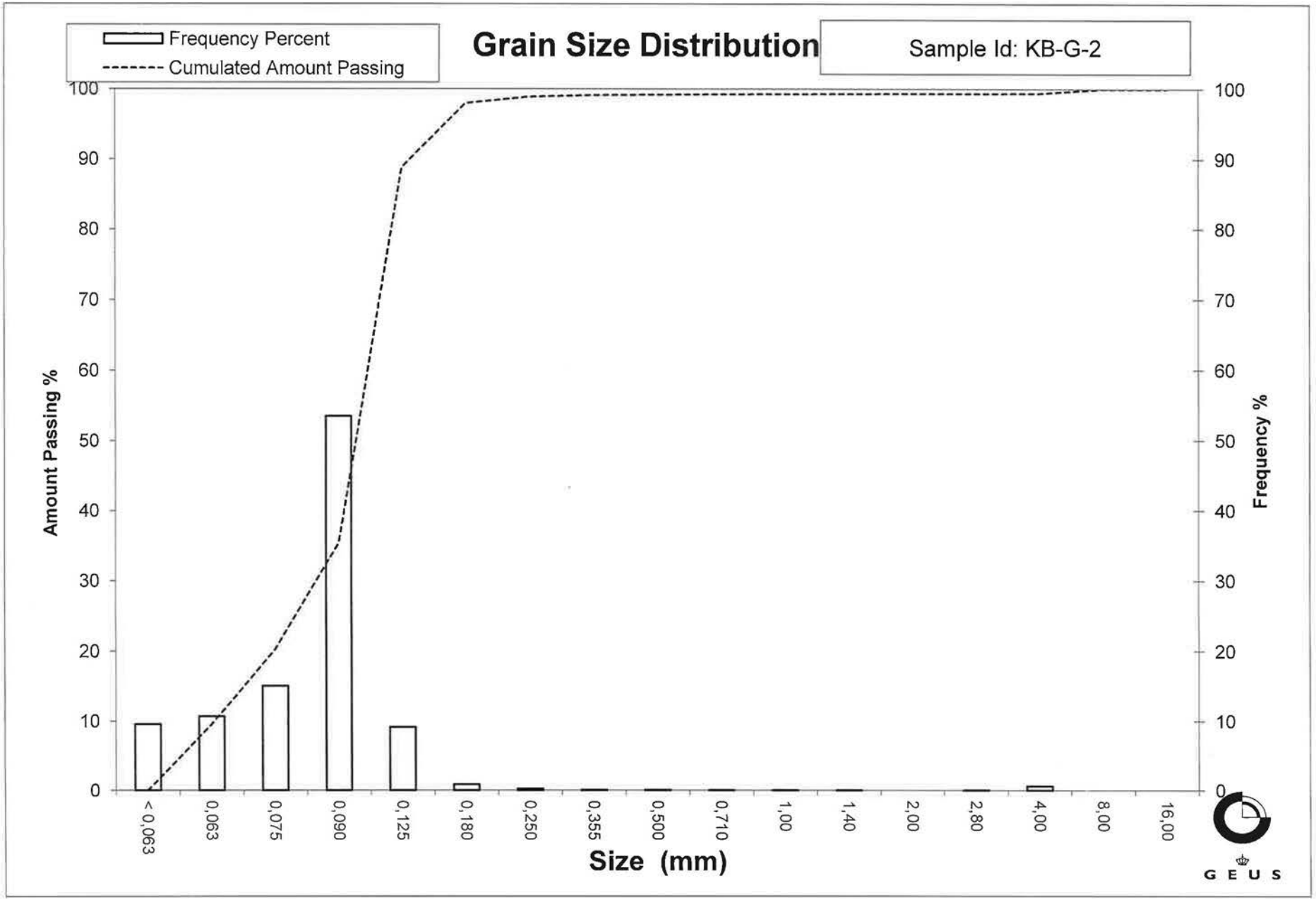
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-2
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-3
Lab. Id: 14018
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 108,17 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,08	0,07	99,93
	1,00	0,00	0,05	0,05	99,88
	0,710	0,49	0,03	0,03	99,85
	0,500	1,00	0,05	0,05	99,81
	0,355	1,49	0,09	0,08	99,72
	0,250	2,00	0,20	0,18	99,54
	0,180	2,47	0,48	0,44	99,09
	0,125	3,00	2,26	2,09	97,00
	0,090	3,47	10,16	9,39	87,61
	0,075	3,74	24,08	22,26	65,35
	0,063	3,99	43,95	40,63	24,72
	< 0,063	> 3,99	26,74	24,72	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	24,72
Sand, fine	(0,063 mm - 0,200 mm):	74,50
Sand, medium	(0,2 mm - 0,6 mm):	0,61
Sand, coarse	(0,6 mm - 2 mm):	0,17
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,09
16%	84%	0,09	3,51
25%	75%	0,08	3,62
40%	60%	0,07	3,77
Median 50%	50%	0,07	3,83
75%	25%	0,06	3,99
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,67
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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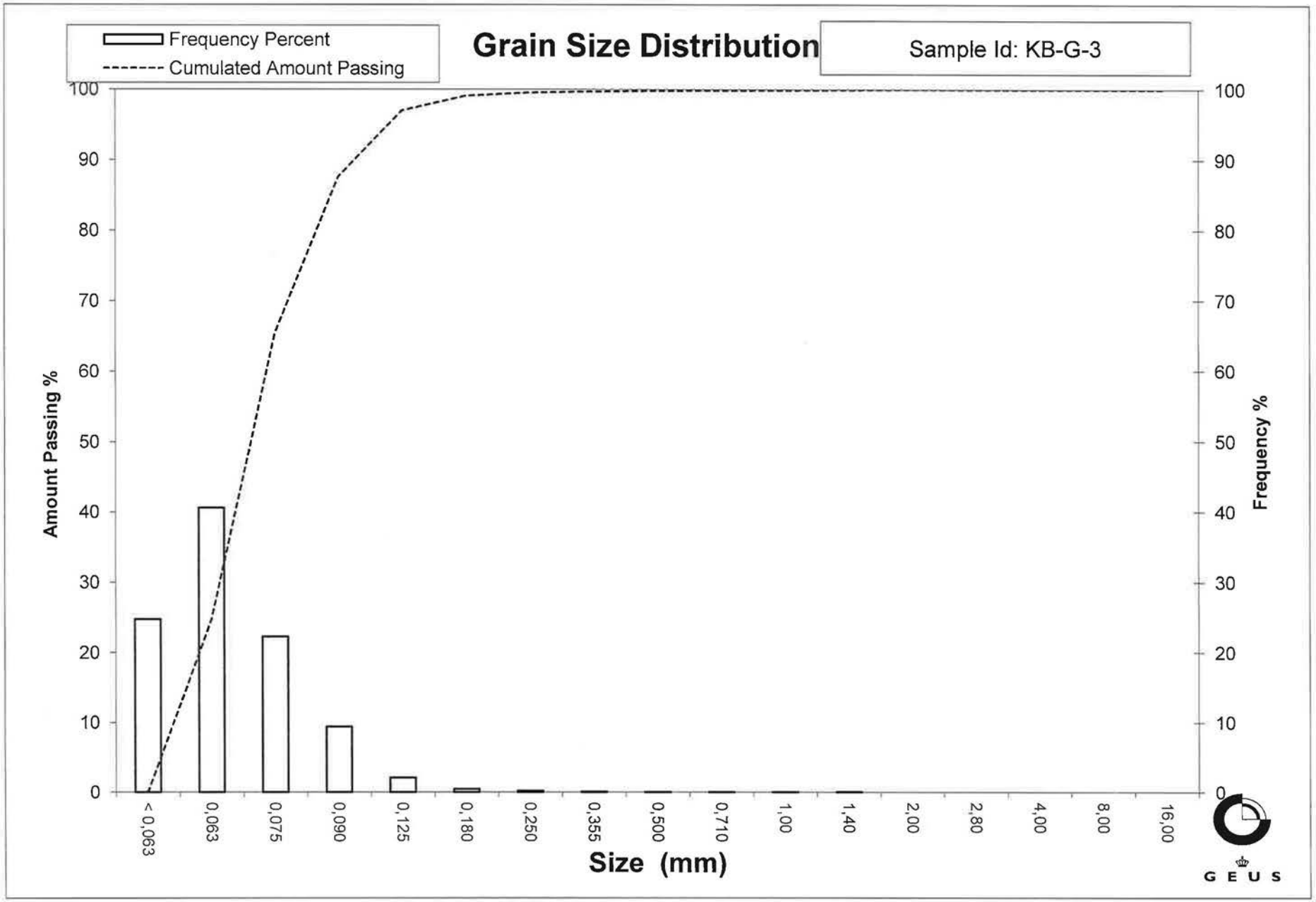
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-3
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-4
Lab. Id: 14019
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 114,48 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,22	0,19	99,81
	2,00	-1,00	0,04	0,03	99,77
Sand	1,40	-0,49	0,05	0,04	99,73
	1,00	0,00	0,04	0,03	99,69
	0,710	0,49	0,41	0,36	99,34
	0,500	1,00	4,63	4,04	95,29
	0,355	1,49	22,57	19,72	75,58
	0,250	2,00	37,90	33,11	42,47
	0,180	2,47	26,47	23,12	19,35
	0,125	3,00	17,08	14,92	4,43
	0,090	3,47	2,98	2,60	1,83
	0,075	3,74	0,25	0,22	1,61
	0,063	3,99	0,40	0,35	1,26
	< 0,063	> 3,99	1,44	1,26	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,26
Sand, fine	(0,063 mm - 0,200 mm):	24,70
Sand, medium	(0,2 mm - 0,6 mm):	71,26
Sand, coarse	(0,6 mm - 2 mm):	2,56
Gravel	(> 2 mm):	0,23
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,50	1,01
16%	84%	0,42	1,26
25%	75%	0,35	1,50
40%	60%	0,31	1,71
Median 50%	50%	0,27	1,87
75%	25%	0,20	2,34
84%	16%	0,17	2,58
90%	10%	0,15	2,78
95%	5%	0,13	2,98

Moments Statistics

Mean	1,90
Sorting	0,63
Skewness	0,10
Kurtosis	0,96
Uniformity Coefficient	2,10

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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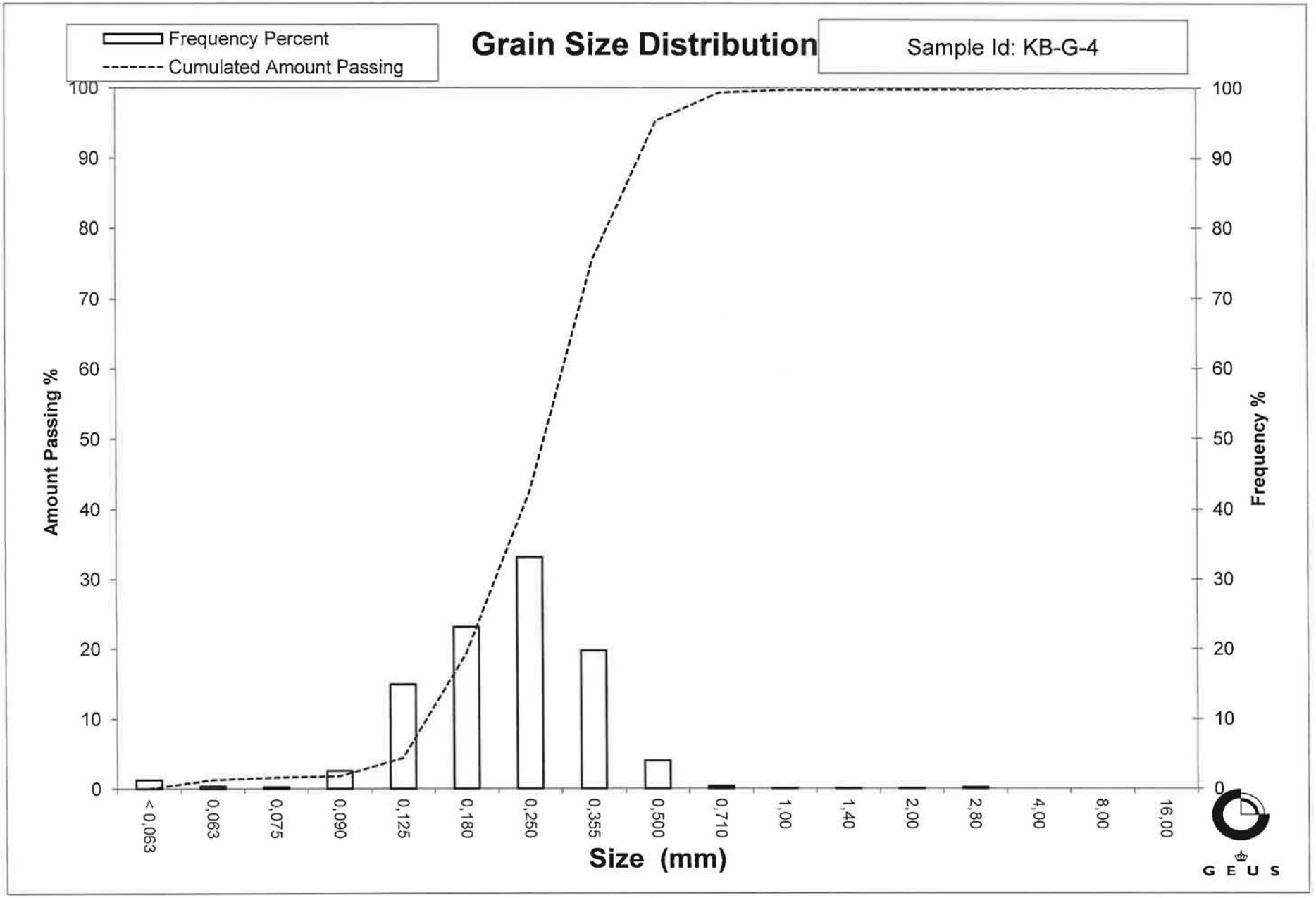
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-4
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-5
Lab. Id: 14020
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 111,26 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,25	0,22	99,78
	1,00	0,00	0,06	0,05	99,72
	0,710	0,49	0,07	0,06	99,66
	0,500	1,00	0,07	0,06	99,60
	0,355	1,49	0,00	0,00	99,60
	0,250	2,00	0,30	0,27	99,33
	0,180	2,47	0,73	0,66	98,67
	0,125	3,00	1,43	1,29	97,38
	0,090	3,47	10,63	9,55	87,83
	0,075	3,74	32,33	29,06	58,77
	0,063	3,99	28,60	25,71	33,07
	< 0,063	> 3,99	36,79	33,07	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	33,07
Sand, fine	(0,063 mm - 0,200 mm):	65,79
Sand, medium	(0,2 mm - 0,6 mm):	0,77
Sand, coarse	(0,6 mm - 2 mm):	0,37
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,10
16%	84%	0,09	3,51
25%	75%	0,08	3,58
40%	60%	0,08	3,72
Median 50%	50%	0,07	3,82
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,66
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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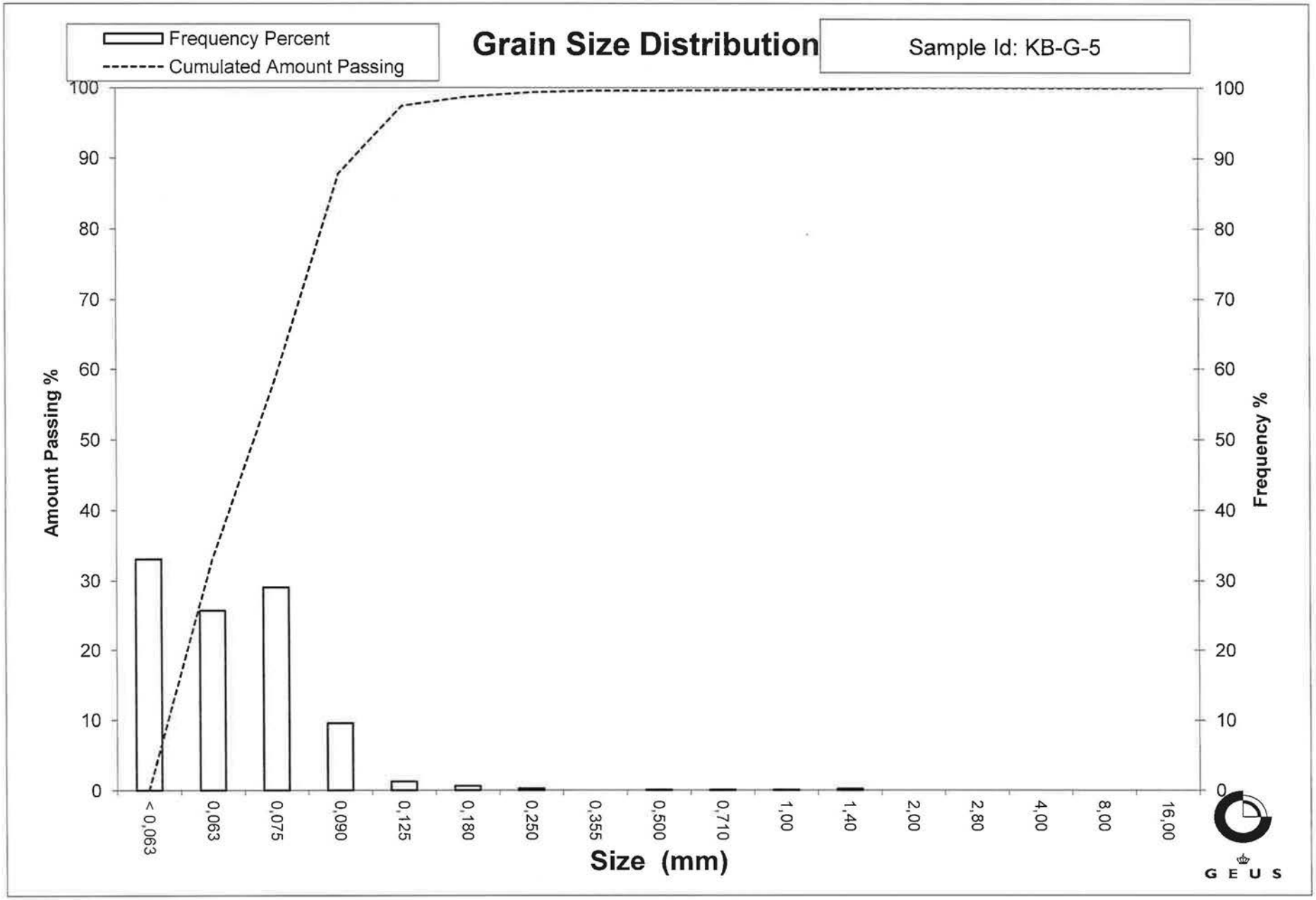
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-5
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-6
Lab. Id: 14021
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 106,21 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,06	0,06	99,94
	1,00	0,00	0,06	0,06	99,89
	0,710	0,49	0,27	0,25	99,63
	0,500	1,00	5,87	5,53	94,11
	0,355	1,49	16,77	15,79	78,32
	0,250	2,00	45,21	42,57	35,75
	0,180	2,47	27,24	25,65	10,10
	0,125	3,00	8,09	7,62	2,49
	0,090	3,47	1,00	0,94	1,54
	0,075	3,74	0,40	0,38	1,17
	0,063	3,99	0,27	0,25	0,91
	< 0,063	> 3,99	0,97	0,91	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,91
Sand, fine	(0,063 mm - 0,200 mm):	16,52
Sand, medium	(0,2 mm - 0,6 mm):	79,31
Sand, coarse	(0,6 mm - 2 mm):	3,26
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,53	0,91
16%	84%	0,41	1,30
25%	75%	0,35	1,53
40%	60%	0,31	1,69
Median 50%	50%	0,29	1,81
75%	25%	0,22	2,18
84%	16%	0,20	2,35
90%	10%	0,18	2,48
95%	5%	0,14	2,80

Moments Statistics

Mean	1,82
Sorting	0,55
Skewness	0,04
Kurtosis	1,19
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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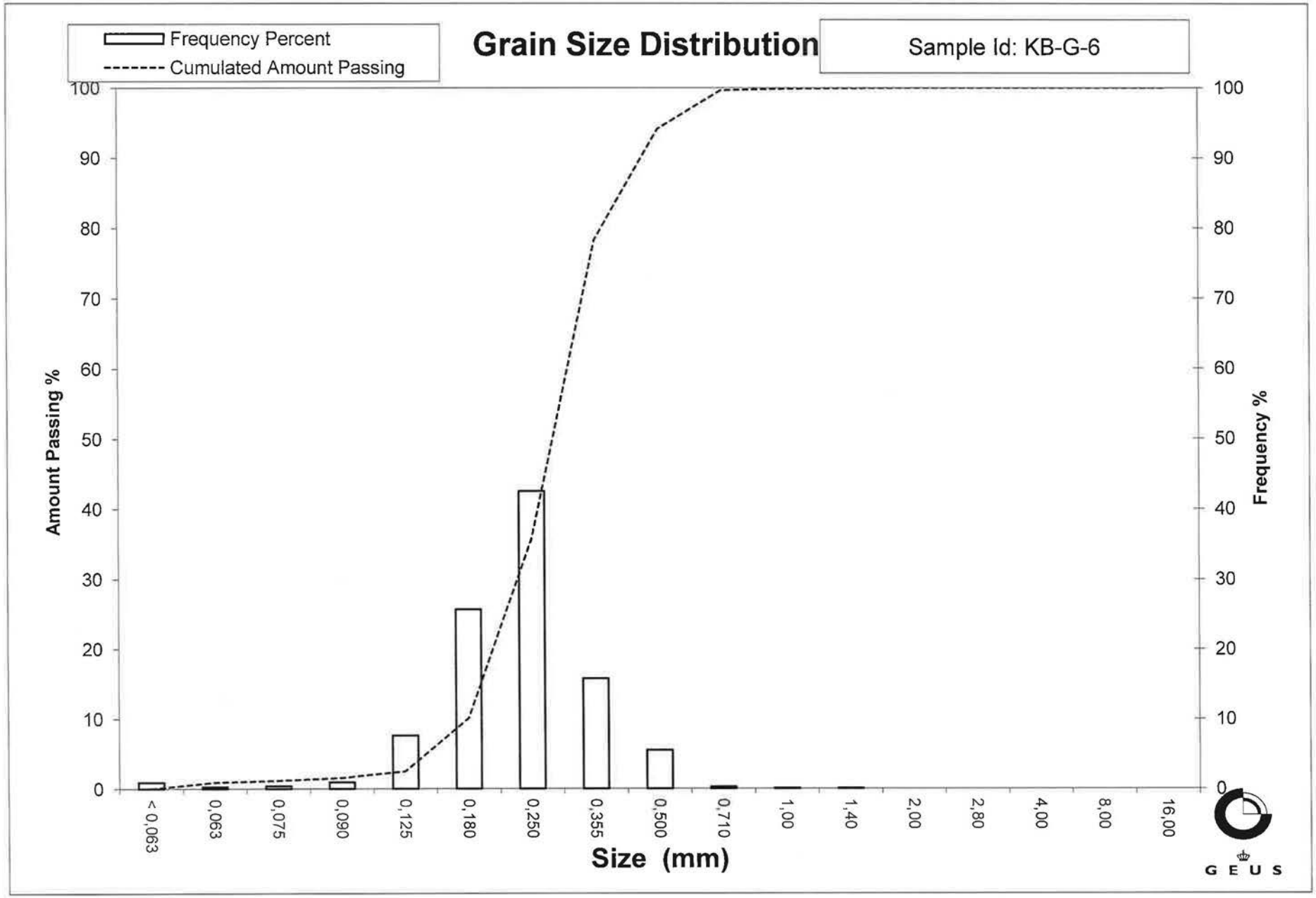
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-6
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-7
Lab. Id: 14022
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 112,49 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,00	0,00	99,89
	1,00	0,00	0,01	0,01	99,88
	0,710	0,49	0,11	0,10	99,79
	0,500	1,00	2,35	2,09	97,70
	0,355	1,49	12,09	10,75	86,95
	0,250	2,00	37,54	33,37	53,58
	0,180	2,47	36,57	32,51	21,07
	0,125	3,00	11,47	10,20	10,87
	0,090	3,47	5,10	4,53	6,34
	0,075	3,74	4,03	3,58	2,76
	0,063	3,99	1,46	1,30	1,46
	< 0,063	> 3,99	1,64	1,46	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,46
Sand, fine	(0,063 mm - 0,200 mm):	28,90
Sand, medium	(0,2 mm - 0,6 mm):	68,34
Sand, coarse	(0,6 mm - 2 mm):	1,20
Gravel	(> 2 mm):	0,11
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,46	1,11
16%	84%	0,35	1,53
25%	75%	0,32	1,66
40%	60%	0,27	1,89
Median 50%	50%	0,24	2,05
75%	25%	0,19	2,41
84%	16%	0,15	2,71
90%	10%	0,12	3,08
95%	5%	0,08	3,57

Moments Statistics

Mean	2,10
Sorting	0,67
Skewness	0,18
Kurtosis	1,34
Uniformity Coefficient	2,28

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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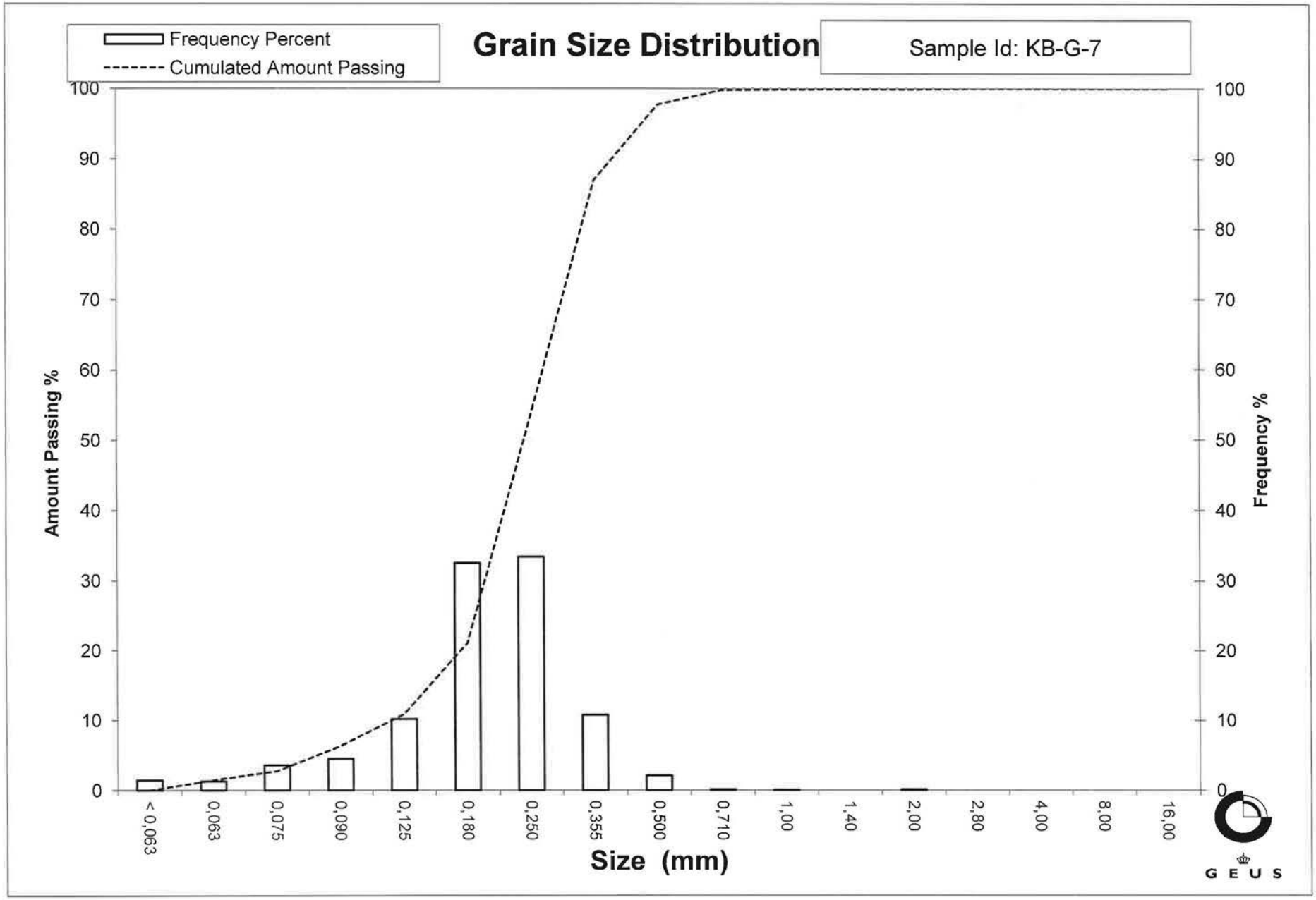
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-7
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-8
Lab. Id: 14023
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 103,52 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,06	0,06	99,94
	1,00	0,00	0,07	0,07	99,87
	0,710	0,49	0,11	0,11	99,77
	0,500	1,00	0,73	0,71	99,06
	0,355	1,49	2,08	2,01	97,05
	0,250	2,00	5,88	5,68	91,37
	0,180	2,47	10,74	10,37	81,00
	0,125	3,00	38,64	37,33	43,67
	0,090	3,47	19,89	19,21	24,46
	0,075	3,74	10,09	9,75	14,71
	0,063	3,99	7,89	7,62	7,09
	< 0,063	> 3,99	7,34	7,09	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	7,09
Sand, fine	(0,063 mm - 0,200 mm):	76,87
Sand, medium	(0,2 mm - 0,6 mm):	15,44
Sand, coarse	(0,6 mm - 2 mm):	0,60
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,32	1,66
16%	84%	0,20	2,32
25%	75%	0,17	2,55
40%	60%	0,15	2,75
Median 50%	50%	0,13	2,90
75%	25%	0,09	3,46
84%	16%	0,08	3,70
90%	10%	0,07	3,89
95%	5%	-------	-------

Moments Statistics

Mean	2,97
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,21

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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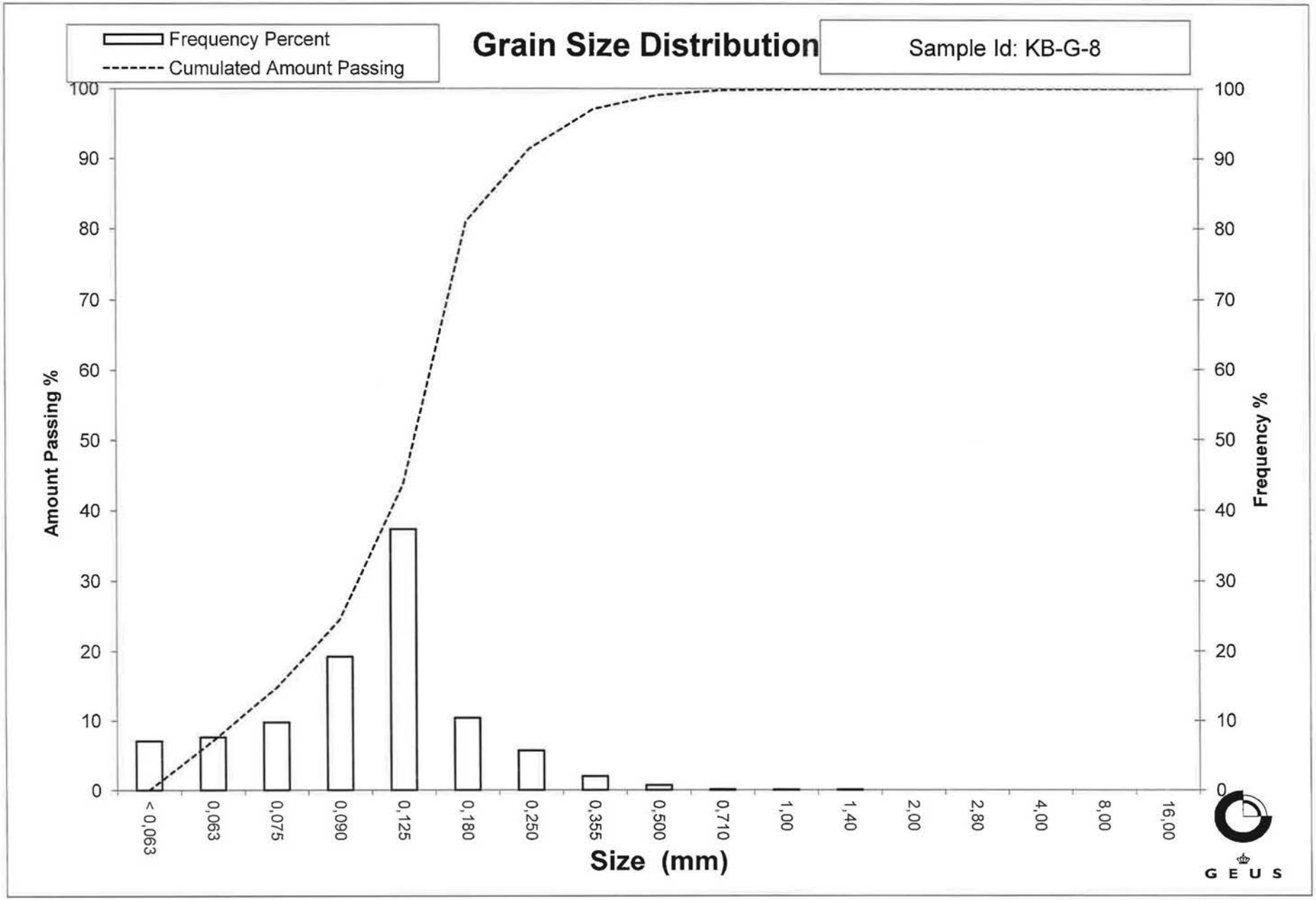
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-8
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-9
Lab. Id: 14024
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 113,42 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,06	0,05	99,95
	1,00	0,00	0,13	0,11	99,83
	0,710	0,49	0,78	0,69	99,14
	0,500	1,00	2,79	2,46	96,68
	0,355	1,49	3,25	2,87	93,82
	0,250	2,00	5,41	4,77	89,05
	0,180	2,47	10,05	8,86	80,19
	0,125	3,00	10,08	8,89	71,30
	0,090	3,47	43,14	38,04	33,27
	0,075	3,74	26,67	23,51	9,75
	0,063	3,99	5,78	5,10	4,66
	< 0,063	> 3,99	5,28	4,66	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,66
Sand, fine	(0,063 mm - 0,200 mm):	78,07
Sand, medium	(0,2 mm - 0,6 mm):	15,14
Sand, coarse	(0,6 mm - 2 mm):	2,14
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,41	1,27
16%	84%	0,21	2,25
25%	75%	0,15	2,76
40%	60%	0,11	3,13
Median 50%	50%	0,11	3,25
75%	25%	0,08	3,56
84%	16%	0,08	3,66
90%	10%	0,08	3,73
95%	5%	0,06	3,97

Moments Statistics

Mean	3,05
Sorting	0,76
Skewness	-0,44
Kurtosis	1,38
Uniformity Coefficient	1,52

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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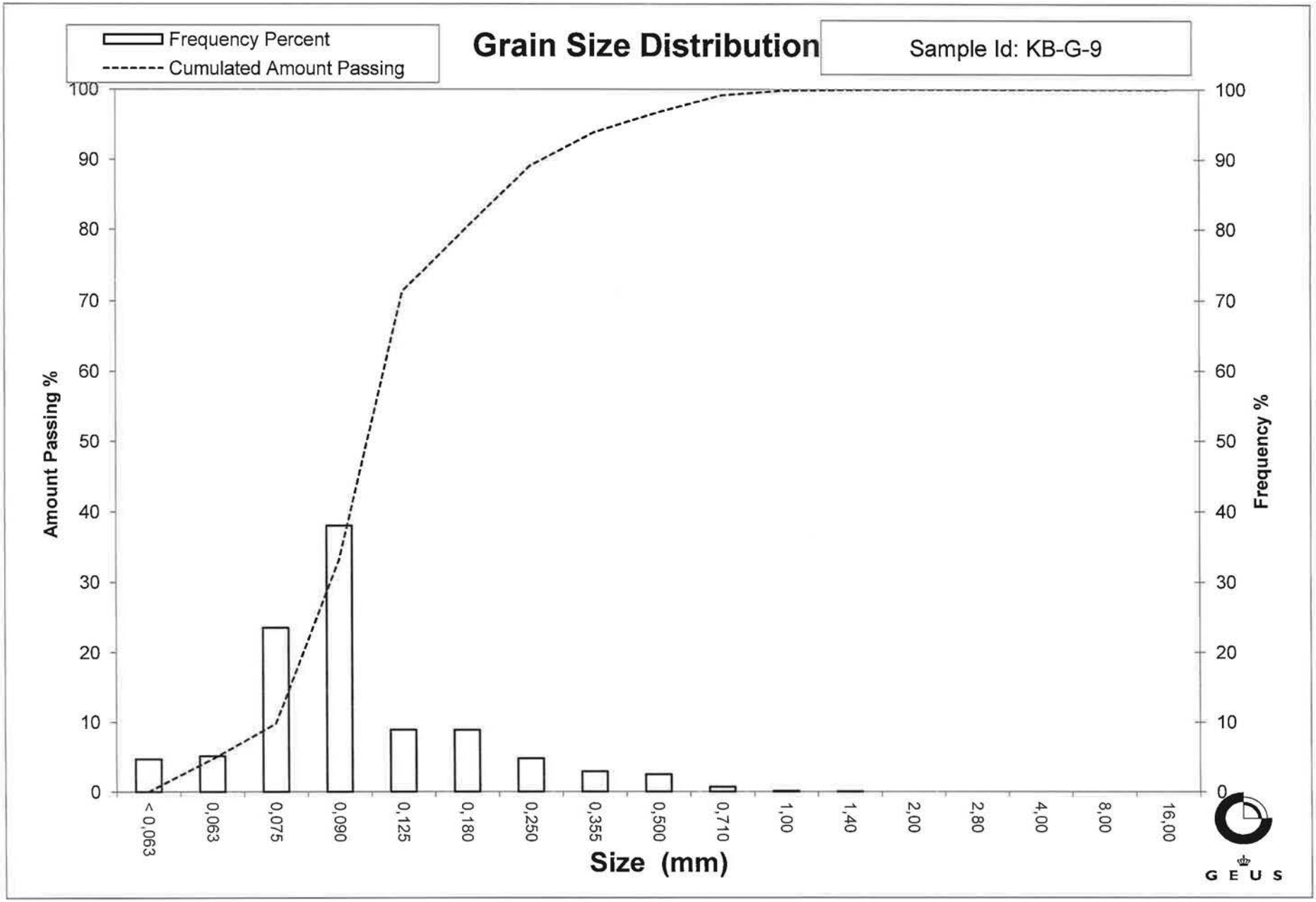
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-9
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-10
Lab. Id: 14025
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 122,4 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,44	0,36	99,64
	1,00	0,00	0,12	0,10	99,54
	0,710	0,49	0,37	0,30	99,24
	0,500	1,00	2,79	2,28	96,96
	0,355	1,49	11,35	9,27	87,69
	0,250	2,00	35,67	29,14	58,55
	0,180	2,47	20,77	16,97	41,58
	0,125	3,00	30,60	25,00	16,58
	0,090	3,47	14,90	12,17	4,40
	0,075	3,74	0,43	0,35	4,05
	0,063	3,99	0,26	0,21	3,84
	< 0,063	> 3,99	4,70	3,84	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,84
Sand, fine	(0,063 mm - 0,200 mm):	42,59
Sand, medium	(0,2 mm - 0,6 mm):	51,62
Sand, coarse	(0,6 mm - 2 mm):	1,95
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,47	1,09
16%	84%	0,34	1,55
25%	75%	0,31	1,69
40%	60%	0,26	1,97
Median 50%	50%	0,21	2,22
75%	25%	0,14	2,80
84%	16%	0,12	3,02
90%	10%	0,11	3,24
95%	5%	0,09	3,45

Moments Statistics

Mean	2,26
Sorting	0,72
Skewness	0,07
Kurtosis	0,87
Uniformity Coefficient	2,41

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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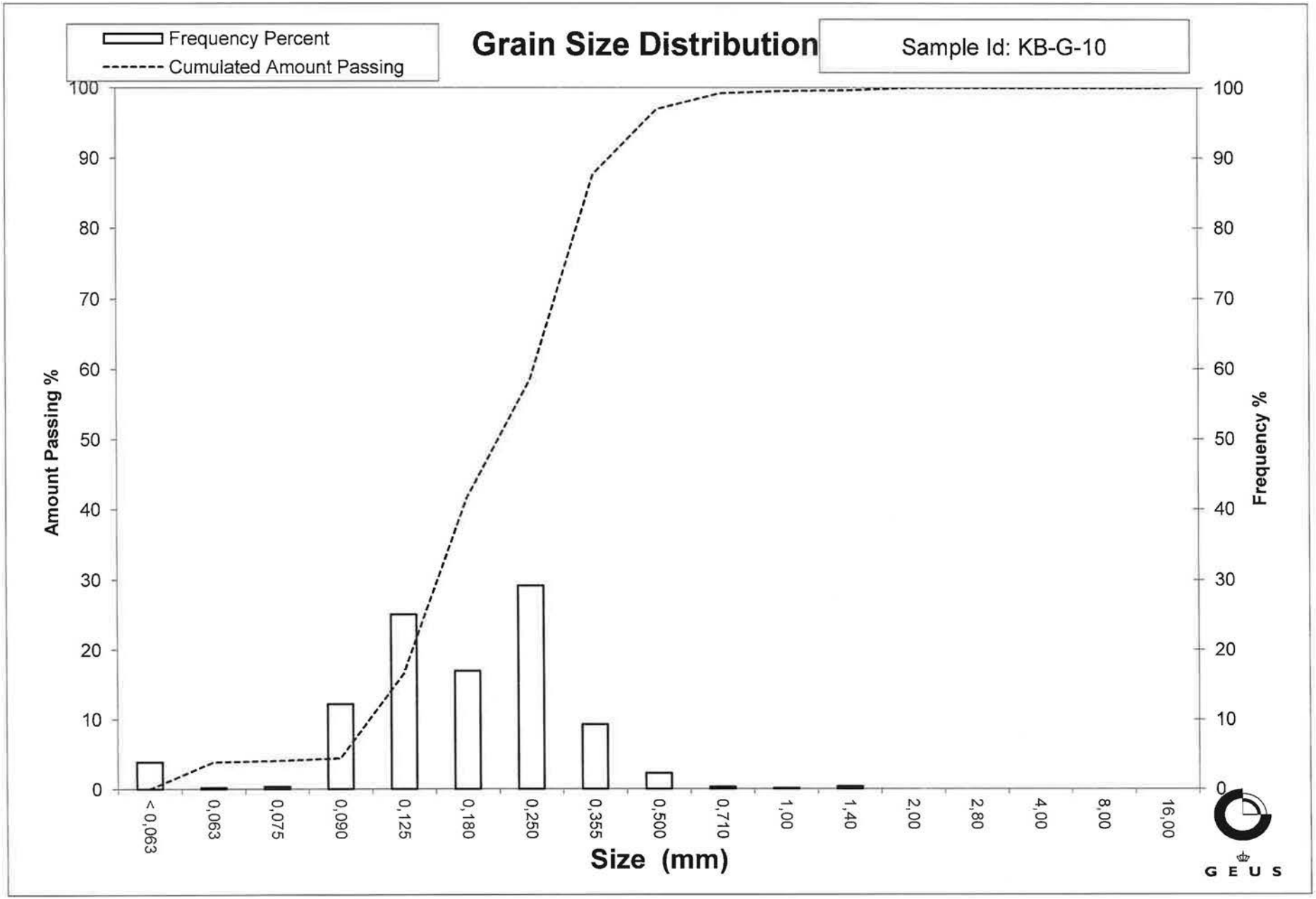
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-10
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-11
Lab. Id: 14026
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 120,91 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,19	0,16	99,84
	1,00	0,00	0,12	0,10	99,74
	0,710	0,49	0,08	0,07	99,68
	0,500	1,00	0,15	0,12	99,55
	0,355	1,49	0,26	0,22	99,34
	0,250	2,00	0,75	0,62	98,72
	0,180	2,47	1,92	1,59	97,13
	0,125	3,00	10,24	8,47	88,66
	0,090	3,47	34,67	28,67	59,99
	0,075	3,74	41,19	34,07	25,92
	0,063	3,99	16,33	13,51	12,41
	< 0,063	> 3,99	15,01	12,41	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	12,41
Sand, fine	(0,063 mm - 0,200 mm):	85,17
Sand, medium	(0,2 mm - 0,6 mm):	2,03
Sand, coarse	(0,6 mm - 2 mm):	0,39
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,17	2,59
16%	84%	0,12	3,07
25%	75%	0,11	3,21
40%	60%	0,09	3,47
Median 50%	50%	0,09	3,55
75%	25%	0,07	3,75
84%	16%	0,07	3,92
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,51
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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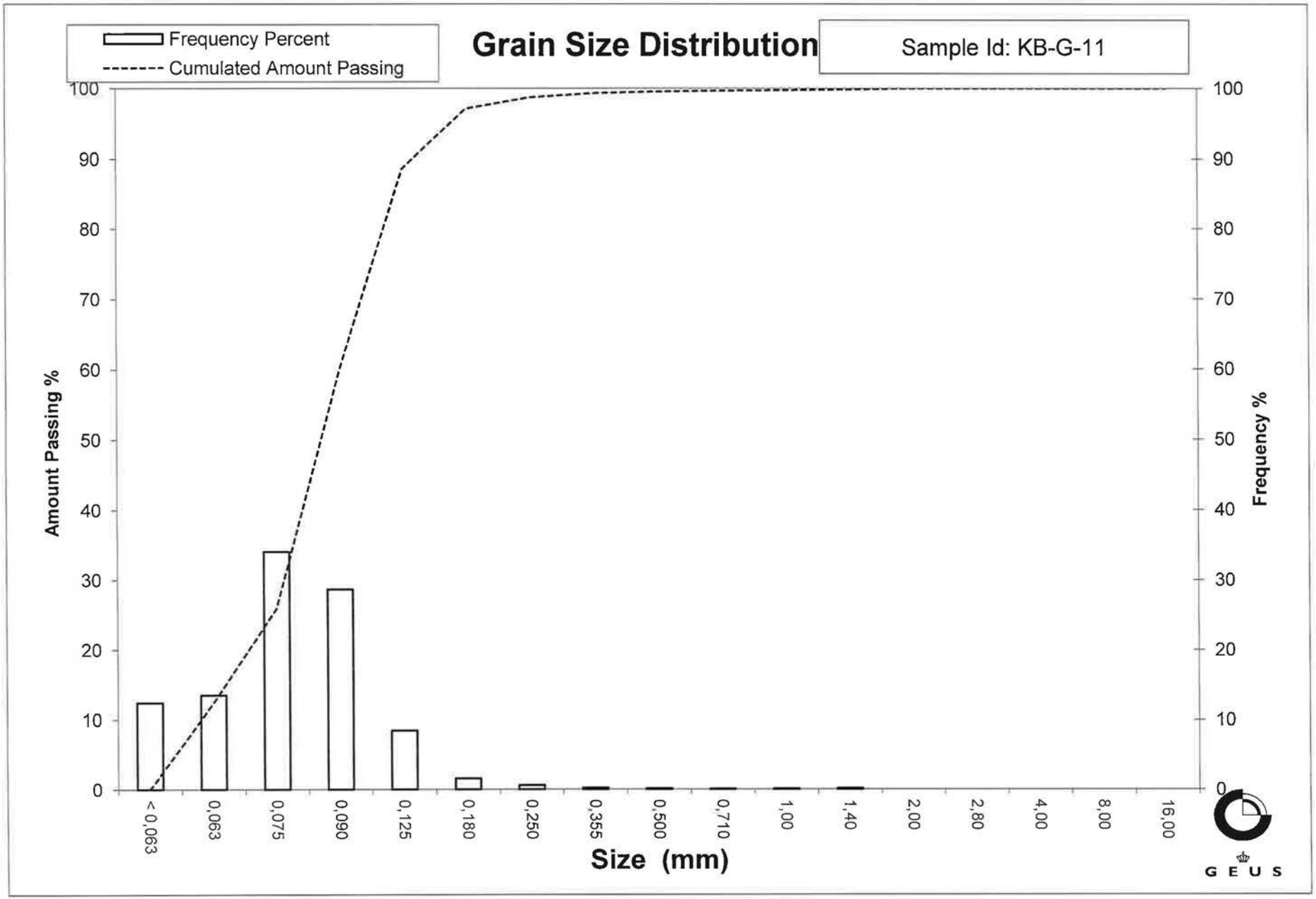
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-11
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-12
Lab. Id: 14027
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 118,87 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,15	0,13	99,87
Sand	1,40	-0,49	0,06	0,05	99,82
	1,00	0,00	0,06	0,05	99,77
	0,710	0,49	0,40	0,34	99,44
	0,500	1,00	3,03	2,55	96,89
	0,355	1,49	8,30	6,98	89,90
	0,250	2,00	17,69	14,88	75,02
	0,180	2,47	37,26	31,35	43,68
	0,125	3,00	39,32	33,08	10,60
	0,090	3,47	5,28	4,44	6,16
	0,075	3,74	2,34	1,97	4,19
	0,063	3,99	2,13	1,79	2,40
	< 0,063	> 3,99	2,85	2,40	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,40
Sand, fine	(0,063 mm - 0,200 mm):	50,24
Sand, medium	(0,2 mm - 0,6 mm):	45,47
Sand, coarse	(0,6 mm - 2 mm):	1,77
Gravel	(> 2 mm):	0,13
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,46	1,12
16%	84%	0,31	1,67
25%	75%	0,25	2,00
40%	60%	0,22	2,21
Median 50%	50%	0,19	2,36
75%	25%	0,15	2,75
84%	16%	0,13	2,90
90%	10%	0,12	3,06
95%	5%	0,08	3,62

Moments Statistics

Mean	2,31
Sorting	0,69
Skewness	-0,06
Kurtosis	1,37
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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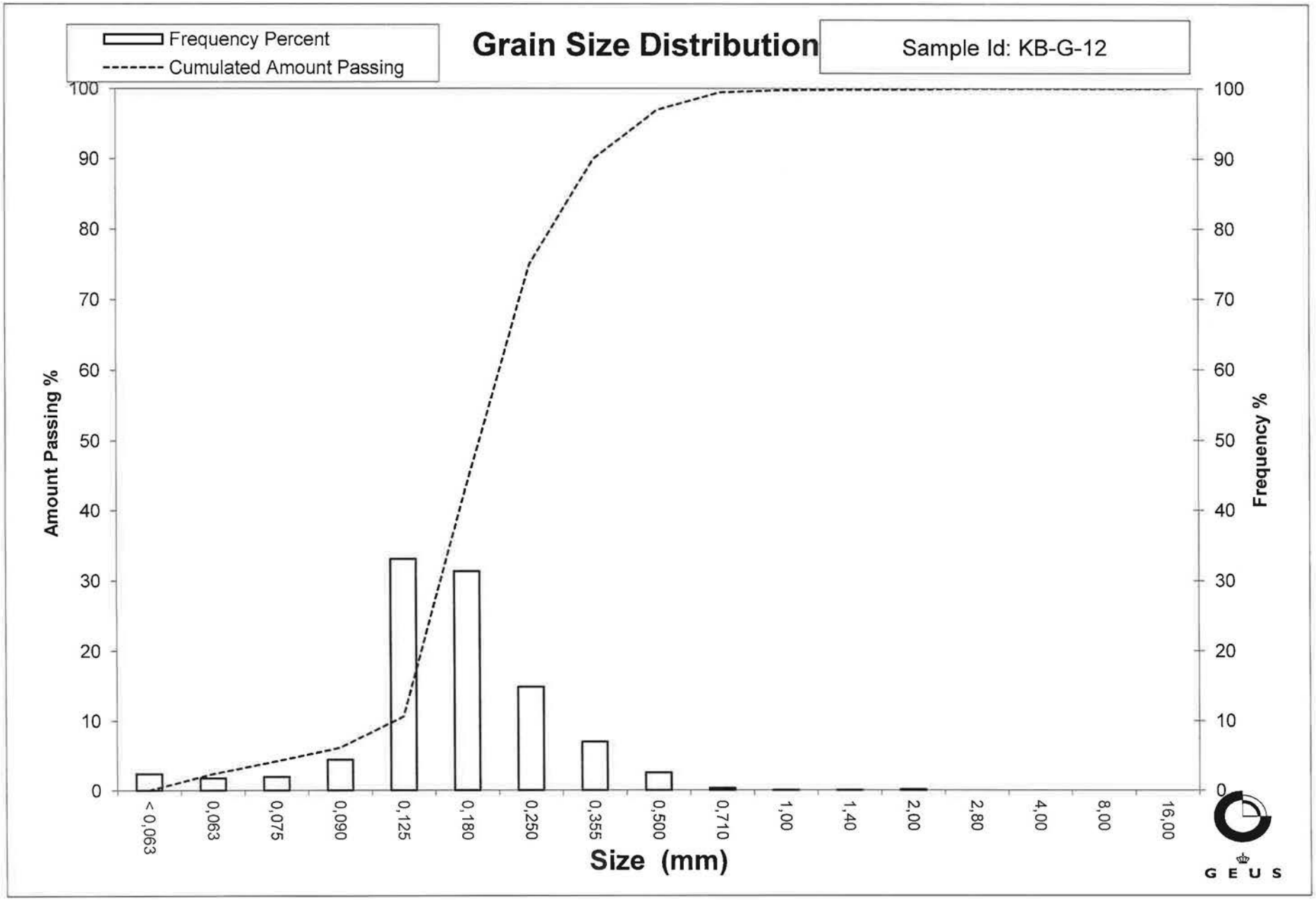
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-12
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-13
Lab. Id: 14028
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

G E U S

Total Weight 115,63 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	2,00	-1,00	0,06	0,05	99,95
	1,40	-0,49	0,02	0,02	99,93
	1,00	0,00	0,01	0,01	99,92
	0,710	0,49	0,12	0,10	99,82
	0,500	1,00	0,20	0,17	99,65
	0,355	1,49	0,46	0,40	99,25
	0,250	2,00	0,76	0,66	98,59
	0,180	2,47	1,96	1,70	96,90
	0,125	3,00	53,57	46,33	50,57
	0,090	3,47	23,09	19,97	30,60
	0,075	3,74	11,43	9,88	20,71
	0,063	3,99	9,11	7,88	12,83
	< 0,063	> 3,99	14,84	12,83	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	12,83
Sand, fine	(0,063 mm - 0,200 mm):	84,55
Sand, medium	(0,2 mm - 0,6 mm):	2,35
Sand, coarse	(0,6 mm - 2 mm):	0,22
Gravel	(> 2 mm):	0,05
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,18	2,49
16%	84%	0,16	2,60
25%	75%	0,15	2,70
40%	60%	0,14	2,88
Median 50%	50%	0,12	3,01
75%	25%	0,08	3,62
84%	16%	0,07	3,88
90%	10%	--------	--------
95%	5%	--------	--------

Moments Statistics

Mean	3,17
Sorting	--------
Skewness	--------
Kurtosis	--------
Uniformity Coefficient	--------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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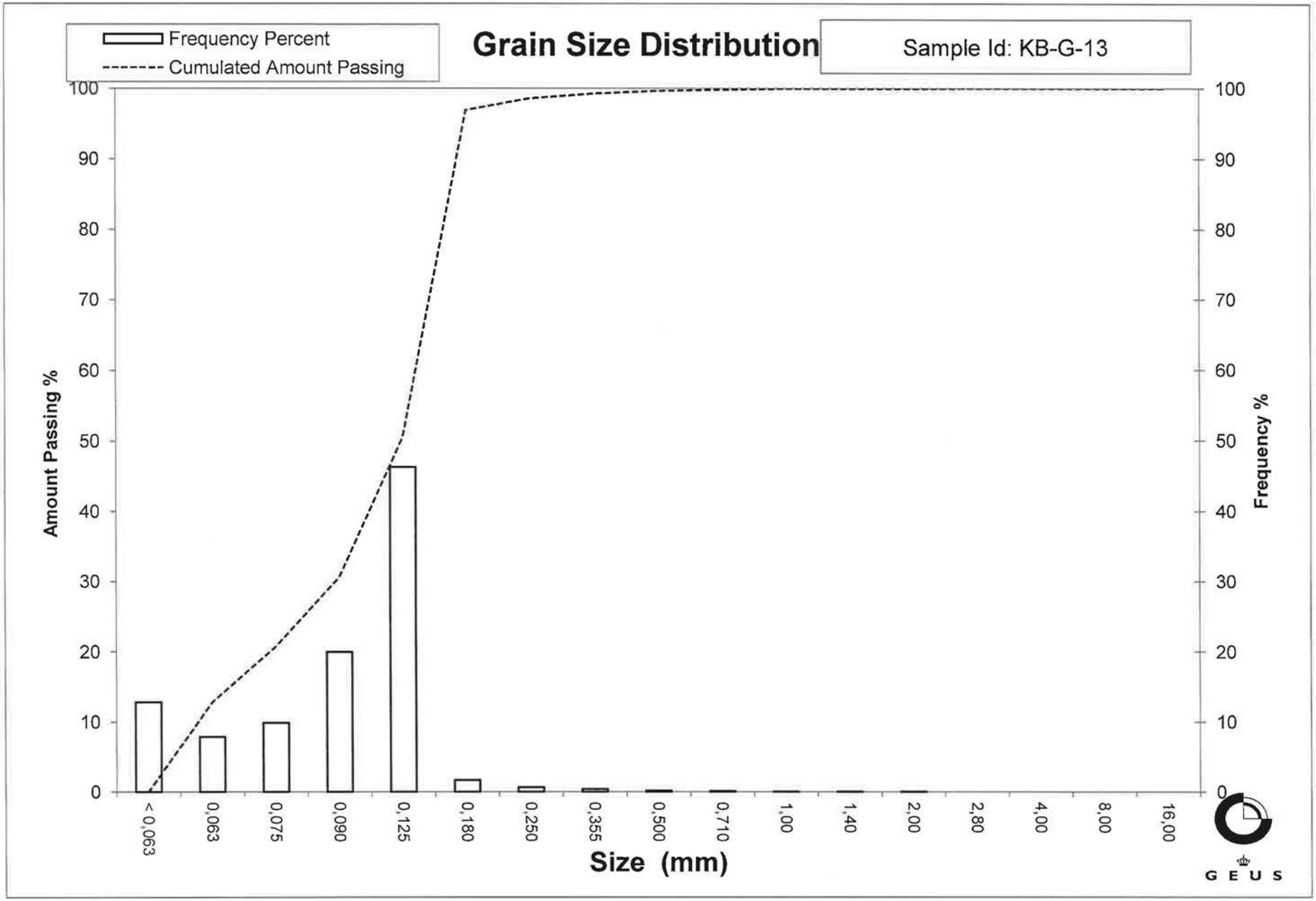
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-13
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-14
Lab. Id: 14029
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 107,32 g

Size Fractions

Sieve Analysis — Gravel / Sand

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	0,42	0,39	99,61
2,80	-1,49	0,02	0,02	99,59
2,00	-1,00	0,03	0,03	99,56
1,40	-0,49	0,02	0,02	99,54
1,00	0,00	0,02	0,02	99,52
0,710	0,49	0,04	0,04	99,49
0,500	1,00	0,38	0,35	99,13
0,355	1,49	4,26	3,97	95,16
0,250	2,00	24,42	22,75	72,41
0,180	2,47	37,86	35,28	37,13
0,125	3,00	34,89	32,51	4,62
0,090	3,47	2,49	2,32	2,30
0,075	3,74	0,49	0,46	1,84
0,063	3,99	0,27	0,25	1,59
< 0,063	> 3,99	1,71	1,59	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,59
Sand, fine	(0,063 mm - 0,200 mm):	45,62
Sand, medium	(0,2 mm - 0,6 mm):	52,09
Sand, coarse	(0,6 mm - 2 mm):	0,26
Gravel	(> 2 mm):	0,44
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,35	1,50
16%	84%	0,30	1,72
25%	75%	0,26	1,93
40%	60%	0,23	2,15
Median 50%	50%	0,21	2,28
75%	25%	0,16	2,65
84%	16%	0,14	2,79
90%	10%	0,13	2,90
95%	5%	0,13	2,99

Moments Statistics

Mean	2,27
Sorting	0,49
Skewness	-0,05
Kurtosis	0,86
Uniformity Coefficient	1,68

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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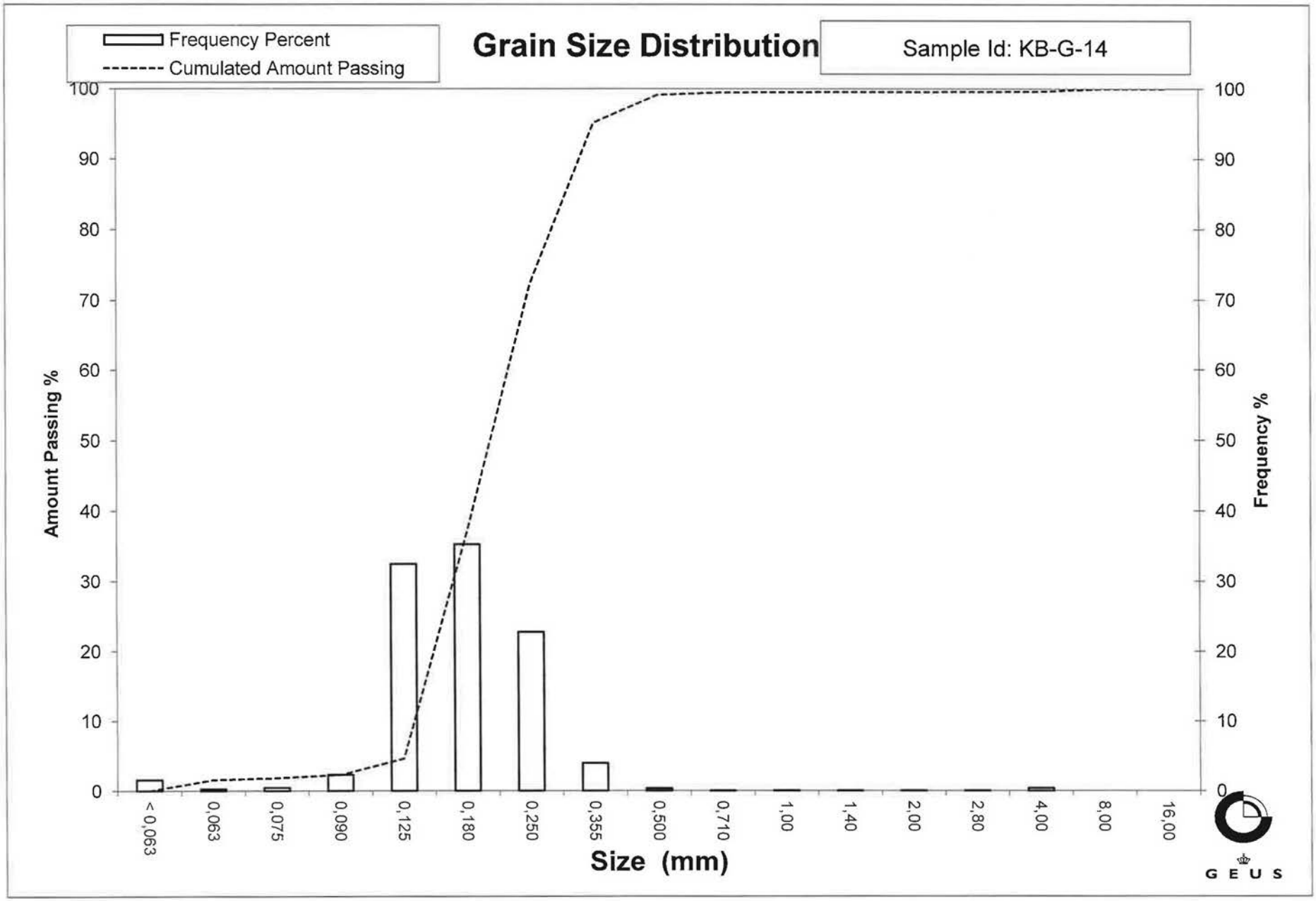
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-14
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-16
Lab. Id: 14030
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 119,69 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,20	0,17	99,83
	4,00	-2,00	0,00	0,00	99,83
	2,80	-1,49	0,00	0,00	99,83
	2,00	-1,00	0,00	0,00	99,83
Sand	1,40	-0,49	0,00	0,00	99,83
	1,00	0,00	0,01	0,01	99,82
	0,710	0,49	0,05	0,04	99,78
	0,500	1,00	0,61	0,51	99,27
	0,355	1,49	4,17	3,48	95,79
	0,250	2,00	20,34	16,99	78,80
	0,180	2,47	37,44	31,28	47,51
	0,125	3,00	20,94	17,50	30,02
	0,090	3,47	5,08	4,24	25,77
	0,075	3,74	3,51	2,93	22,84
	0,063	3,99	6,29	5,26	17,59
	< 0,063	> 3,99	21,05	17,59	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	17,59
Sand, fine	(0,063 mm - 0,200 mm):	38,86
Sand, medium	(0,2 mm - 0,6 mm):	43,06
Sand, coarse	(0,6 mm - 2 mm):	0,32
Gravel	(> 2 mm):	0,17
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,35	1,51
16%	84%	0,28	1,83
25%	75%	0,24	2,05
40%	60%	0,21	2,27
Median 50%	50%	0,19	2,43
75%	25%	0,09	3,54
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,13
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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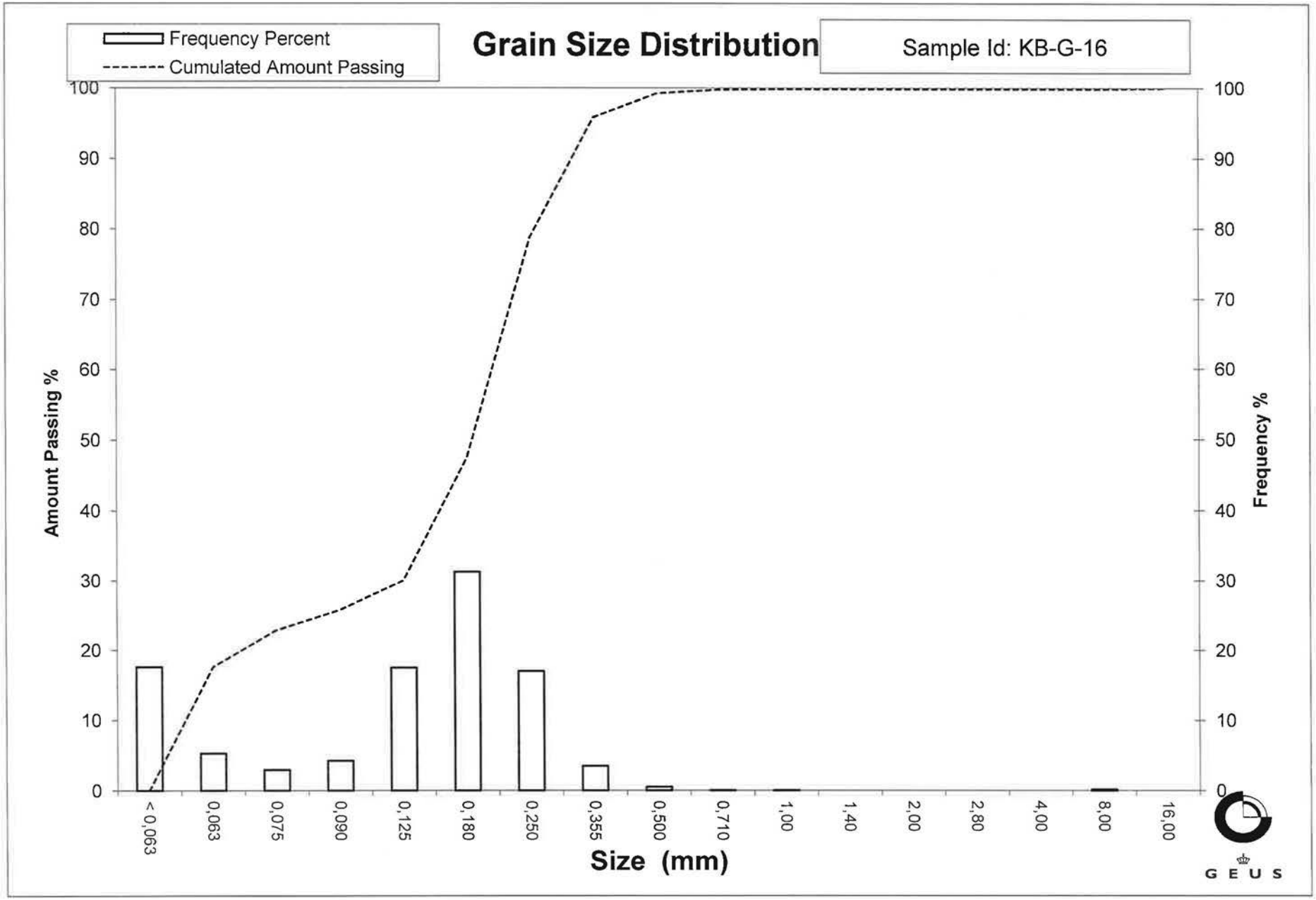
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-16
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-17
Lab. Id: 14031
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 110,92 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,10	0,09	99,91
	2,80	-1,49	0,05	0,05	99,86
	2,00	-1,00	0,03	0,03	99,84
Sand	1,40	-0,49	0,16	0,14	99,69
	1,00	0,00	1,82	1,64	98,05
	0,710	0,49	4,90	4,42	93,64
	0,500	1,00	23,39	21,09	72,55
	0,355	1,49	37,51	33,82	38,73
	0,250	2,00	15,02	13,54	25,19
	0,180	2,47	9,53	8,59	16,60
	0,125	3,00	14,75	13,30	3,30
	0,090	3,47	3,28	2,96	0,34
	0,075	3,74	0,17	0,15	0,19
	0,063	3,99	0,11	0,10	0,09
	< 0,063	> 3,99	0,10	0,09	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,09
Sand, fine	(0,063 mm - 0,200 mm):	18,96
Sand, medium	(0,2 mm - 0,6 mm):	63,54
Sand, coarse	(0,6 mm - 2 mm):	17,25
Gravel	(> 2 mm):	0,16
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,80	0,32
16%	84%	0,61	0,70
25%	75%	0,52	0,93
40%	60%	0,45	1,16
Median 50%	50%	0,40	1,31
75%	25%	0,25	2,01
84%	16%	0,18	2,49
90%	10%	0,15	2,71
95%	5%	0,13	2,92

Moments Statistics

Mean	1,50
Sorting	0,84
Skewness	0,28
Kurtosis	0,99
Uniformity Coefficient	2,92

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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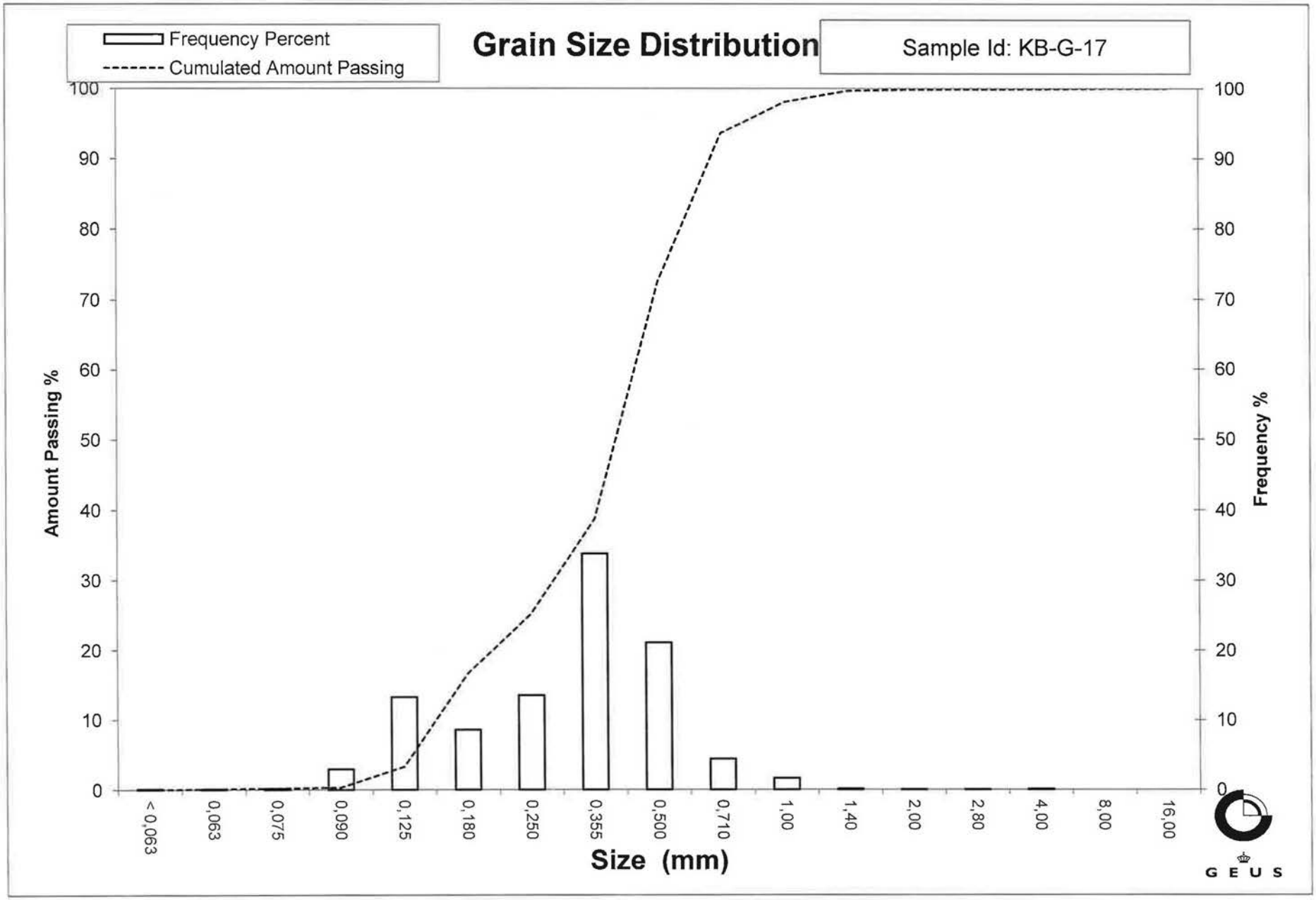
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-17
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: KB-G-18
Lab. Id: 14032
Submitter: Naturstyrelsen
Subject: Grab Køge Bugt
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 121,57 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,26	0,21	99,79
	4,00	-2,00	0,22	0,18	99,61
	2,80	-1,49	0,13	0,11	99,50
	2,00	-1,00	0,11	0,09	99,41
Sand	1,40	-0,49	0,09	0,07	99,33
	1,00	0,00	0,09	0,07	99,26
	0,710	0,49	0,08	0,07	99,19
	0,500	1,00	0,18	0,15	99,05
	0,355	1,49	0,62	0,51	98,54
	0,250	2,00	3,15	2,59	95,94
	0,180	2,47	11,29	9,29	86,66
	0,125	3,00	27,65	22,74	63,91
	0,090	3,47	29,81	24,52	39,39
	0,075	3,74	12,72	10,46	28,93
	0,063	3,99	14,03	11,54	17,39
	< 0,063	> 3,99	21,14	17,39	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	17,39
Sand, fine	(0,063 mm - 0,200 mm):	71,92
Sand, medium	(0,2 mm - 0,6 mm):	9,81
Sand, coarse	(0,6 mm - 2 mm):	0,29
Gravel	(> 2 mm):	0,59
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,24	2,04
16%	84%	0,17	2,53
25%	75%	0,15	2,72
40%	60%	0,12	3,07
Median 50%	50%	0,11	3,25
75%	25%	0,07	3,82
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,89
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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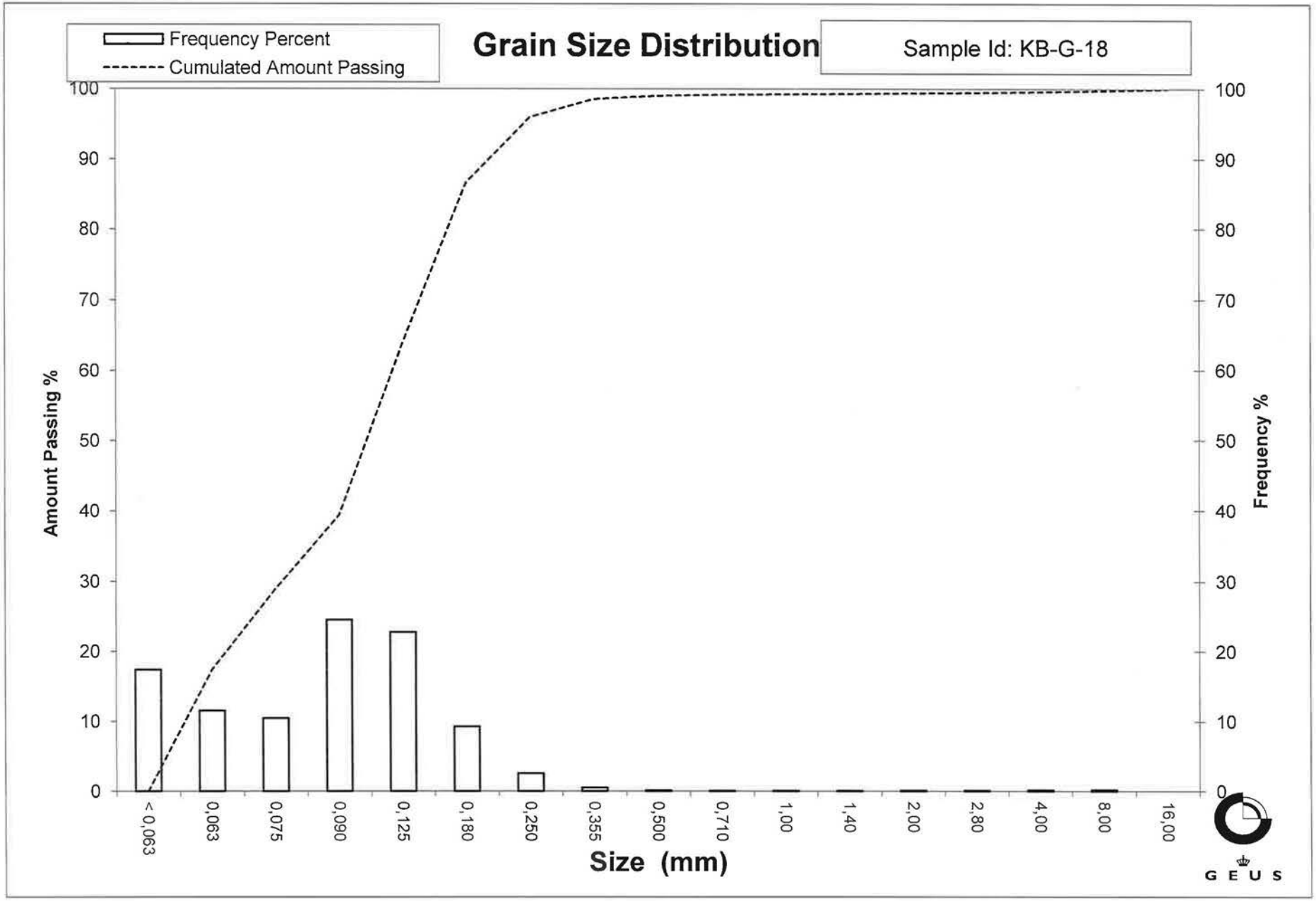
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: KB-G-18
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-01
Lab. Id: 14033
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 117,61 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	7,53	6,40	93,60
	1,00	0,00	1,45	1,23	92,36
	0,710	0,49	1,85	1,57	90,79
	0,500	1,00	4,80	4,08	86,71
	0,355	1,49	9,84	8,37	78,34
	0,250	2,00	13,54	11,51	66,83
	0,180	2,47	7,61	6,47	60,36
	0,125	3,00	4,83	4,11	56,25
	0,090	3,47	9,29	7,90	48,35
	0,075	3,74	5,76	4,90	43,46
	0,063	3,99	6,29	5,35	38,11
	< 0,063	> 3,99	44,82	38,11	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	38,11
Sand, fine	(0,063 mm - 0,200 mm):	24,10
Sand, medium	(0,2 mm - 0,6 mm):	26,44
Sand, coarse	(0,6 mm - 2 mm):	11,35
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	1,53	-0,61
16%	84%	0,45	1,14
25%	75%	0,32	1,62
40%	60%	0,18	2,51
Median 50%	50%	0,10	3,36
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,25
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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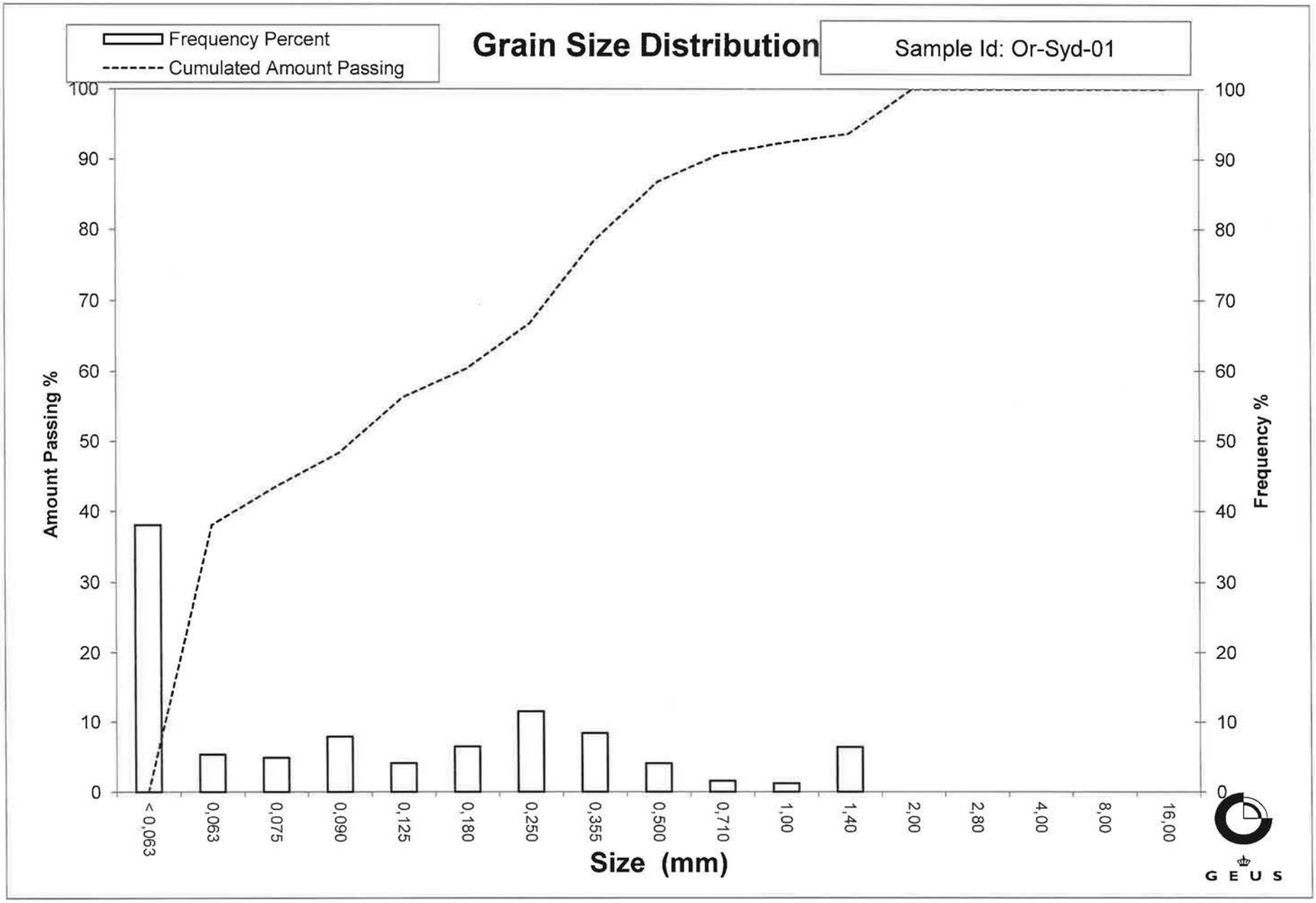
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-01
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-02
Lab. Id: 14034
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 130,1 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,17	0,13	99,87
	1,00	0,00	0,05	0,04	99,83
	0,710	0,49	0,00	0,00	99,83
	0,500	1,00	0,02	0,02	99,82
	0,355	1,49	0,05	0,04	99,78
	0,250	2,00	0,08	0,06	99,72
	0,180	2,47	0,15	0,12	99,60
	0,125	3,00	1,61	1,24	98,36
	0,090	3,47	15,11	11,61	86,75
	0,075	3,74	11,32	8,70	78,05
	0,063	3,99	13,29	10,22	67,83
	< 0,063	> 3,99	88,25	67,83	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	67,83
Sand, fine	(0,063 mm - 0,200 mm):	31,80
Sand, medium	(0,2 mm - 0,6 mm):	0,19
Sand, coarse	(0,6 mm - 2 mm):	0,18
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,11	3,12
16%	84%	0,09	3,55
25%	75%	0,07	3,81
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,55
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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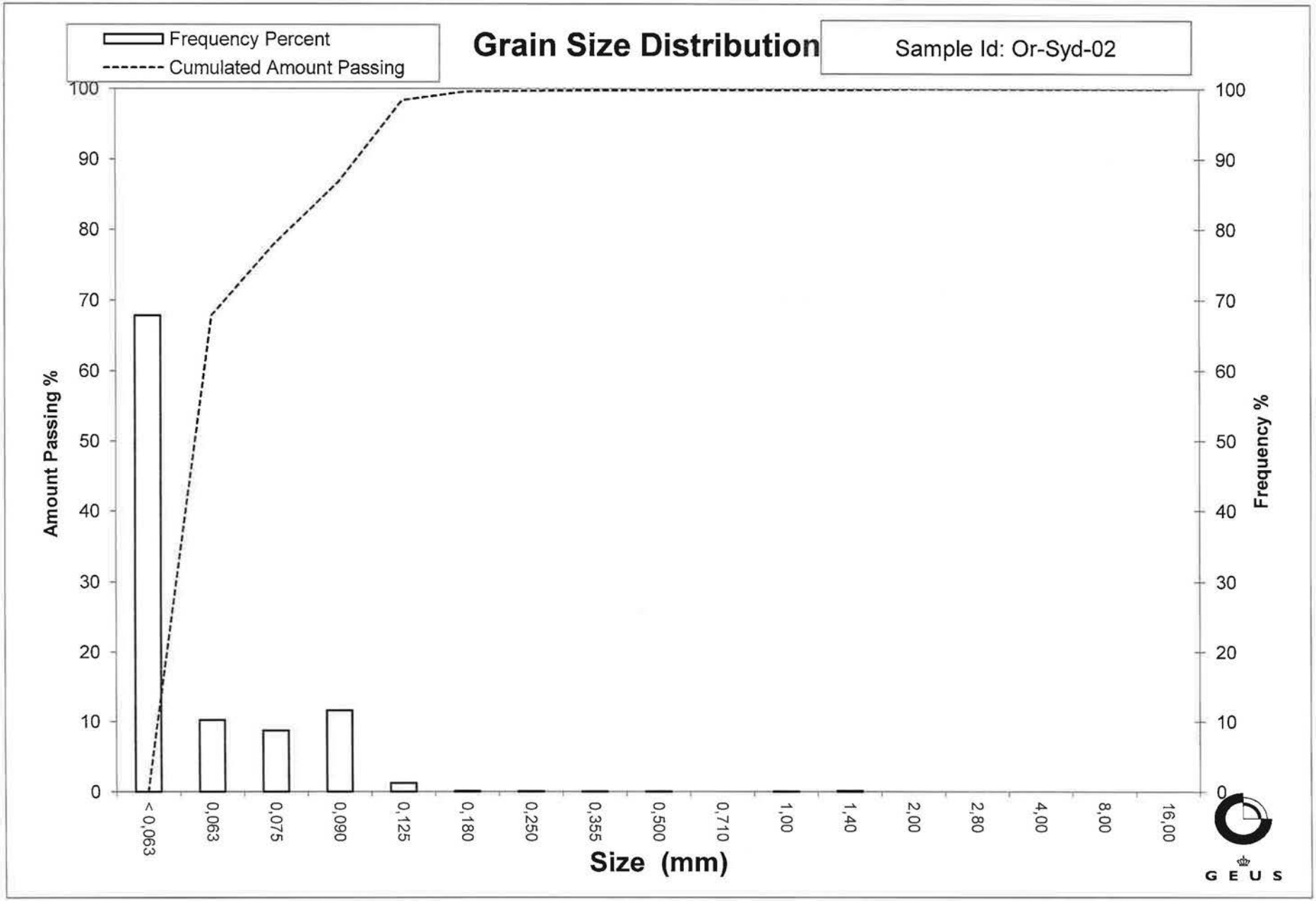
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-02
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-03
Lab. Id: 14035
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 109,72 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,08	0,07	99,93
	1,00	0,00	0,06	0,05	99,87
	0,710	0,49	0,04	0,04	99,84
	0,500	1,00	0,08	0,07	99,76
	0,355	1,49	0,08	0,07	99,69
	0,250	2,00	0,11	0,10	99,59
	0,180	2,47	0,15	0,14	99,45
	0,125	3,00	0,92	0,84	98,61
	0,090	3,47	7,32	6,67	91,94
	0,075	3,74	7,51	6,84	85,10
	0,063	3,99	9,41	8,58	76,52
	< 0,063	> 3,99	83,96	76,52	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	76,52
Sand, fine	(0,063 mm - 0,200 mm):	22,97
Sand, medium	(0,2 mm - 0,6 mm):	0,31
Sand, coarse	(0,6 mm - 2 mm):	0,20
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,11	3,24
16%	84%	0,07	3,77
25%	75%	-------	-------
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,77
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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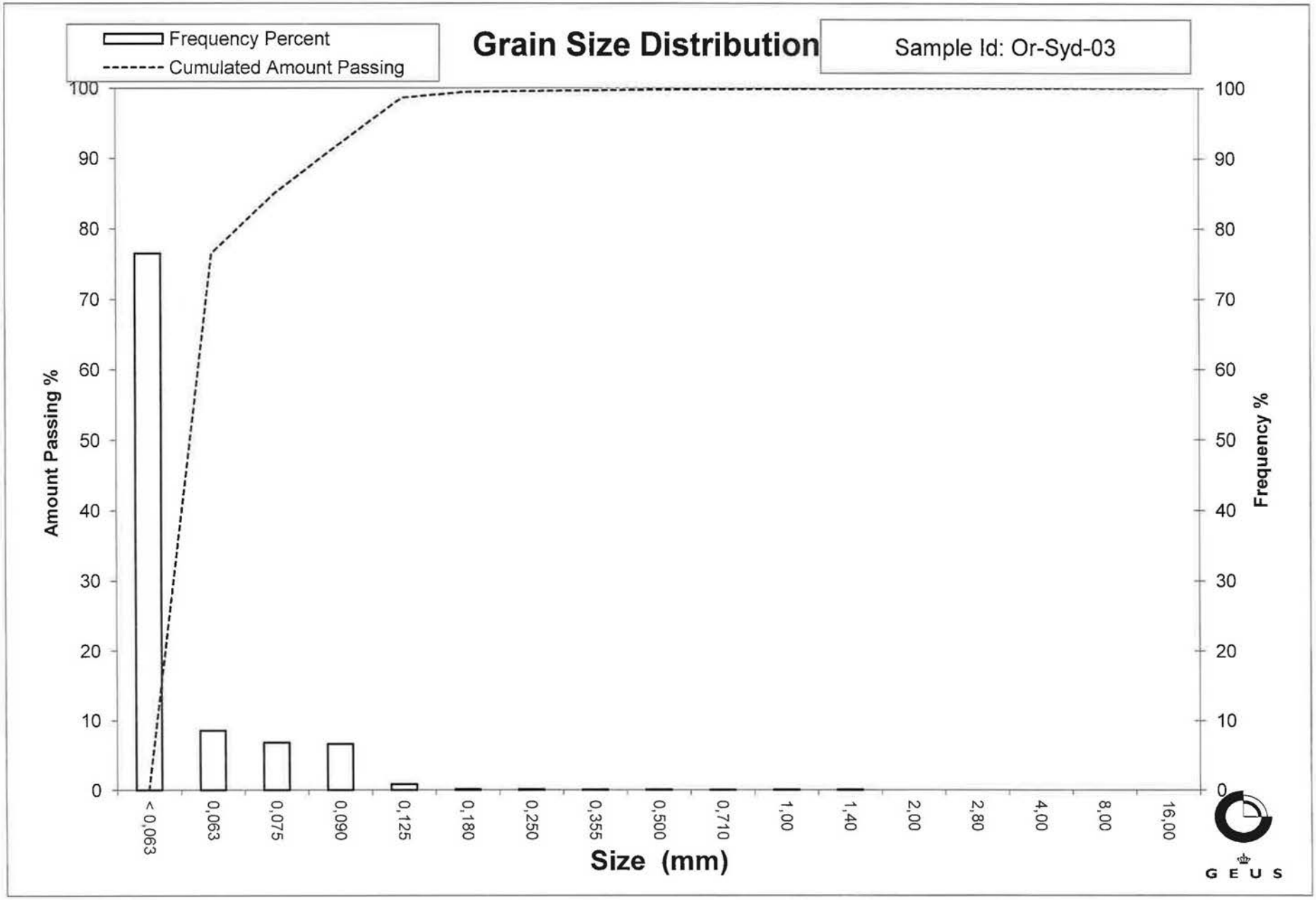
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-03
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-04
Lab. Id: 14036
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 130,35 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,07	0,05	99,95
	1,00	0,00	0,08	0,06	99,88
	0,710	0,49	0,08	0,06	99,82
	0,500	1,00	0,13	0,10	99,72
	0,355	1,49	0,15	0,12	99,61
	0,250	2,00	0,22	0,17	99,44
	0,180	2,47	0,31	0,24	99,20
	0,125	3,00	1,57	1,20	98,00
	0,090	3,47	11,61	8,91	89,09
	0,075	3,74	11,11	8,52	80,57
	0,063	3,99	13,15	10,09	70,48
	< 0,063	> 3,99	91,87	70,48	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	70,48
Sand, fine	(0,063 mm - 0,200 mm):	28,79
Sand, medium	(0,2 mm - 0,6 mm):	0,50
Sand, coarse	(0,6 mm - 2 mm):	0,23
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,11	3,14
16%	84%	0,08	3,63
25%	75%	0,07	3,87
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,63
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (Folk and Ward 1957)

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

Mean, sorting, skewness and kurtosis are based on

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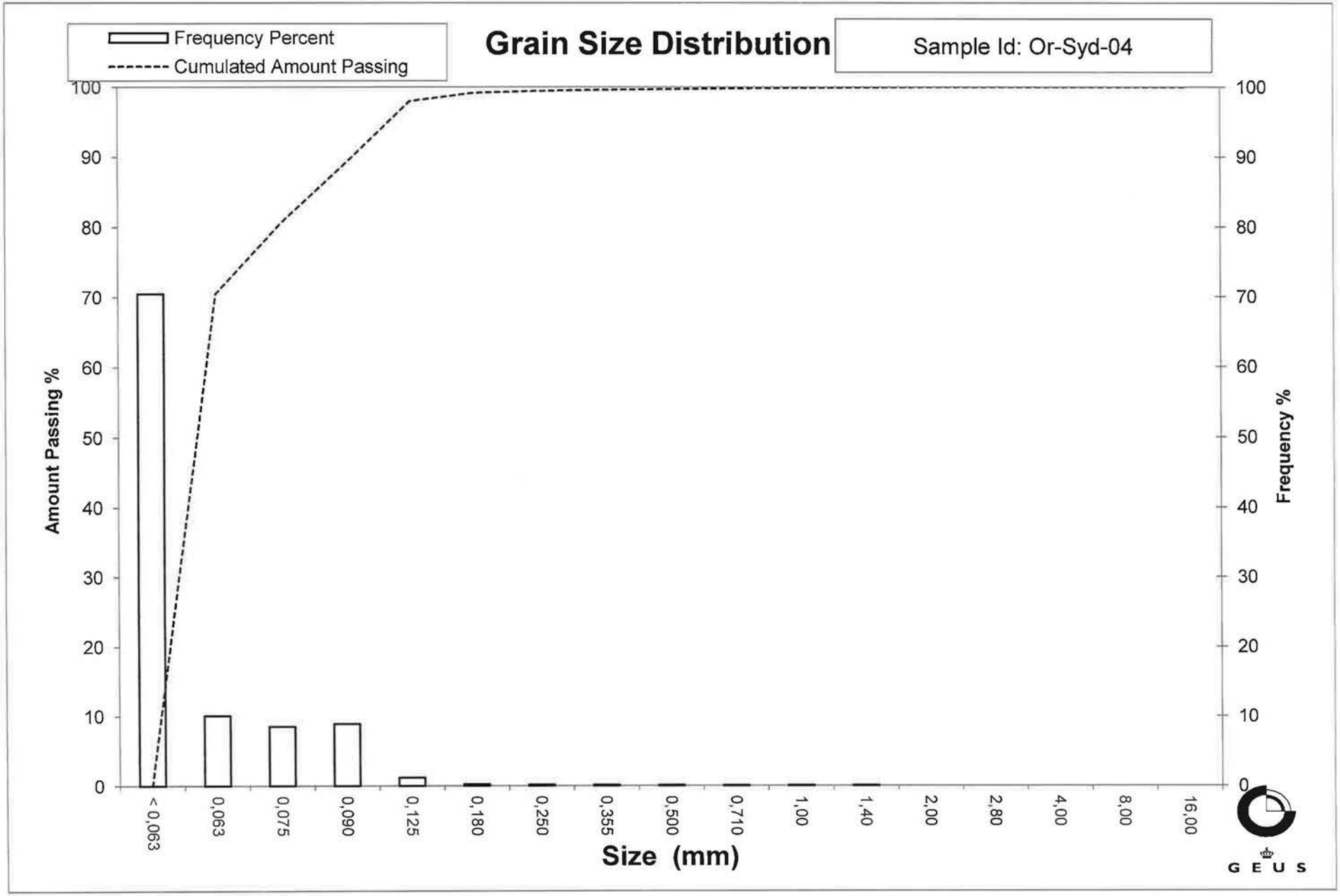
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-04
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-05
Lab. Id: 14037
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 108,57 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	7,26	6,69	93,31
	2,80	-1,49	2,62	2,41	90,90
	2,00	-1,00	0,00	0,00	90,90
Sand	1,40	-0,49	0,20	0,18	90,72
	1,00	0,00	0,53	0,49	90,23
	0,710	0,49	0,57	0,53	89,70
	0,500	1,00	0,73	0,67	89,03
	0,355	1,49	0,67	0,62	88,41
	0,250	2,00	0,73	0,67	87,74
	0,180	2,47	0,61	0,56	87,18
	0,125	3,00	0,41	0,38	86,80
	0,090	3,47	10,24	9,43	77,37
	0,075	3,74	6,57	6,05	71,32
	0,063	3,99	6,06	5,58	65,74
	< 0,063	> 3,99	71,37	65,74	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	65,74
Sand, fine	(0,063 mm - 0,200 mm):	21,60
Sand, medium	(0,2 mm - 0,6 mm):	2,01
Sand, coarse	(0,6 mm - 2 mm):	1,55
Gravel	(> 2 mm):	9,10
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	5,01	-2,32
16%	84%	0,11	3,13
25%	75%	0,08	3,57
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,13
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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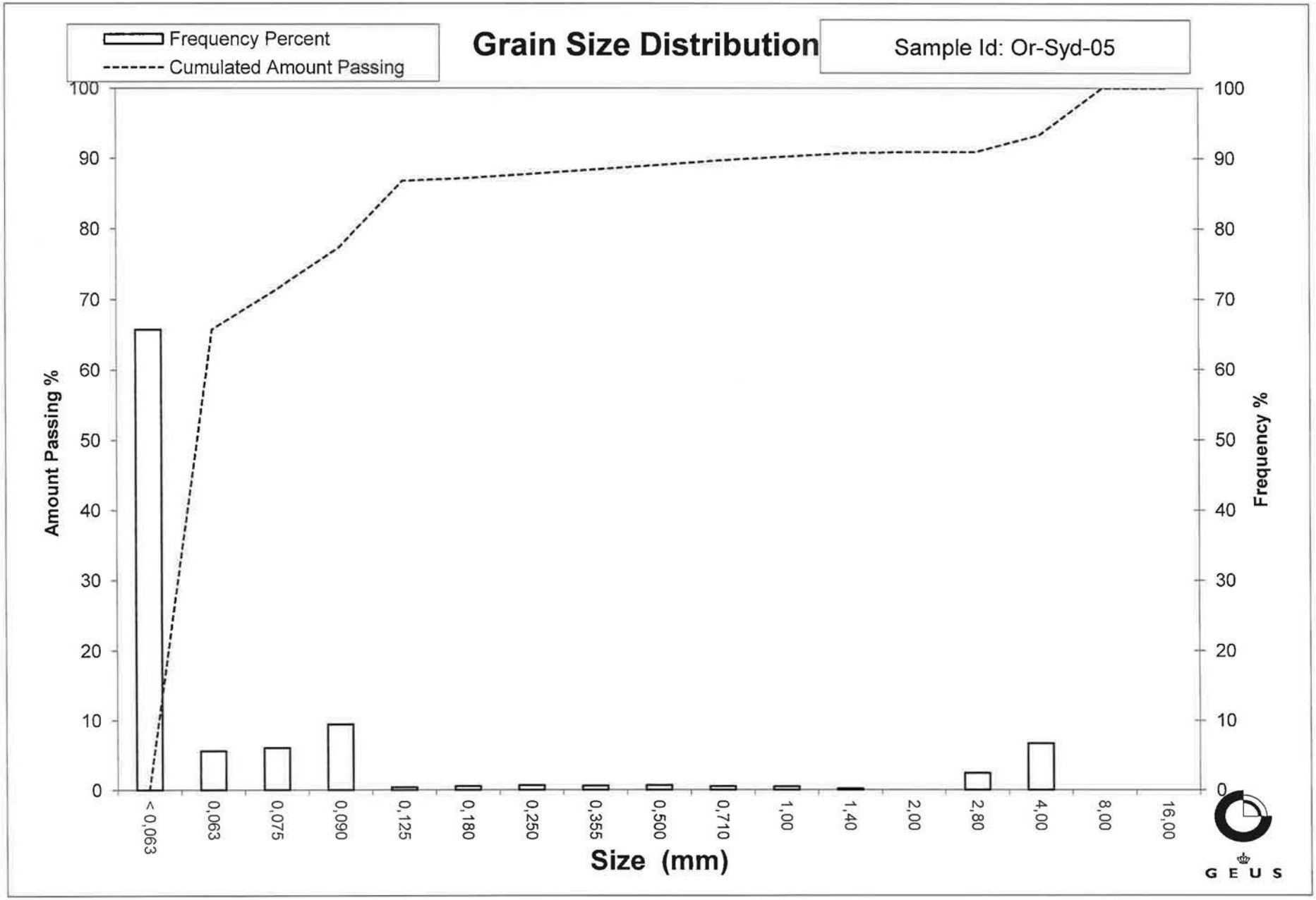
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-05
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-06
Lab. Id: 14038
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 119,85 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,12	0,10	99,90
	1,00	0,00	0,20	0,17	99,73
	0,710	0,49	0,00	0,00	99,73
	0,500	1,00	0,01	0,01	99,72
	0,355	1,49	0,06	0,05	99,67
	0,250	2,00	0,20	0,17	99,51
	0,180	2,47	0,50	0,42	99,09
	0,125	3,00	10,07	8,40	90,69
	0,090	3,47	32,70	27,28	63,40
	0,075	3,74	15,28	12,75	50,65
	0,063	3,99	13,52	11,28	39,37
	< 0,063	> 3,99	47,19	39,37	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	39,37
Sand, fine	(0,063 mm - 0,200 mm):	59,84
Sand, medium	(0,2 mm - 0,6 mm):	0,52
Sand, coarse	(0,6 mm - 2 mm):	0,27
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,15	2,71
16%	84%	0,12	3,10
25%	75%	0,10	3,25
40%	60%	0,09	3,54
Median 50%	50%	0,07	3,75
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,43
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (Folk and Ward 1957)

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

Mean, sorting, skewness and kurtosis are based on

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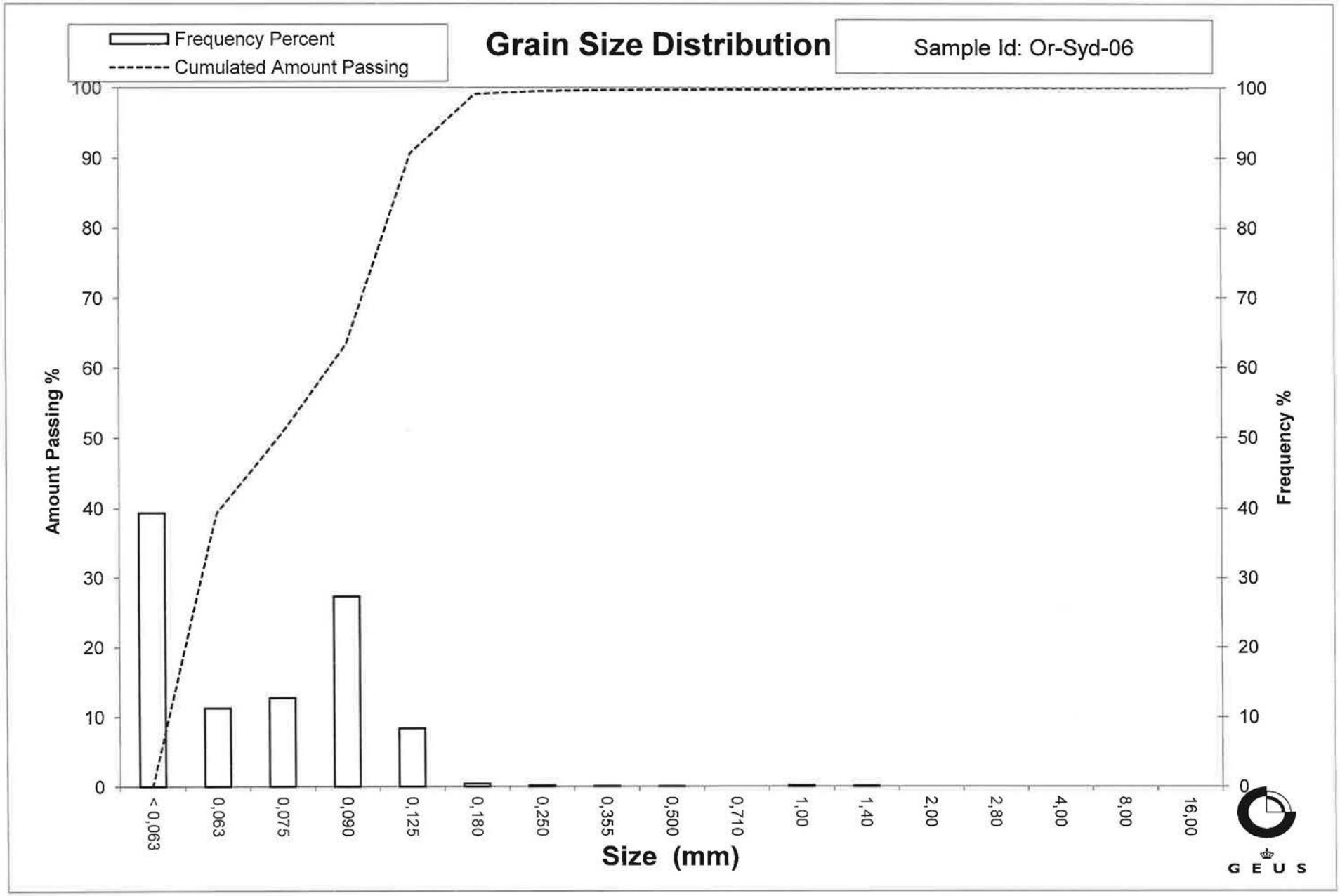
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-06
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-07
Lab. Id: 14039
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 127,35 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,02	0,02	99,98
	1,00	0,00	0,01	0,01	99,98
	0,710	0,49	0,00	0,00	99,98
	0,500	1,00	0,01	0,01	99,97
	0,355	1,49	0,06	0,05	99,92
	0,250	2,00	0,13	0,10	99,82
	0,180	2,47	0,26	0,20	99,62
	0,125	3,00	4,38	3,44	96,18
	0,090	3,47	27,28	21,42	74,75
	0,075	3,74	16,66	13,08	61,67
	0,063	3,99	16,50	12,96	48,72
	< 0,063	> 3,99	62,04	48,72	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	48,72
Sand, fine	(0,063 mm - 0,200 mm):	50,96
Sand, medium	(0,2 mm - 0,6 mm):	0,30
Sand, coarse	(0,6 mm - 2 mm):	0,03
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,02
16%	84%	0,11	3,25
25%	75%	0,09	3,47
40%	60%	0,07	3,77
Median 50%	50%	0,06	3,96
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,61
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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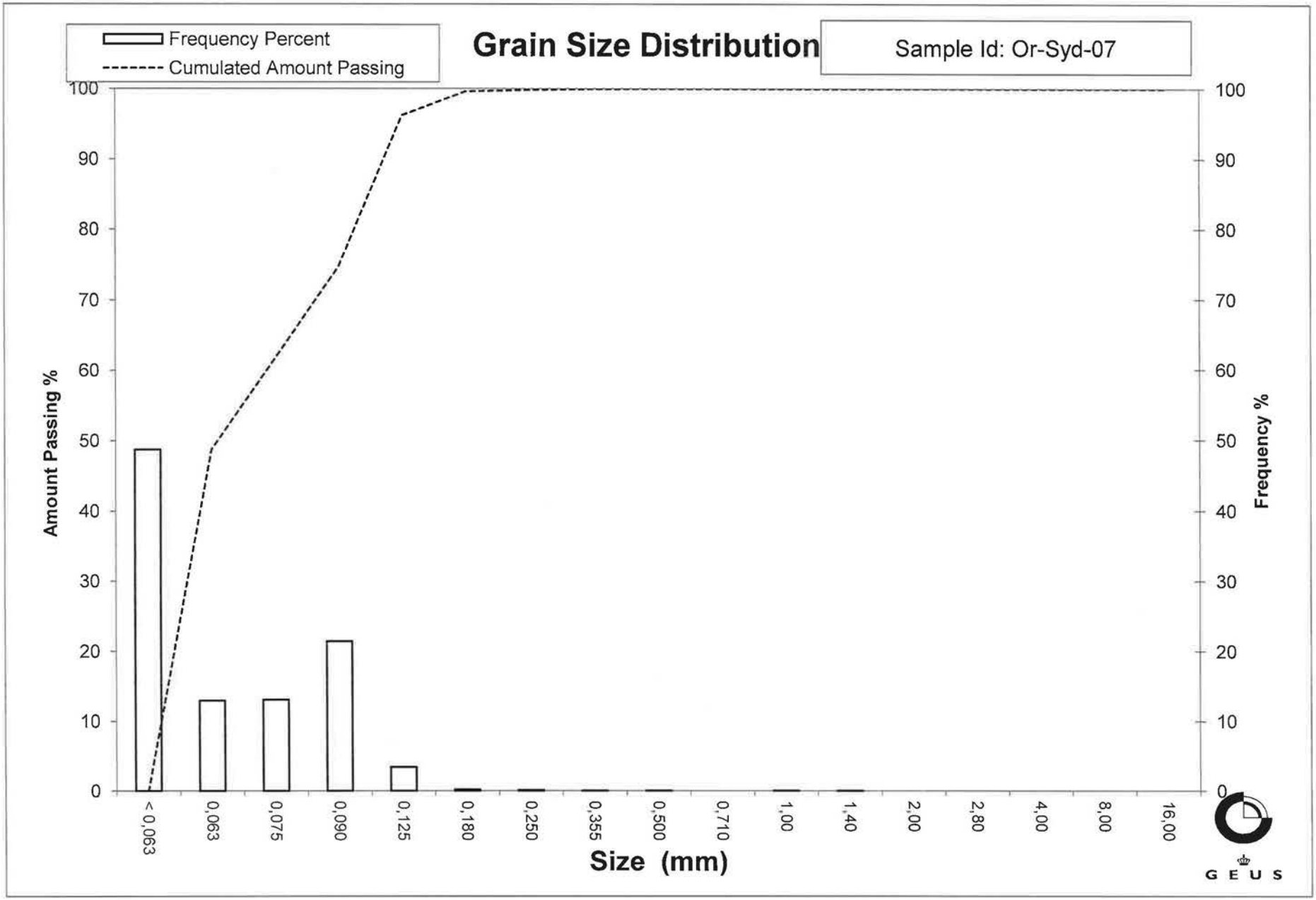
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-07
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-08
Lab. Id: 14040
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 120,75 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,20	0,17	99,83
	1,00	0,00	0,11	0,09	99,74
	0,710	0,49	0,08	0,07	99,68
	0,500	1,00	0,10	0,08	99,59
	0,355	1,49	0,12	0,10	99,49
	0,250	2,00	0,29	0,24	99,25
	0,180	2,47	0,65	0,54	98,72
	0,125	3,00	2,71	2,24	96,47
	0,090	3,47	12,57	10,41	86,06
	0,075	3,74	10,33	8,55	77,51
	0,063	3,99	13,59	11,25	66,25
	< 0,063	> 3,99	80,00	66,25	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	66,25
Sand, fine	(0,063 mm - 0,200 mm):	32,62
Sand, medium	(0,2 mm - 0,6 mm):	0,76
Sand, coarse	(0,6 mm - 2 mm):	0,37
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,06
16%	84%	0,09	3,53
25%	75%	0,07	3,79
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,53
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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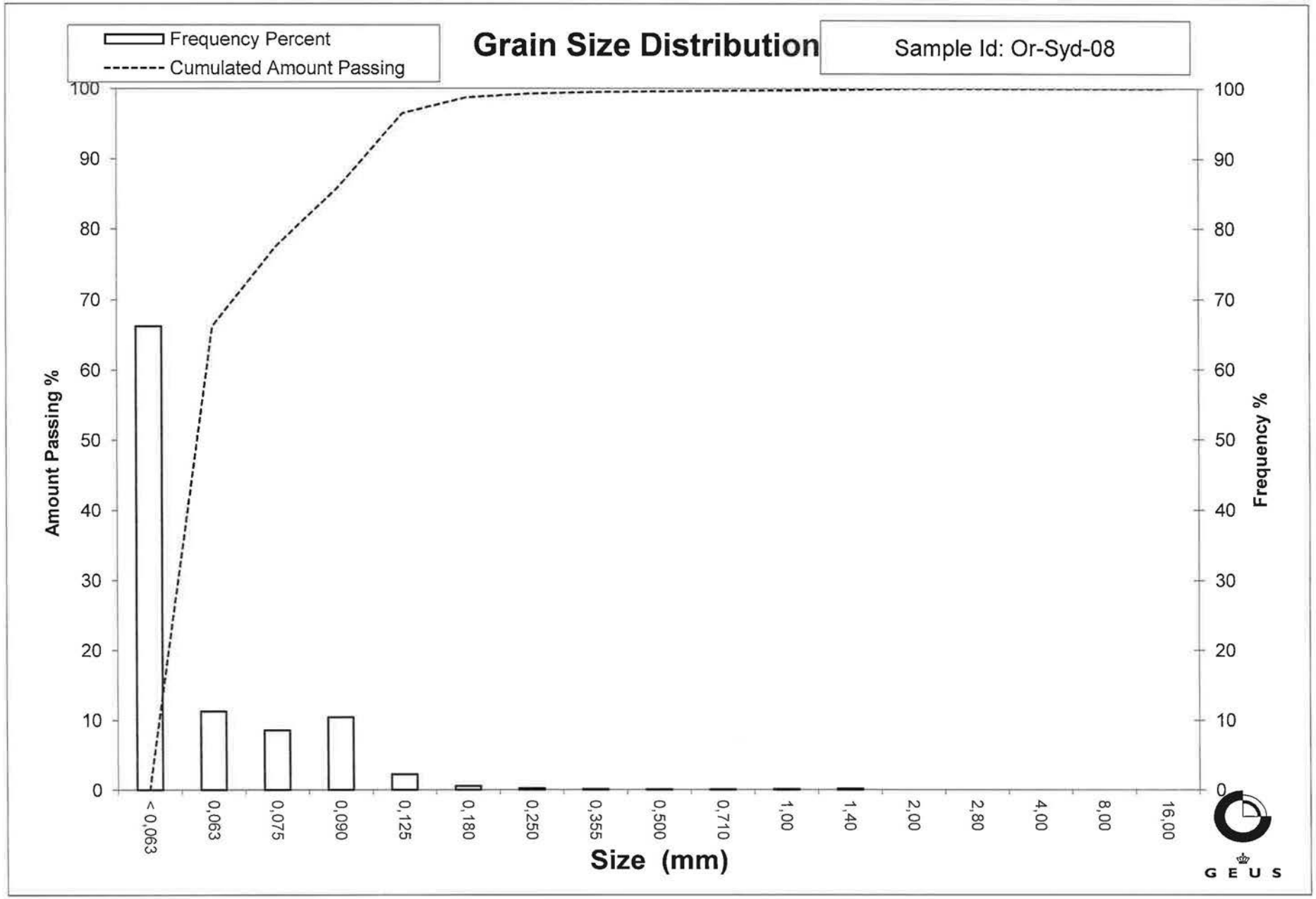
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-08
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-09
Lab. Id: 14041
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 209,8 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	16,58	7,90	92,10
	4,00	-2,00	17,98	8,57	83,53
	2,80	-1,49	7,74	3,69	79,84
	2,00	-1,00	7,57	3,61	76,23
Sand	1,40	-0,49	6,42	3,06	73,17
	1,00	0,00	8,66	4,13	69,04
	0,710	0,49	8,10	3,86	65,18
	0,500	1,00	14,00	6,67	58,51
	0,355	1,49	22,89	10,91	47,60
	0,250	2,00	27,15	12,94	34,66
	0,180	2,47	14,11	6,73	27,93
	0,125	3,00	6,76	3,22	24,71
	0,090	3,47	10,82	5,16	19,55
	0,075	3,74	7,41	3,53	16,02
	0,063	3,99	6,64	3,16	12,86
	< 0,063	> 3,99	26,97	12,86	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	12,86
Sand, fine	(0,063 mm - 0,200 mm):	17,00
Sand, medium	(0,2 mm - 0,6 mm):	31,83
Sand, coarse	(0,6 mm - 2 mm):	14,54
Gravel	(> 2 mm):	23,77
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	10,94	-3,45
16%	84%	4,22	-2,08
25%	75%	1,76	-0,81
40%	60%	0,55	0,87
Median 50%	50%	0,39	1,37
75%	25%	0,13	2,94
84%	16%	0,07	3,74
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	1,01
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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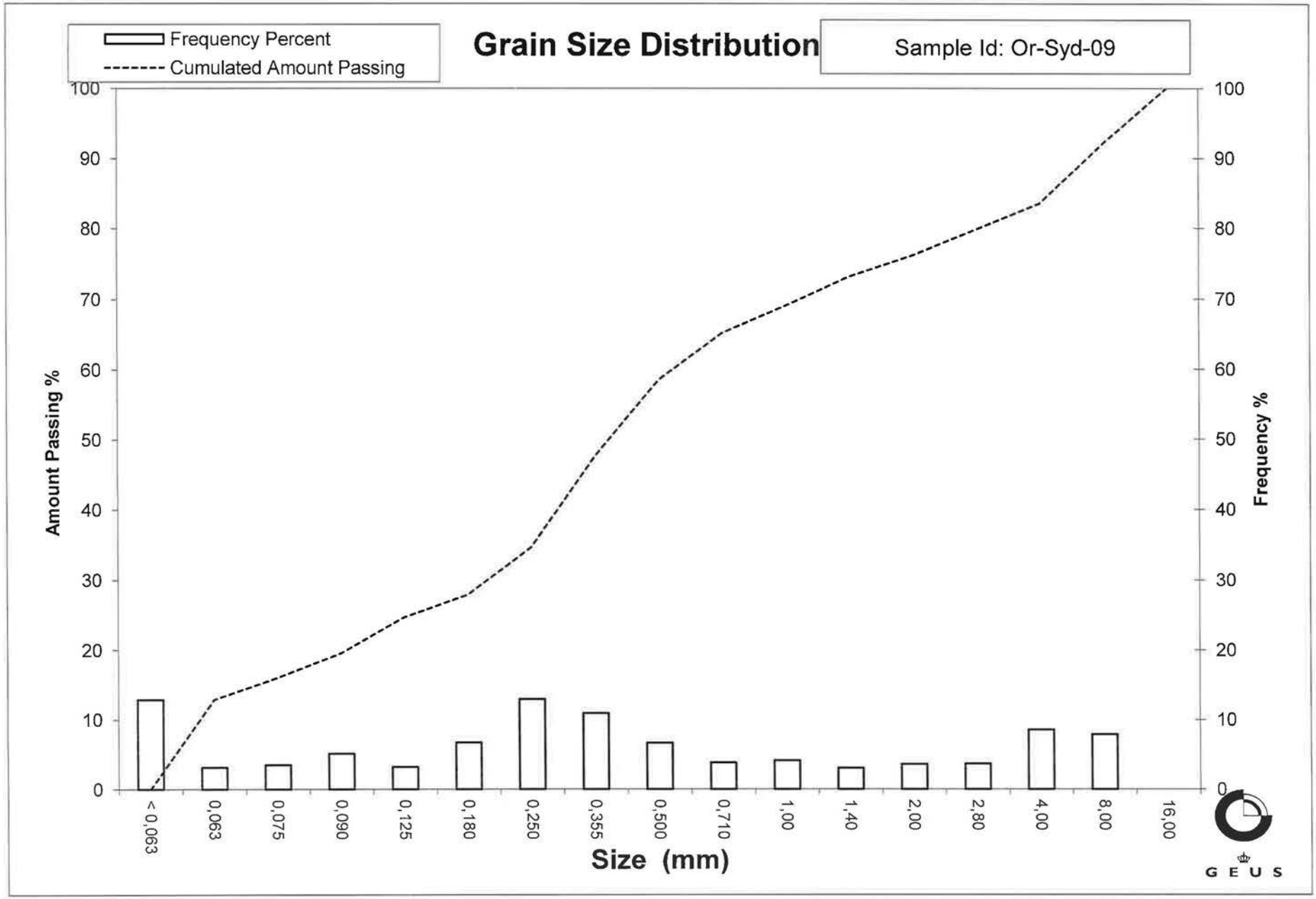
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-09
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-10
Lab. Id: 14042
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 106 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,84	0,79	99,21
	2,80	-1,49	0,00	0,00	99,21
	2,00	-1,00	0,03	0,03	99,18
Sand	1,40	-0,49	0,07	0,07	99,11
	1,00	0,00	0,08	0,08	99,04
	0,710	0,49	0,09	0,08	98,95
	0,500	1,00	0,25	0,24	98,72
	0,355	1,49	0,84	0,79	97,92
	0,250	2,00	2,45	2,31	95,61
	0,180	2,47	3,33	3,15	92,47
	0,125	3,00	7,07	6,67	85,80
	0,090	3,47	19,04	17,96	67,84
	0,075	3,74	9,61	9,07	58,77
	0,063	3,99	9,26	8,74	50,03
	< 0,063	> 3,99	53,04	50,03	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	50,03
Sand, fine	(0,063 mm - 0,200 mm):	43,33
Sand, medium	(0,2 mm - 0,6 mm):	5,46
Sand, coarse	(0,6 mm - 2 mm):	0,35
Gravel	(> 2 mm):	0,82
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,24	2,08
16%	84%	0,12	3,04
25%	75%	0,10	3,27
40%	60%	0,08	3,70
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,04
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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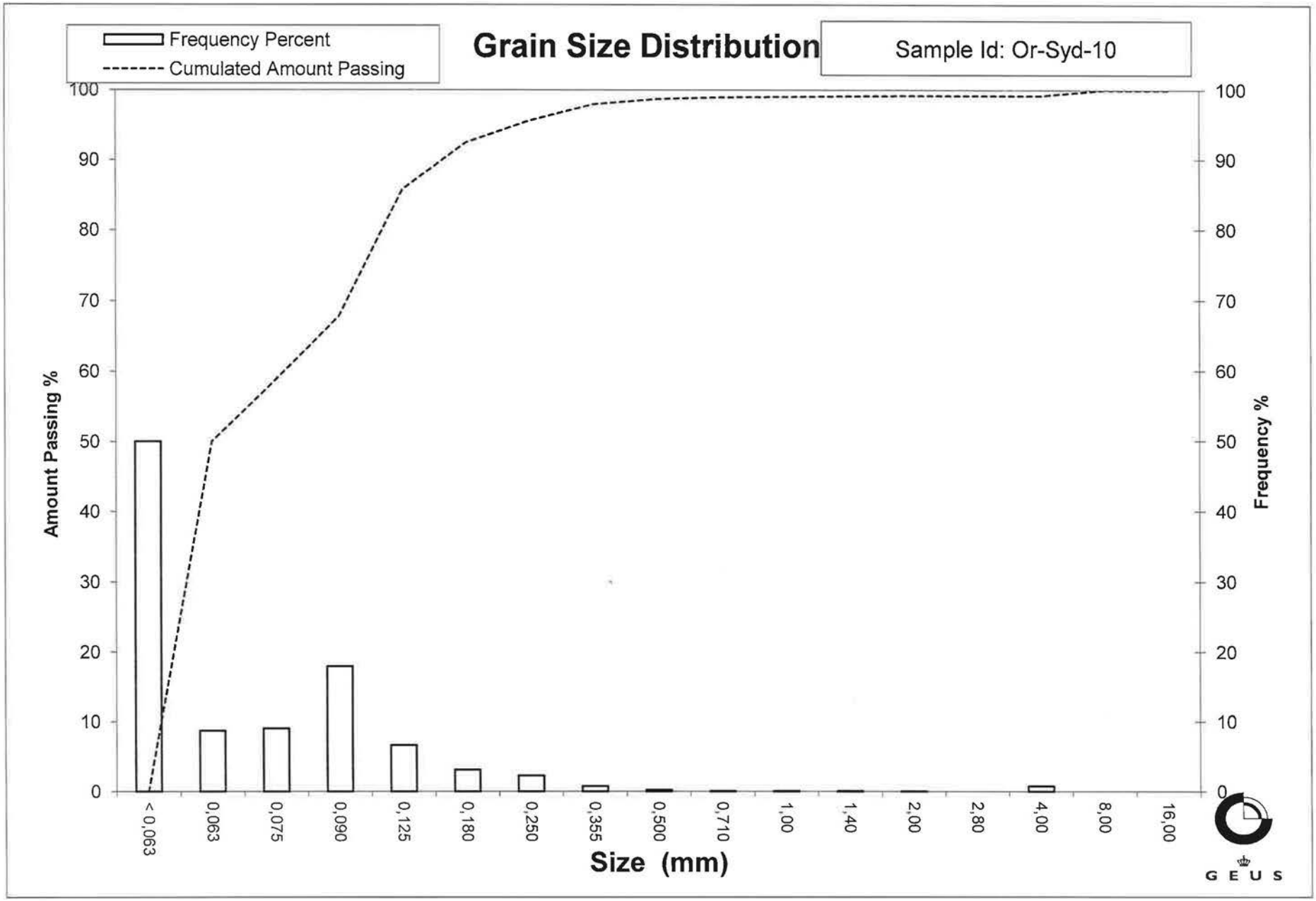
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-10
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-11
Lab. Id: 14043
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 108,88 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,12	0,11	99,89
	2,80	-1,49	0,01	0,01	99,88
	2,00	-1,00	0,03	0,03	99,85
Sand	1,40	-0,49	0,05	0,05	99,81
	1,00	0,00	0,09	0,08	99,72
	0,710	0,49	0,07	0,06	99,66
	0,500	1,00	0,11	0,10	99,56
	0,355	1,49	0,19	0,17	99,38
	0,250	2,00	0,39	0,36	99,03
	0,180	2,47	0,77	0,71	98,32
	0,125	3,00	9,81	9,01	89,31
	0,090	3,47	23,49	21,57	67,74
	0,075	3,74	12,10	11,11	56,62
	0,063	3,99	10,73	9,85	46,77
	< 0,063	> 3,99	50,92	46,77	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	46,77
Sand, fine	(0,063 mm - 0,200 mm):	51,75
Sand, medium	(0,2 mm - 0,6 mm):	1,09
Sand, coarse	(0,6 mm - 2 mm):	0,25
Gravel	(> 2 mm):	0,15
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,16	2,65
16%	84%	0,12	3,10
25%	75%	0,10	3,30
40%	60%	0,08	3,65
Median 50%	50%	0,07	3,90
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,50
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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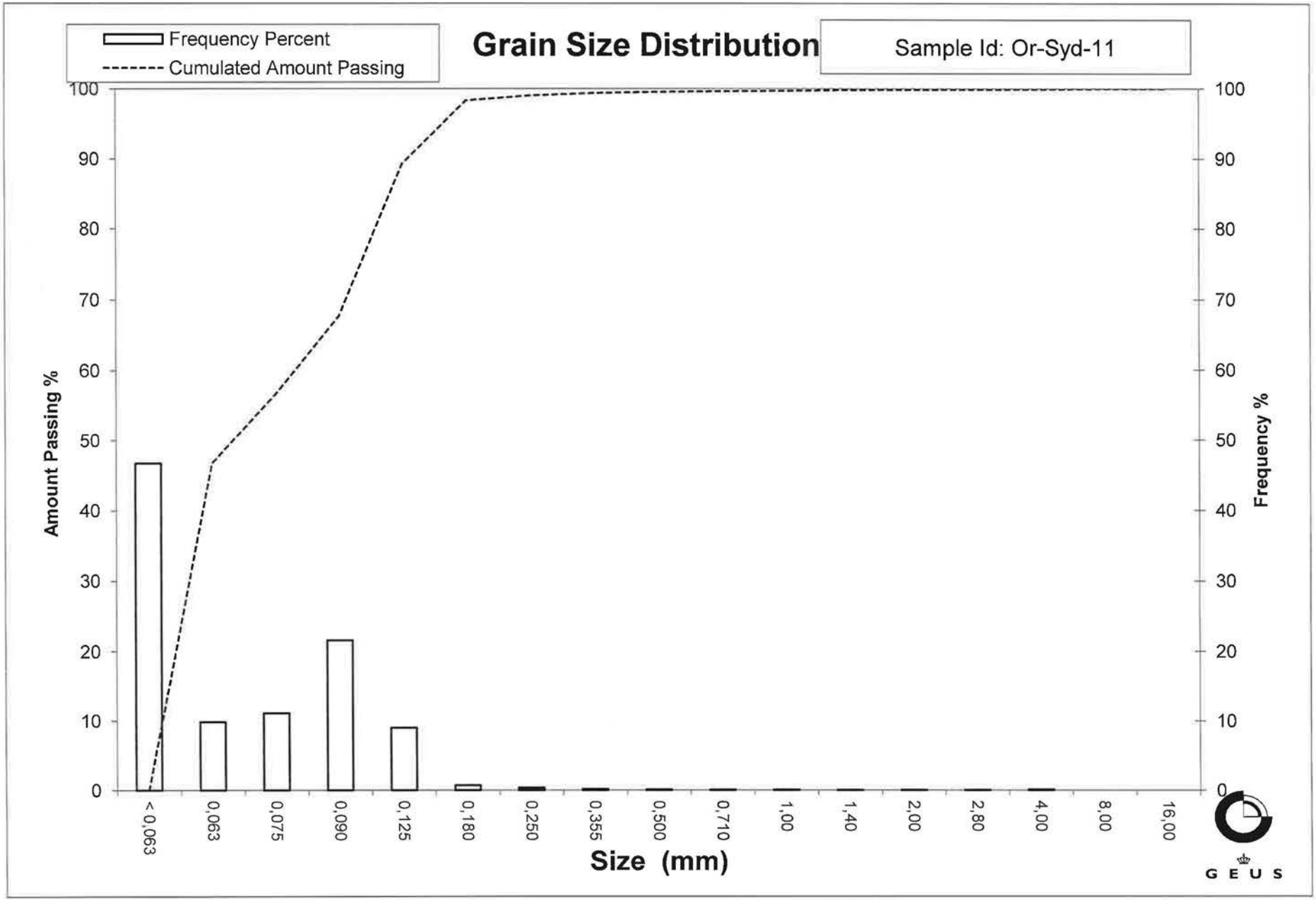
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-11
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-12
Lab. Id: 14044
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 105,31 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,07	0,07	99,93
	2,80	-1,49	0,05	0,05	99,89
	2,00	-1,00	0,01	0,01	99,88
Sand	1,40	-0,49	0,02	0,02	99,86
	1,00	0,00	0,05	0,05	99,81
	0,710	0,49	0,03	0,03	99,78
	0,500	1,00	0,03	0,03	99,75
	0,355	1,49	0,07	0,07	99,69
	0,250	2,00	0,16	0,15	99,53
	0,180	2,47	0,74	0,70	98,83
	0,125	3,00	24,32	23,09	75,74
	0,090	3,47	47,74	45,33	30,41
	0,075	3,74	10,99	10,44	19,97
	0,063	3,99	7,19	6,83	13,14
	< 0,063	> 3,99	13,84	13,14	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	13,14
Sand, fine	(0,063 mm - 0,200 mm):	85,89
Sand, medium	(0,2 mm - 0,6 mm):	0,73
Sand, coarse	(0,6 mm - 2 mm):	0,11
Gravel	(> 2 mm):	0,12
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,17	2,55
16%	84%	0,14	2,79
25%	75%	0,12	3,01
40%	60%	0,11	3,15
Median 50%	50%	0,11	3,25
75%	25%	0,08	3,60
84%	16%	0,07	3,88
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,31
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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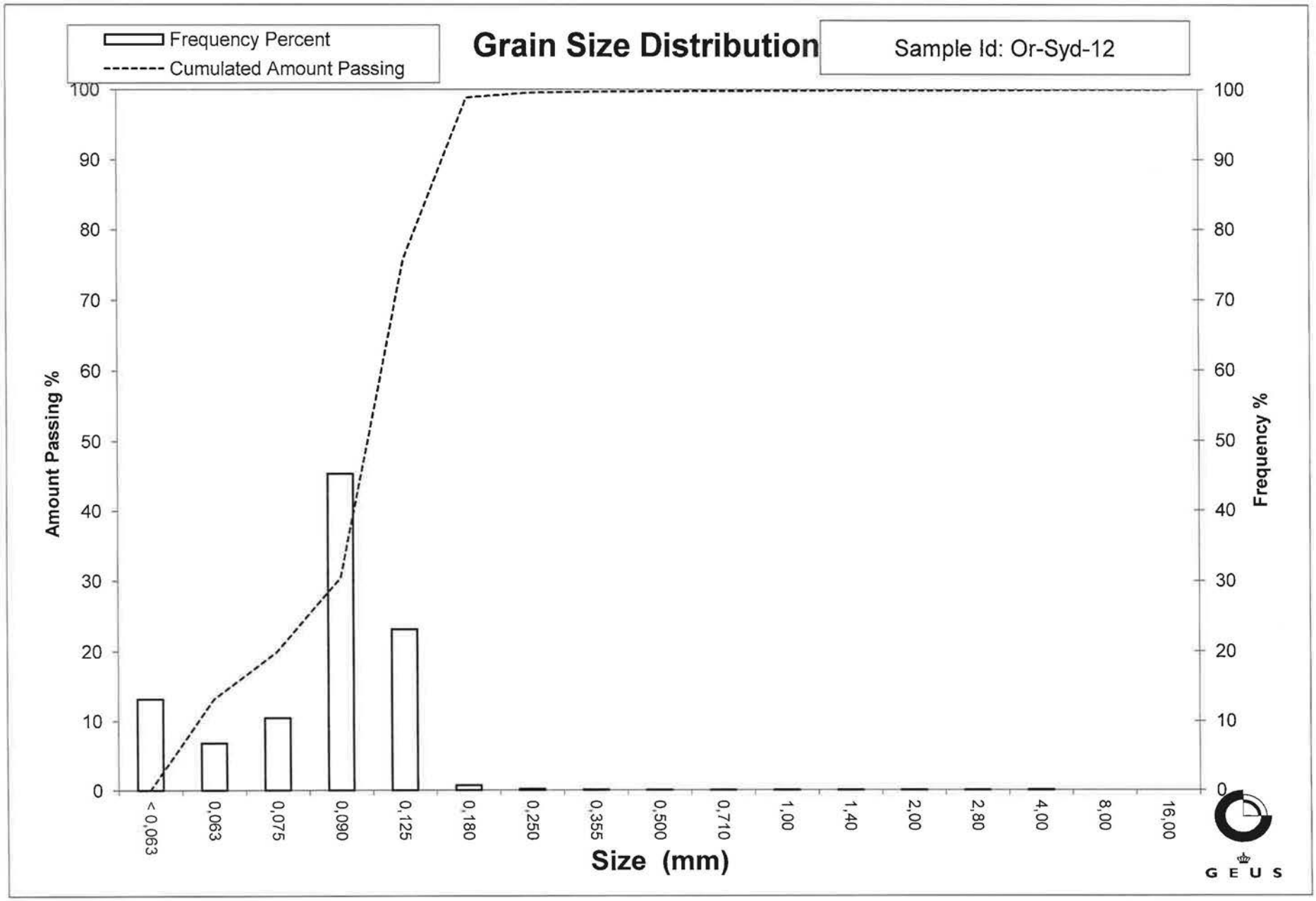
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-12
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-13
Lab. Id: 14045
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 185,81 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,45	0,24	99,76
	2,80	-1,49	0,35	0,19	99,57
	2,00	-1,00	0,18	0,10	99,47
Sand	1,40	-0,49	0,14	0,08	99,40
	1,00	0,00	0,15	0,08	99,32
	0,710	0,49	0,16	0,09	99,23
	0,500	1,00	0,16	0,09	99,14
	0,355	1,49	0,24	0,13	99,02
	0,250	2,00	1,03	0,55	98,46
	0,180	2,47	11,18	6,02	92,44
	0,125	3,00	93,06	50,08	42,36
	0,090	3,47	43,07	23,18	19,18
	0,075	3,74	7,55	4,06	15,12
	0,063	3,99	6,32	3,40	11,72
	< 0,063	> 3,99	21,77	11,72	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	11,72
Sand, fine	(0,063 mm - 0,200 mm):	82,45
Sand, medium	(0,2 mm - 0,6 mm):	5,02
Sand, coarse	(0,6 mm - 2 mm):	0,29
Gravel	(> 2 mm):	0,53
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,21	2,25
16%	84%	0,17	2,55
25%	75%	0,16	2,64
40%	60%	0,14	2,79
Median 50%	50%	0,13	2,91
75%	25%	0,10	3,34
84%	16%	0,08	3,68
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,04
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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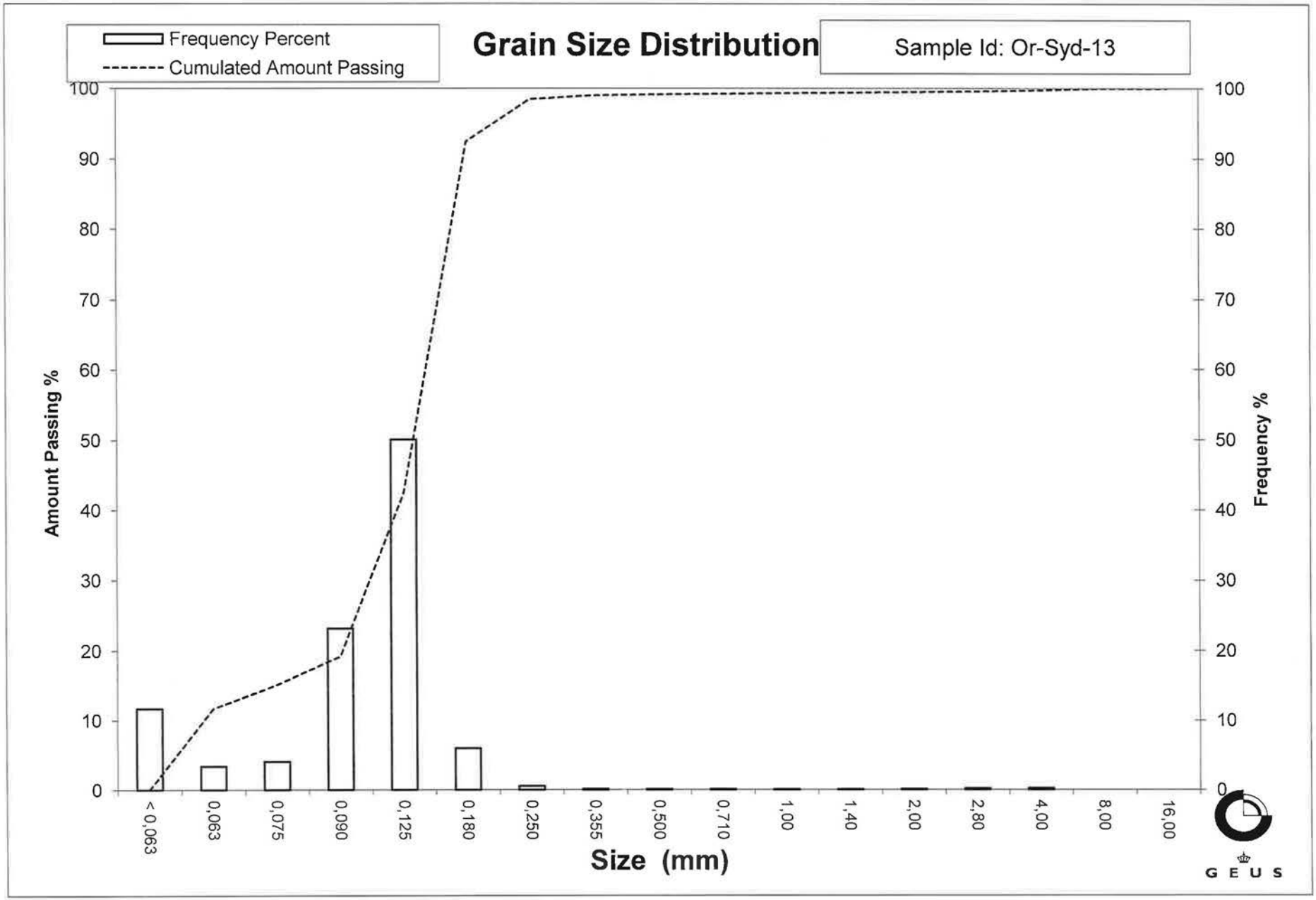
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-13
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-14
Lab. Id: 14046
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm, Mat >8mm er skaller

Total Weight 104,31 g

GEUS

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	1,31	1,26	98,74
	4,00	-2,00	0,33	0,32	98,43
	2,80	-1,49	0,63	0,60	97,82
	2,00	-1,00	0,42	0,40	97,42
Sand	1,40	-0,49	0,33	0,32	97,10
	1,00	0,00	0,41	0,39	96,71
	0,710	0,49	0,55	0,53	96,18
	0,500	1,00	0,80	0,77	95,42
	0,355	1,49	2,77	2,66	92,76
	0,250	2,00	7,33	7,03	85,73
	0,180	2,47	17,35	16,63	69,10
	0,125	3,00	31,21	29,92	39,18
	0,090	3,47	15,79	15,14	24,04
	0,075	3,74	3,48	3,34	20,71
	0,063	3,99	1,95	1,87	18,84
	< 0,063	> 3,99	19,65	18,84	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	18,84
Sand, fine	(0,063 mm - 0,200 mm):	55,02
Sand, medium	(0,2 mm - 0,6 mm):	21,93
Sand, coarse	(0,6 mm - 2 mm):	1,64
Gravel	(> 2 mm):	2,58
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,48	1,07
16%	84%	0,24	2,04
25%	75%	0,20	2,29
40%	60%	0,16	2,61
Median 50%	50%	0,14	2,79
75%	25%	0,09	3,44
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,41
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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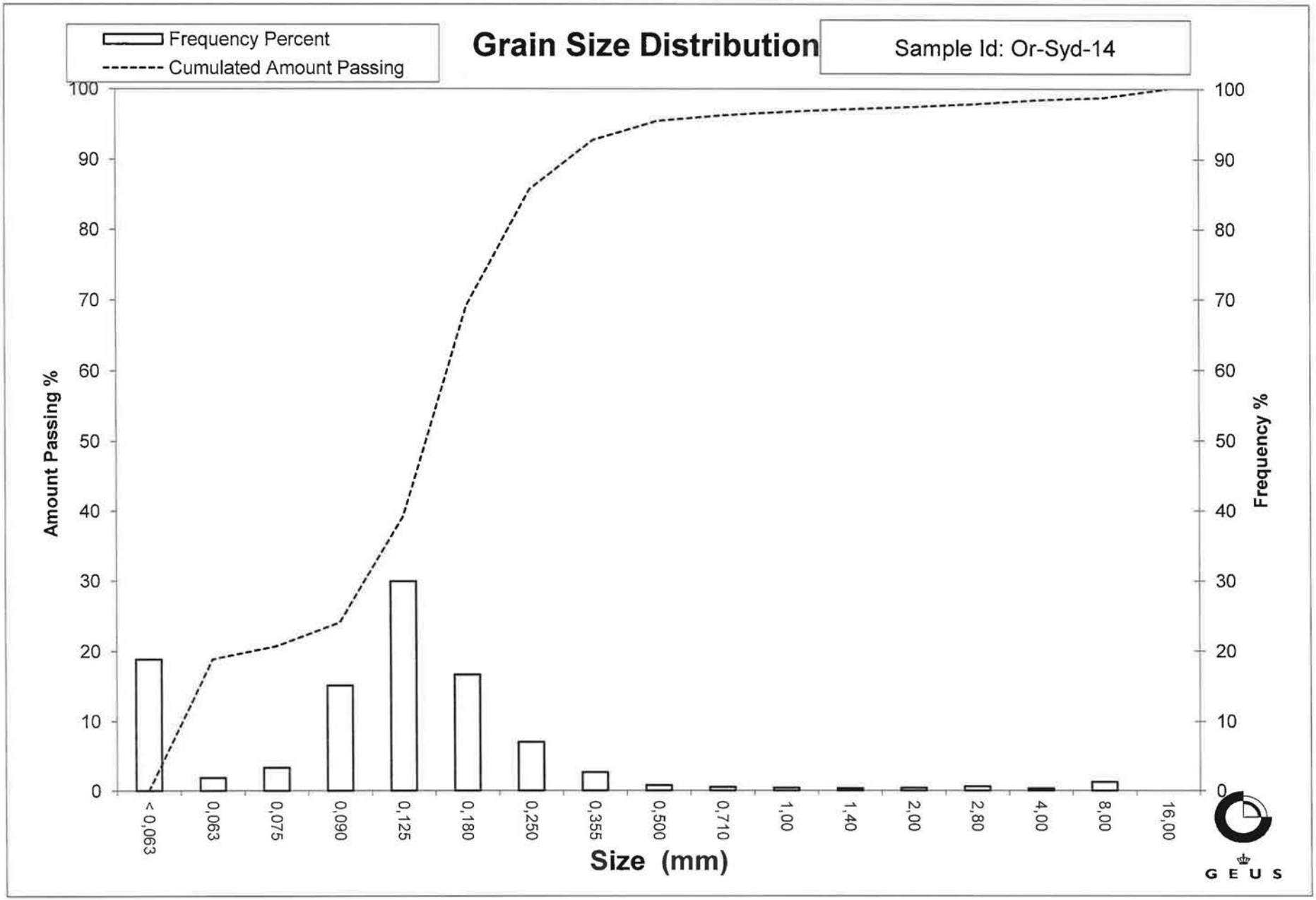
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-14
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-15
Lab. Id: 14047
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 141,99 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,02	0,01	99,99
	1,00	0,00	0,03	0,02	99,96
	0,710	0,49	0,08	0,06	99,91
	0,500	1,00	0,06	0,04	99,87
	0,355	1,49	0,10	0,07	99,80
	0,250	2,00	0,22	0,15	99,64
	0,180	2,47	0,63	0,44	99,20
	0,125	3,00	14,37	10,12	89,08
	0,090	3,47	41,47	29,21	59,87
	0,075	3,74	16,04	11,30	48,57
	0,063	3,99	12,37	8,71	39,86
	< 0,063	> 3,99	56,60	39,86	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	39,86
Sand, fine	(0,063 mm - 0,200 mm):	59,46
Sand, medium	(0,2 mm - 0,6 mm):	0,56
Sand, coarse	(0,6 mm - 2 mm):	0,11
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,16	2,67
16%	84%	0,12	3,07
25%	75%	0,11	3,21
40%	60%	0,09	3,47
Median 50%	50%	0,08	3,70
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,39
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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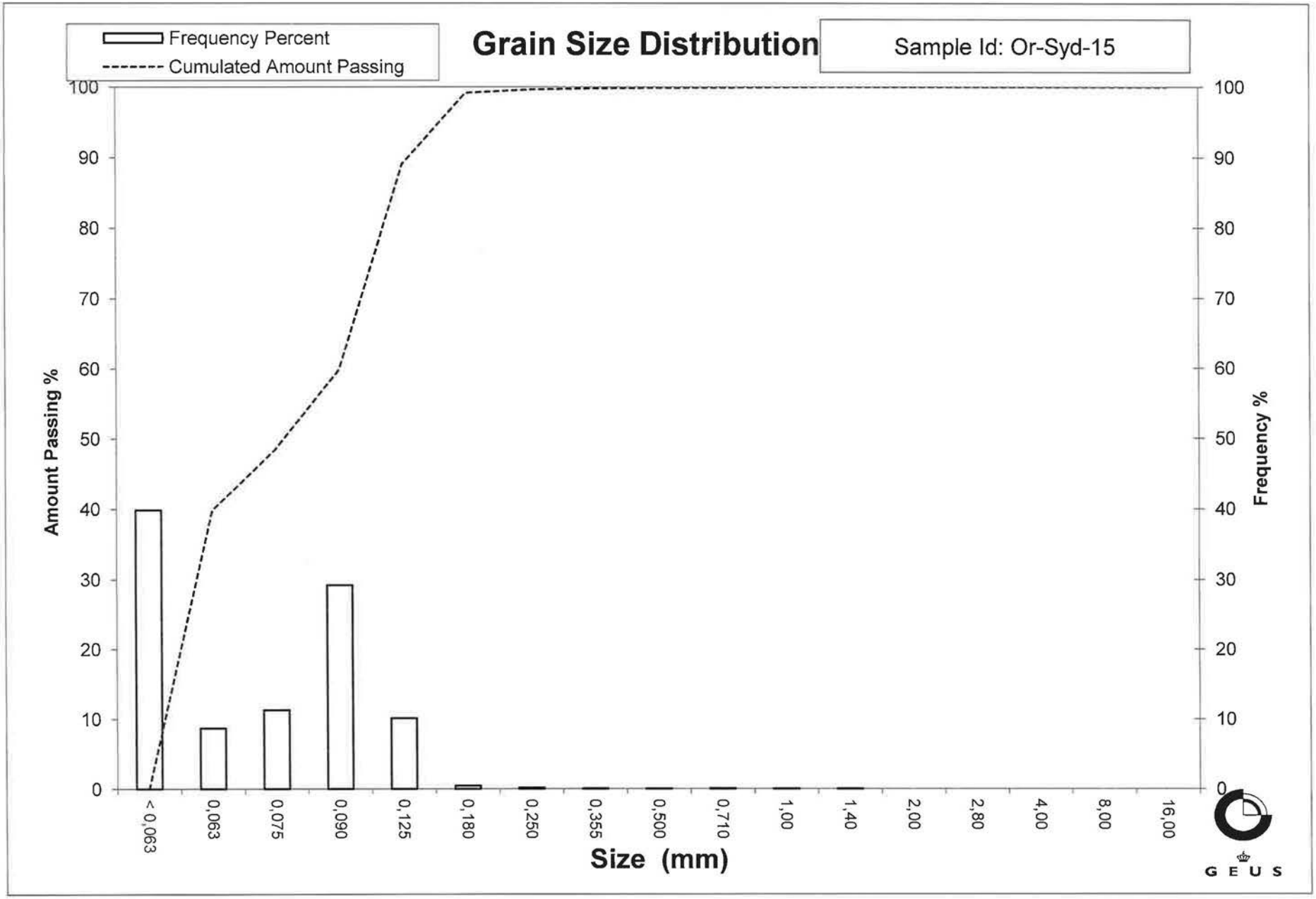
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-15
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-16
Lab. Id: 14048
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 131,56 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,09	0,07	99,93
	2,80	-1,49	0,01	0,01	99,92
	2,00	-1,00	0,05	0,04	99,89
Sand	1,40	-0,49	0,08	0,06	99,83
	1,00	0,00	0,10	0,08	99,75
	0,710	0,49	0,25	0,19	99,56
	0,500	1,00	0,72	0,55	99,01
	0,355	1,49	1,80	1,37	97,64
	0,250	2,00	4,09	3,11	94,53
	0,180	2,47	5,77	4,39	90,15
	0,125	3,00	9,07	6,89	83,25
	0,090	3,47	22,27	16,93	66,33
	0,075	3,74	12,30	9,35	56,98
	0,063	3,99	13,95	10,60	46,37
	< 0,063	> 3,99	61,01	46,37	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	46,37
Sand, fine	(0,063 mm - 0,200 mm):	45,03
Sand, medium	(0,2 mm - 0,6 mm):	7,87
Sand, coarse	(0,6 mm - 2 mm):	0,61
Gravel	(> 2 mm):	0,11
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,27	1,91
16%	84%	0,13	2,93
25%	75%	0,11	3,21
40%	60%	0,08	3,65
Median 50%	50%	0,07	3,90
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,42
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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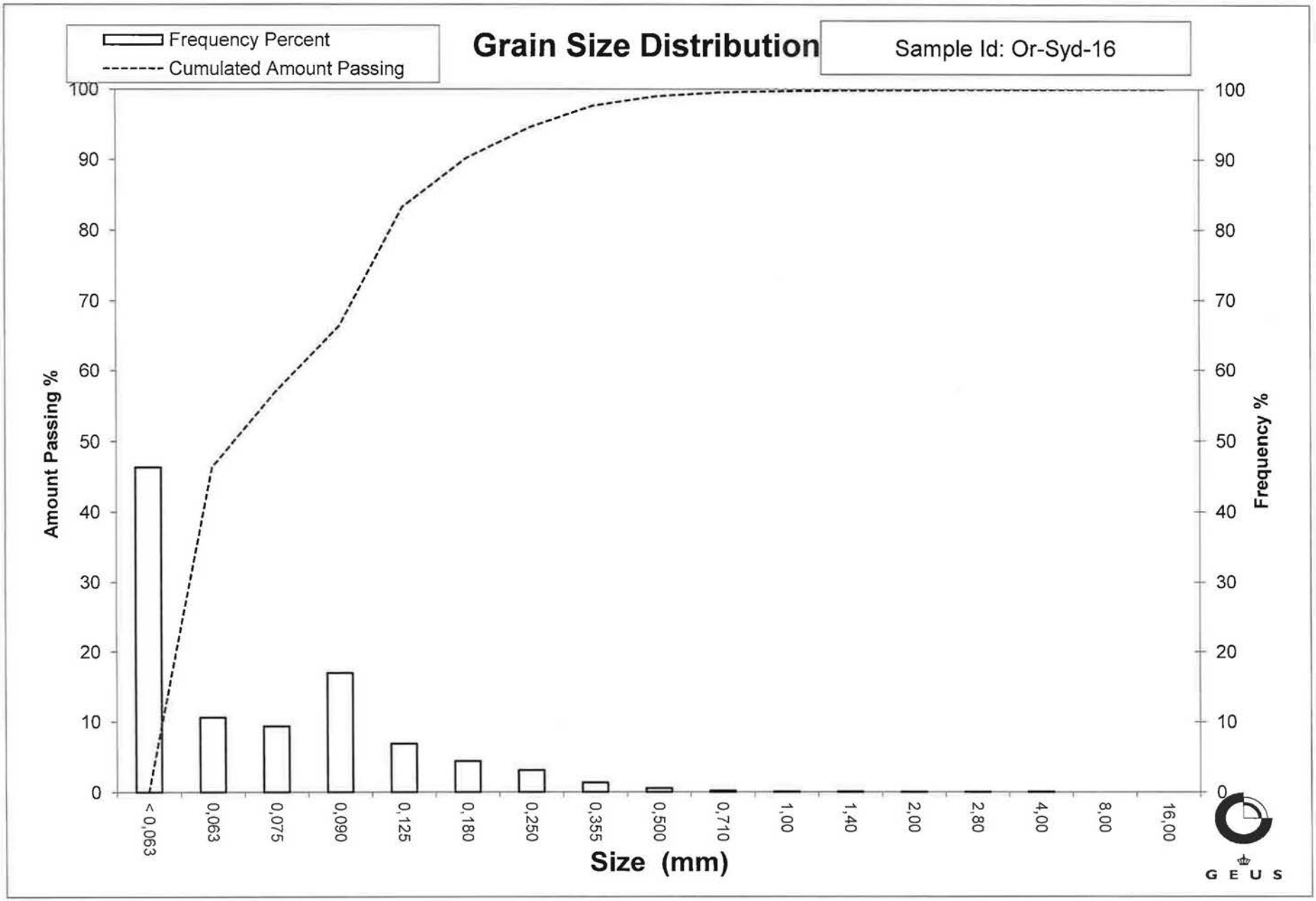
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-16
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-17
Lab. Id: 14049
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 107,21 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,18	0,17	99,83
	2,00	-1,00	0,09	0,08	99,75
Sand	1,40	-0,49	0,08	0,07	99,67
	1,00	0,00	0,17	0,16	99,51
	0,710	0,49	0,21	0,20	99,32
	0,500	1,00	0,33	0,31	99,01
	0,355	1,49	0,54	0,50	98,51
	0,250	2,00	0,99	0,92	97,58
	0,180	2,47	2,34	2,18	95,40
	0,125	3,00	5,99	5,59	89,81
	0,090	3,47	32,05	29,89	59,92
	0,075	3,74	4,54	4,23	55,69
	0,063	3,99	9,05	8,44	47,24
	< 0,063	> 3,99	50,65	47,24	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	47,24
Sand, fine	(0,063 mm - 0,200 mm):	48,78
Sand, medium	(0,2 mm - 0,6 mm):	3,13
Sand, coarse	(0,6 mm - 2 mm):	0,59
Gravel	(> 2 mm):	0,25
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,18	2,51
16%	84%	0,12	3,08
25%	75%	0,11	3,22
40%	60%	0,09	3,47
Median 50%	50%	0,07	3,90
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,49
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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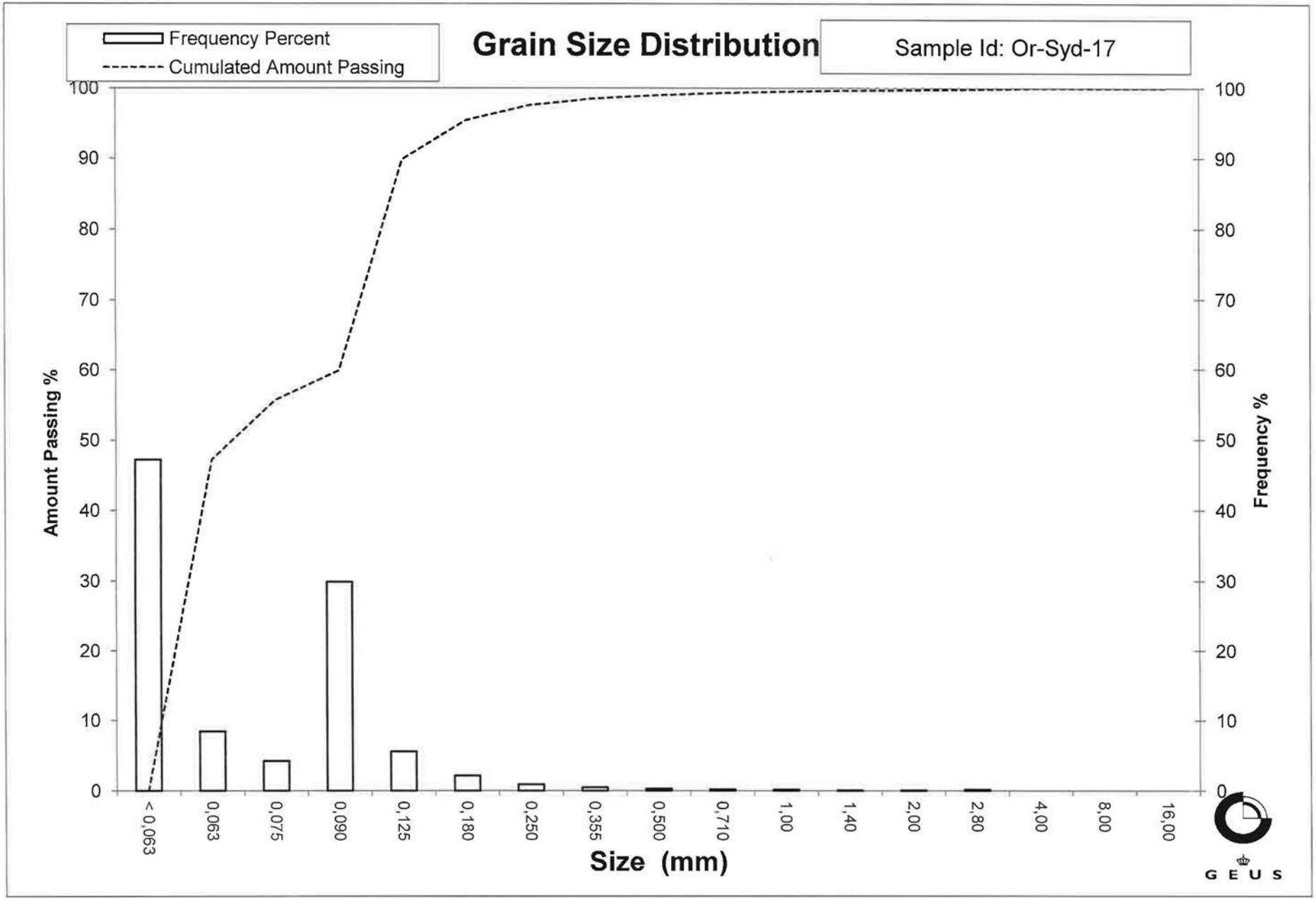
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-17
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-18
Lab. Id: 14050
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 99,64 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,69	0,69	99,31
	2,80	-1,49	0,09	0,09	99,22
	2,00	-1,00	0,07	0,07	99,15
Sand	1,40	-0,49	0,08	0,08	99,07
	1,00	0,00	0,17	0,17	98,90
	0,710	0,49	0,19	0,19	98,71
	0,500	1,00	0,25	0,25	98,45
	0,355	1,49	0,41	0,41	98,04
	0,250	2,00	1,23	1,23	96,81
	0,180	2,47	2,76	2,77	94,04
	0,125	3,00	5,66	5,68	88,36
	0,090	3,47	13,25	13,30	75,06
	0,075	3,74	11,01	11,05	64,01
	0,063	3,99	10,50	10,54	53,47
	< 0,063	> 3,99	53,28	53,47	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	53,47
Sand, fine	(0,063 mm - 0,200 mm):	41,36
Sand, medium	(0,2 mm - 0,6 mm):	3,74
Sand, coarse	(0,6 mm - 2 mm):	0,57
Gravel	(> 2 mm):	0,85
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,20	2,29
16%	84%	0,11	3,14
25%	75%	0,09	3,48
40%	60%	0,07	3,83
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,14
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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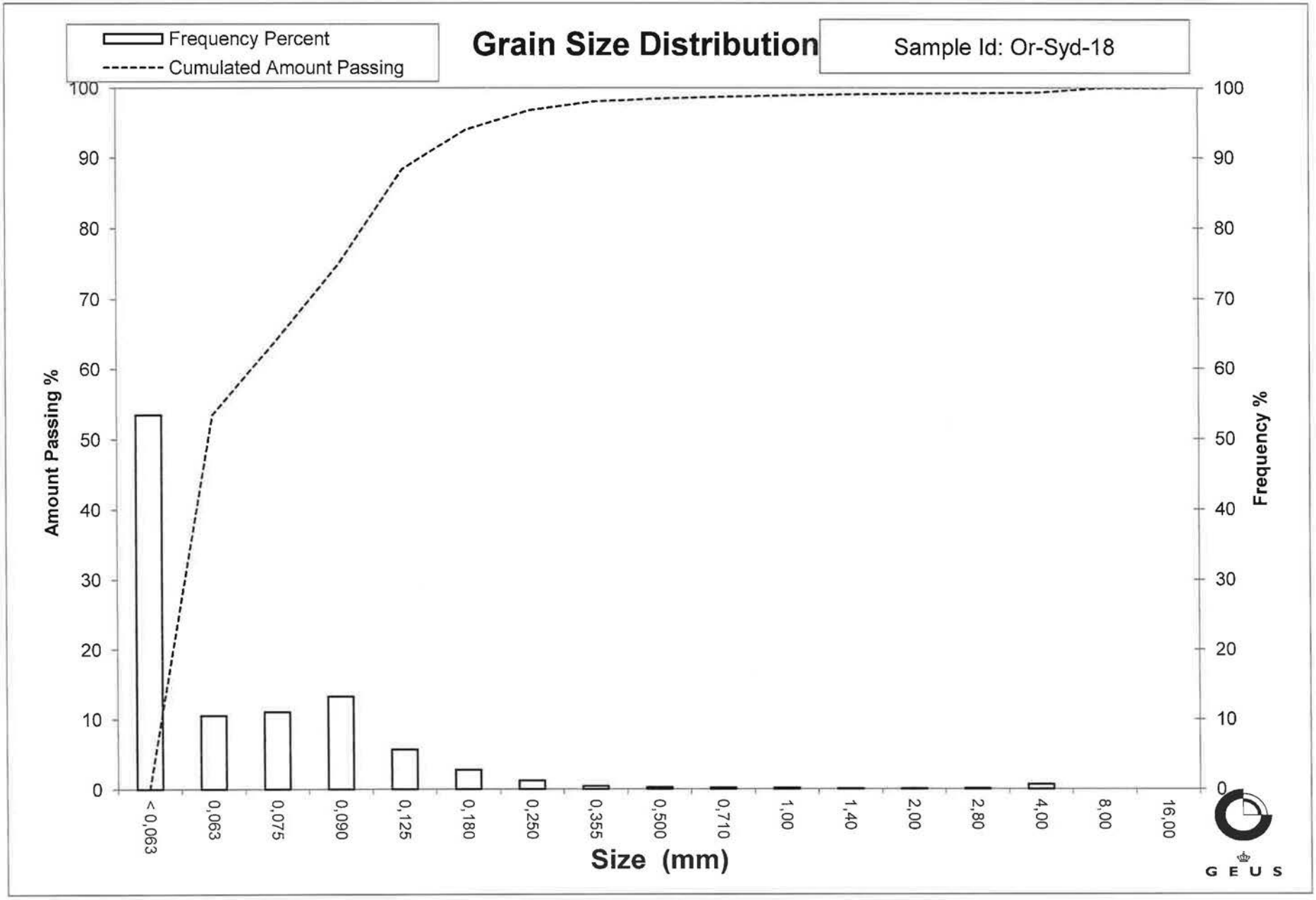
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-18
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-19
Lab. Id: 14051
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 110,08 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,72	0,65	99,35
	2,80	-1,49	0,27	0,25	99,10
	2,00	-1,00	0,16	0,15	98,96
Sand	1,40	-0,49	0,56	0,51	98,45
	1,00	0,00	1,49	1,35	97,09
	0,710	0,49	1,95	1,77	95,32
	0,500	1,00	4,51	4,10	91,22
	0,355	1,49	9,37	8,51	82,71
	0,250	2,00	17,34	15,75	66,96
	0,180	2,47	18,37	16,69	50,27
	0,125	3,00	12,53	11,38	38,89
	0,090	3,47	11,18	10,16	28,73
	0,075	3,74	4,78	4,34	24,39
	0,063	3,99	4,56	4,14	20,25
	< 0,063	> 3,99	22,29	20,25	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	20,25
Sand, fine	(0,063 mm - 0,200 mm):	34,79
Sand, medium	(0,2 mm - 0,6 mm):	38,14
Sand, coarse	(0,6 mm - 2 mm):	5,78
Gravel	(> 2 mm):	1,04
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,69	0,53
16%	84%	0,38	1,41
25%	75%	0,30	1,72
40%	60%	0,22	2,18
Median 50%	50%	0,18	2,48
75%	25%	0,08	3,70
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	1,95
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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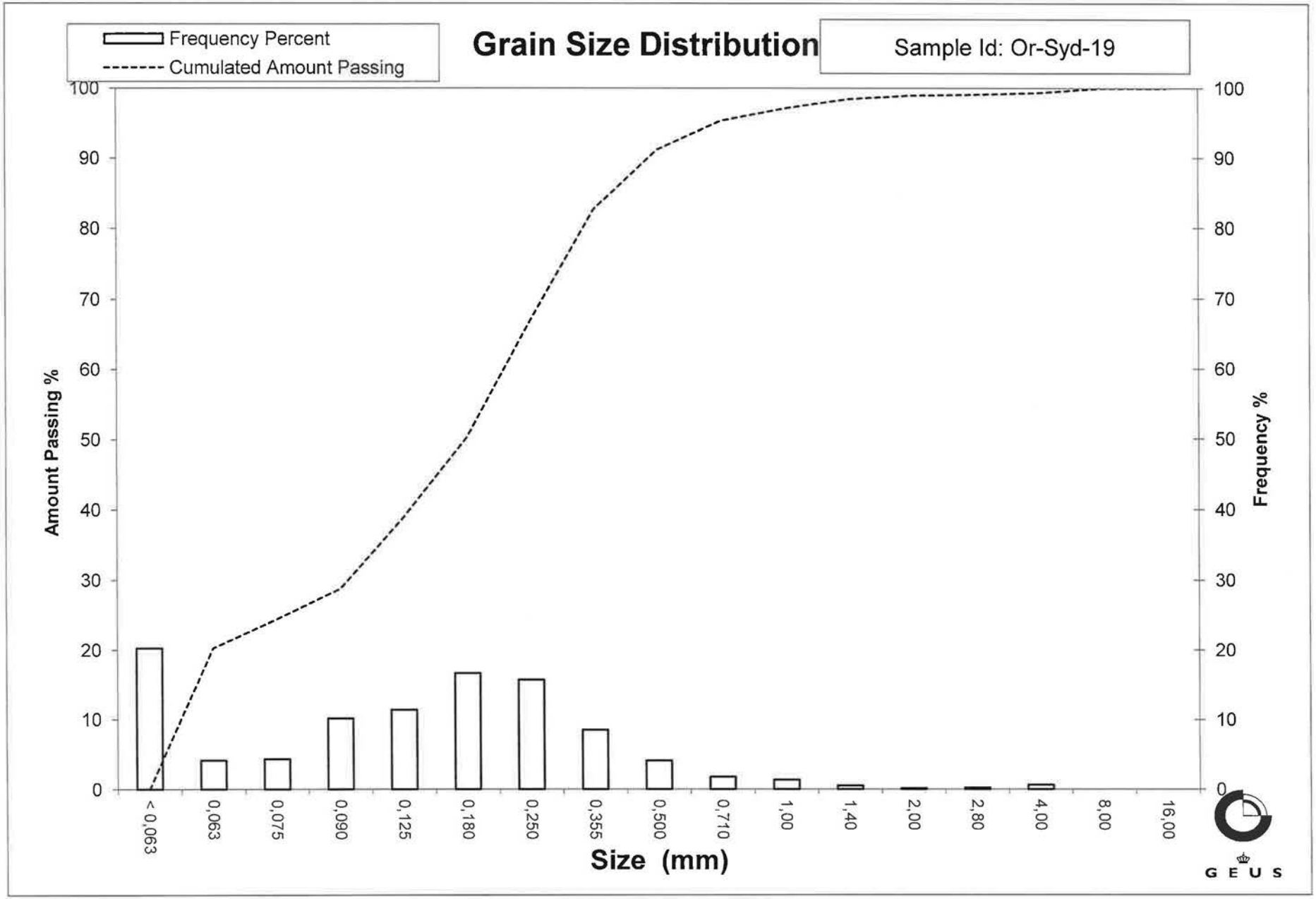
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-19
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-20
Lab. Id: 14052
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 107,16 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,20	99,80
	2,80	-1,49	0,16	0,15	99,65
	2,00	-1,00	0,31	0,29	99,37
Sand	1,40	-0,49	0,32	0,30	99,07
	1,00	0,00	0,69	0,64	98,42
	0,710	0,49	1,58	1,47	96,95
	0,500	1,00	4,18	3,90	93,05
	0,355	1,49	11,84	11,05	82,00
	0,250	2,00	30,08	28,07	53,93
	0,180	2,47	23,63	22,05	31,88
	0,125	3,00	12,35	11,52	20,35
	0,090	3,47	5,74	5,36	15,00
	0,075	3,74	2,81	2,62	12,37
	0,063	3,99	2,51	2,34	10,03
	< 0,063	> 3,99	10,75	10,03	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	10,03
Sand, fine	(0,063 mm - 0,200 mm):	28,15
Sand, medium	(0,2 mm - 0,6 mm):	56,73
Sand, coarse	(0,6 mm - 2 mm):	4,46
Gravel	(> 2 mm):	0,63
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,61	0,72
16%	84%	0,38	1,39
25%	75%	0,33	1,60
40%	60%	0,27	1,87
Median 50%	50%	0,24	2,07
75%	25%	0,15	2,76
84%	16%	0,10	3,37
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,28
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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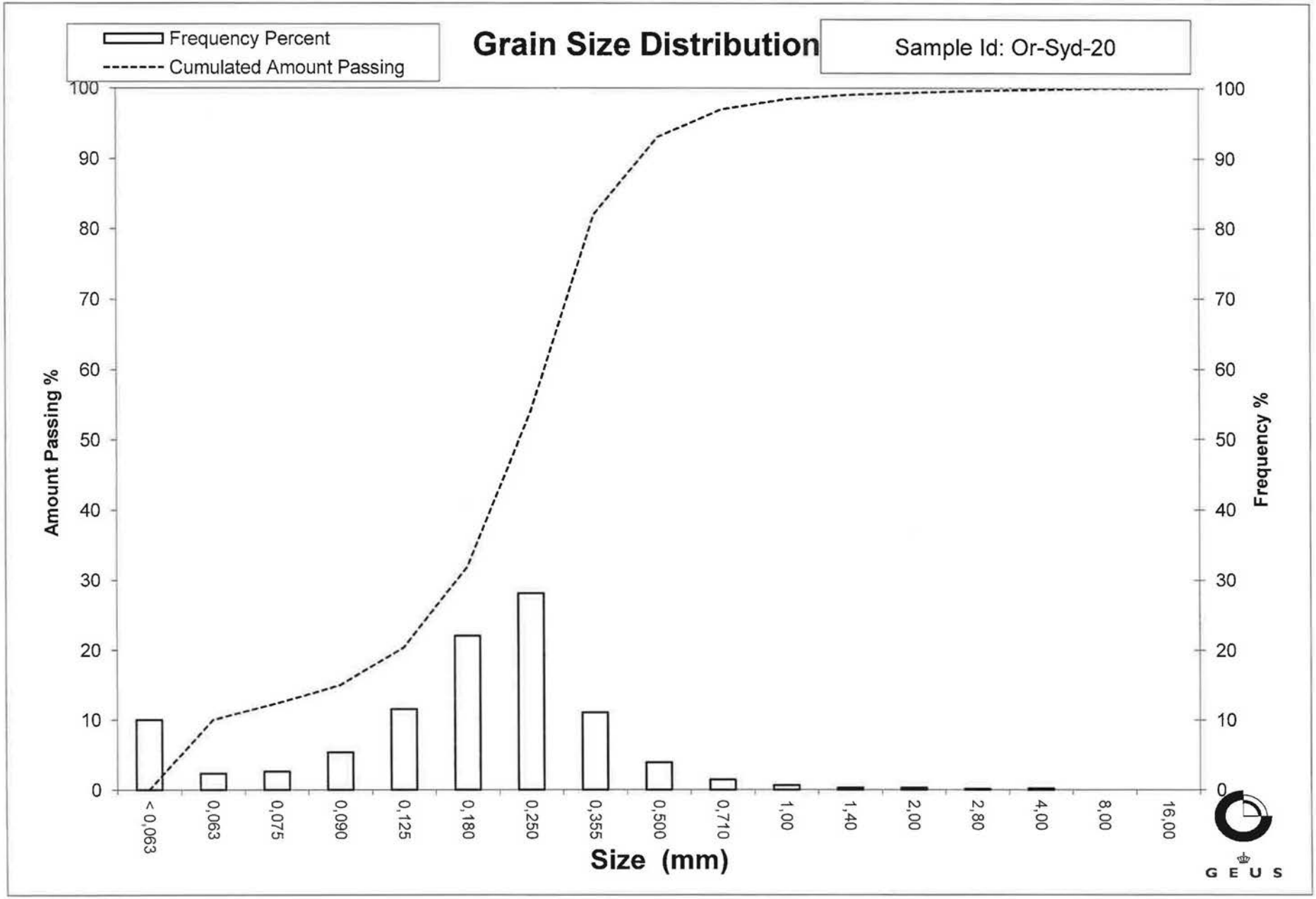
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-20
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-21
Lab. Id: 14053
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 105,87 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,00	0,00	100,00
	1,00	0,00	0,08	0,08	99,92
	0,710	0,49	0,14	0,13	99,79
	0,500	1,00	0,33	0,31	99,48
	0,355	1,49	0,96	0,91	98,57
	0,250	2,00	2,93	2,77	95,81
	0,180	2,47	4,78	4,51	91,29
	0,125	3,00	9,22	8,71	82,58
	0,090	3,47	18,09	17,09	65,50
	0,075	3,74	10,36	9,79	55,71
	0,063	3,99	10,62	10,03	45,68
	< 0,063	> 3,99	48,36	45,68	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	45,68
Sand, fine	(0,063 mm - 0,200 mm):	46,90
Sand, medium	(0,2 mm - 0,6 mm):	7,05
Sand, coarse	(0,6 mm - 2 mm):	0,37
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,24	2,07
16%	84%	0,13	2,90
25%	75%	0,11	3,19
40%	60%	0,08	3,62
Median 50%	50%	0,07	3,87
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,39
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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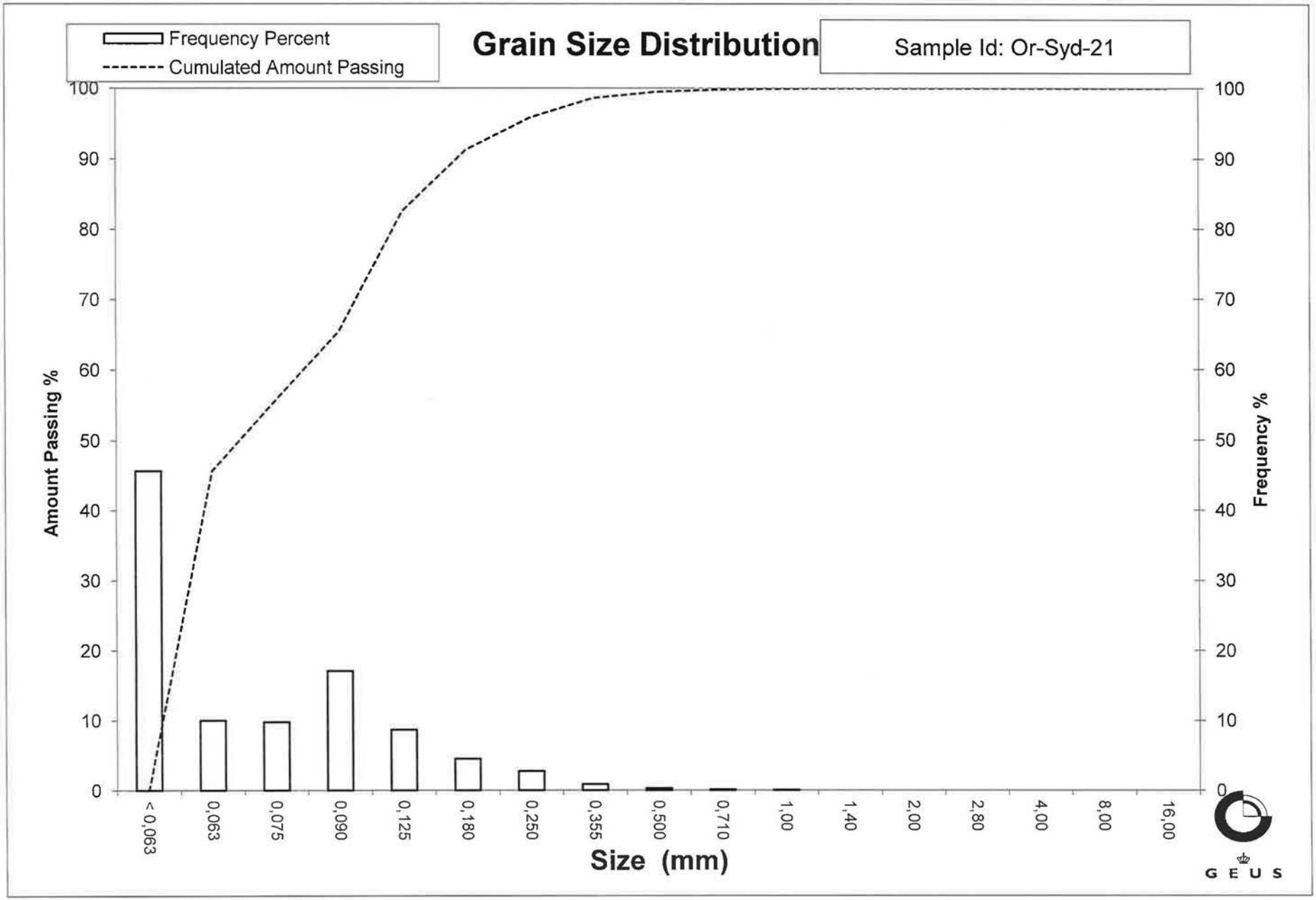
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-21
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-22
Lab. Id: 14054
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 118,98 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	8,23	6,92	93,08
	4,00	-2,00	6,38	5,36	87,72
	2,80	-1,49	1,85	1,55	86,17
	2,00	-1,00	1,49	1,25	84,91
Sand	1,40	-0,49	1,64	1,38	83,54
	1,00	0,00	1,70	1,43	82,11
	0,710	0,49	2,65	2,23	79,88
	0,500	1,00	5,99	5,03	74,84
	0,355	1,49	10,32	8,67	66,17
	0,250	2,00	13,25	11,14	55,03
	0,180	2,47	5,30	4,45	50,58
	0,125	3,00	3,66	3,08	47,50
	0,090	3,47	9,07	7,62	39,88
	0,075	3,74	5,17	4,35	35,54
	0,063	3,99	5,14	4,32	31,22
	< 0,063	> 3,99	37,14	31,22	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	31,22
Sand, fine	(0,063 mm - 0,200 mm):	20,64
Sand, medium	(0,2 mm - 0,6 mm):	25,39
Sand, coarse	(0,6 mm - 2 mm):	7,67
Gravel	(> 2 mm):	15,09
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	10,22	-3,35
16%	84%	1,60	-0,68
25%	75%	0,51	0,98
40%	60%	0,30	1,75
Median 50%	50%	0,17	2,56
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	0,94
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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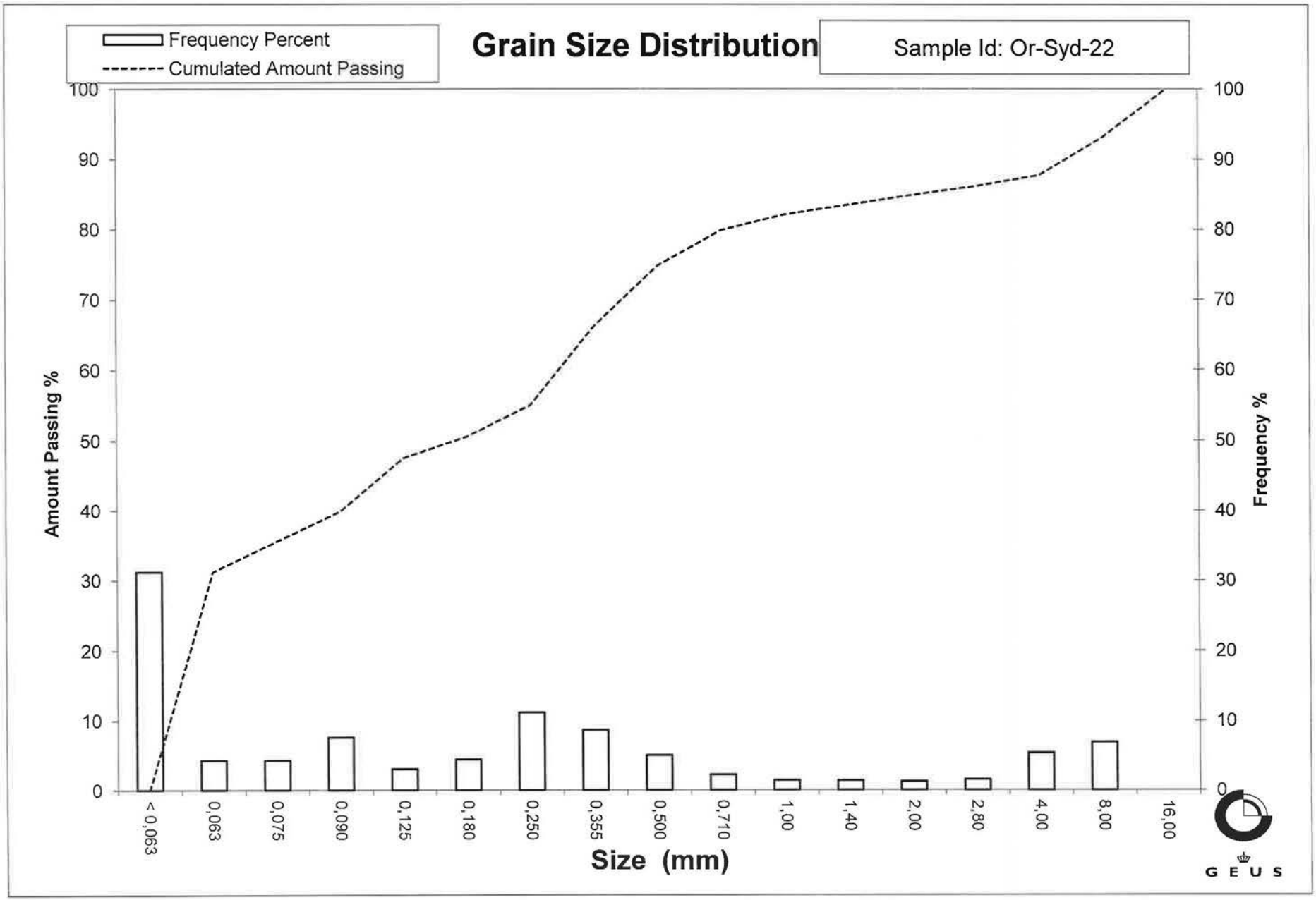
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-22
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-23
Lab. Id: 14055
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 111,36 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,02	0,02	99,96
	1,00	0,00	0,08	0,07	99,88
	0,710	0,49	0,06	0,05	99,83
	0,500	1,00	0,19	0,17	99,66
	0,355	1,49	0,13	0,12	99,54
	0,250	2,00	0,22	0,20	99,34
	0,180	2,47	0,36	0,32	99,02
	0,125	3,00	3,00	2,69	96,33
	0,090	3,47	43,97	39,48	56,84
	0,075	3,74	17,21	15,45	41,39
	0,063	3,99	15,34	13,78	27,61
	< 0,063	> 3,99	30,75	27,61	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	27,61
Sand, fine	(0,063 mm - 0,200 mm):	71,50
Sand, medium	(0,2 mm - 0,6 mm):	0,63
Sand, coarse	(0,6 mm - 2 mm):	0,23
Gravel	(> 2 mm):	0,03
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,01
16%	84%	0,11	3,13
25%	75%	0,11	3,24
40%	60%	0,09	3,43
Median 50%	50%	0,08	3,58
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,36
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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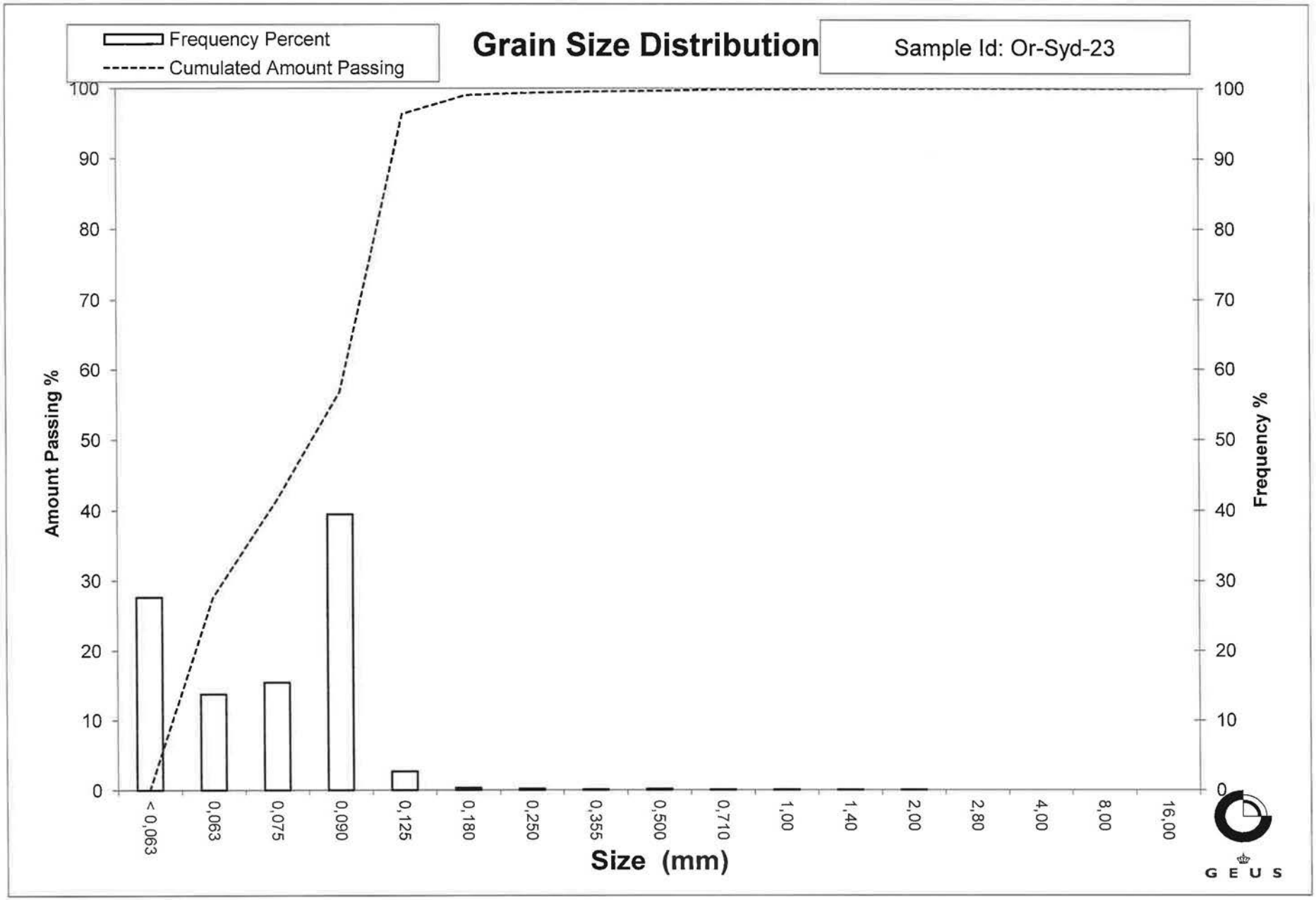
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-23
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-26
Lab. Id: 14056
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 116,06 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	1,22	1,05	98,95
	2,80	-1,49	0,09	0,08	98,87
	2,00	-1,00	0,18	0,16	98,72
Sand	1,40	-0,49	0,51	0,44	98,28
	1,00	0,00	1,31	1,13	97,15
	0,710	0,49	3,56	3,07	94,08
	0,500	1,00	9,90	8,53	85,55
	0,355	1,49	18,07	15,57	69,98
	0,250	2,00	21,16	18,23	51,75
	0,180	2,47	10,55	9,09	42,66
	0,125	3,00	6,47	5,57	37,08
	0,090	3,47	4,86	4,19	32,90
	0,075	3,74	3,05	2,63	30,27
	0,063	3,99	3,52	3,03	27,24
	< 0,063	> 3,99	31,61	27,24	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	27,24
Sand, fine	(0,063 mm - 0,200 mm):	18,02
Sand, medium	(0,2 mm - 0,6 mm):	44,36
Sand, coarse	(0,6 mm - 2 mm):	9,10
Gravel	(> 2 mm):	1,28
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,80	0,33
16%	84%	0,49	1,04
25%	75%	0,40	1,32
40%	60%	0,30	1,75
Median 50%	50%	0,24	2,08
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	1,56
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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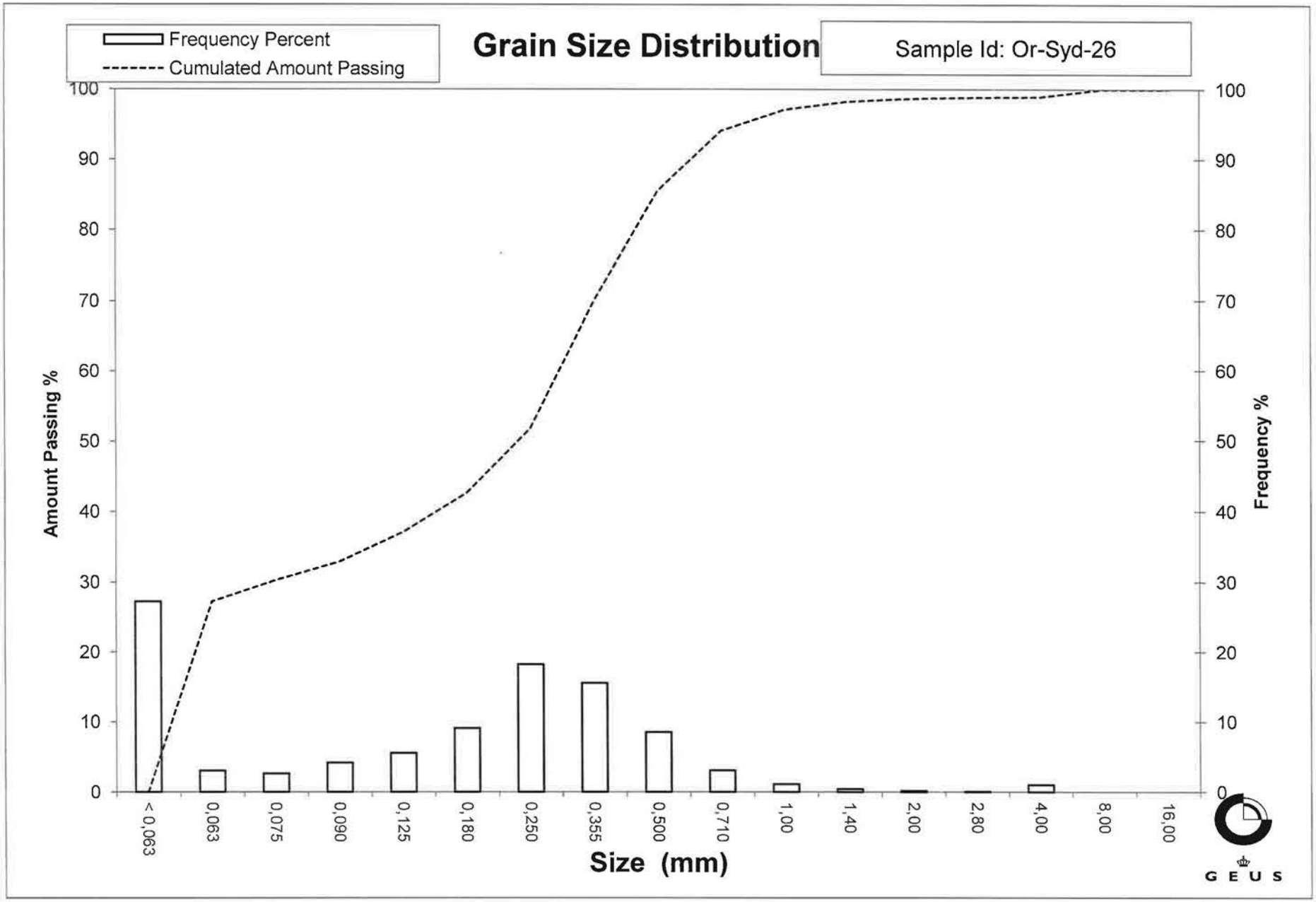
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-26
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-27
Lab. Id: 14057
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 103,04 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,00	0,00	100,00
	1,00	0,00	0,02	0,02	99,98
	0,710	0,49	0,04	0,04	99,94
	0,500	1,00	0,06	0,06	99,88
	0,355	1,49	0,15	0,15	99,74
	0,250	2,00	0,51	0,49	99,24
	0,180	2,47	0,64	0,62	98,62
	0,125	3,00	1,65	1,60	97,02
	0,090	3,47	10,42	10,11	86,91
	0,075	3,74	10,42	10,11	76,80
	0,063	3,99	14,07	13,65	63,14
	< 0,063	> 3,99	65,06	63,14	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	63,14
Sand, fine	(0,063 mm - 0,200 mm):	35,66
Sand, medium	(0,2 mm - 0,6 mm):	1,11
Sand, coarse	(0,6 mm - 2 mm):	0,09
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,12	3,08
16%	84%	0,09	3,54
25%	75%	0,07	3,77
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,54
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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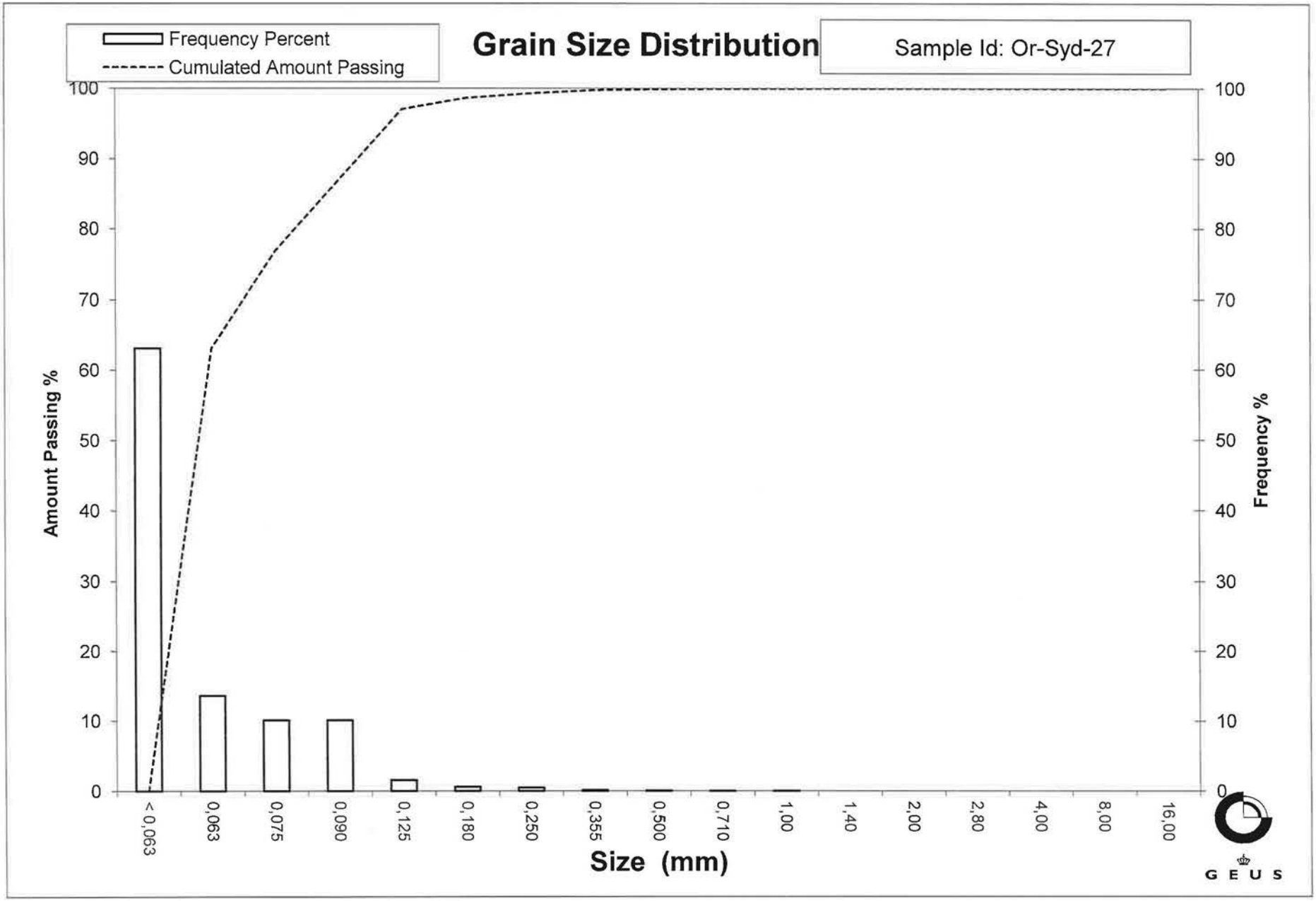
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-27
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-28
Lab. Id: 14058
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 213,71 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	30,00	14,04	85,96
	8,00	-3,00	13,31	6,23	79,73
	4,00	-2,00	0,78	0,36	79,37
	2,80	-1,49	0,16	0,07	79,29
	2,00	-1,00	0,33	0,15	79,14
Sand	1,40	-0,49	0,41	0,19	78,95
	1,00	0,00	1,29	0,60	78,34
	0,710	0,49	4,84	2,26	76,08
	0,500	1,00	18,21	8,52	67,56
	0,355	1,49	36,71	17,18	50,38
	0,250	2,00	57,15	26,74	23,64
	0,180	2,47	32,38	15,15	8,49
	0,125	3,00	13,64	6,38	2,11
	0,090	3,47	1,83	0,86	1,25
	0,075	3,74	0,25	0,12	1,13
	0,063	3,99	0,19	0,09	1,04
	< 0,063	> 3,99	2,23	1,04	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,04
Sand, fine	(0,063 mm - 0,200 mm):	11,77
Sand, medium	(0,2 mm - 0,6 mm):	58,80
Sand, coarse	(0,6 mm - 2 mm):	7,52
Gravel	(> 2 mm):	20,86
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	-------	-------
16%	84%	13,48	-3,75
25%	75%	0,68	0,55
40%	60%	0,44	1,20
Median 50%	50%	0,35	1,50
75%	25%	0,26	1,97
84%	16%	0,21	2,22
90%	10%	0,19	2,42
95%	5%	0,15	2,74

Moments Statistics

Mean	-0,01
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,33

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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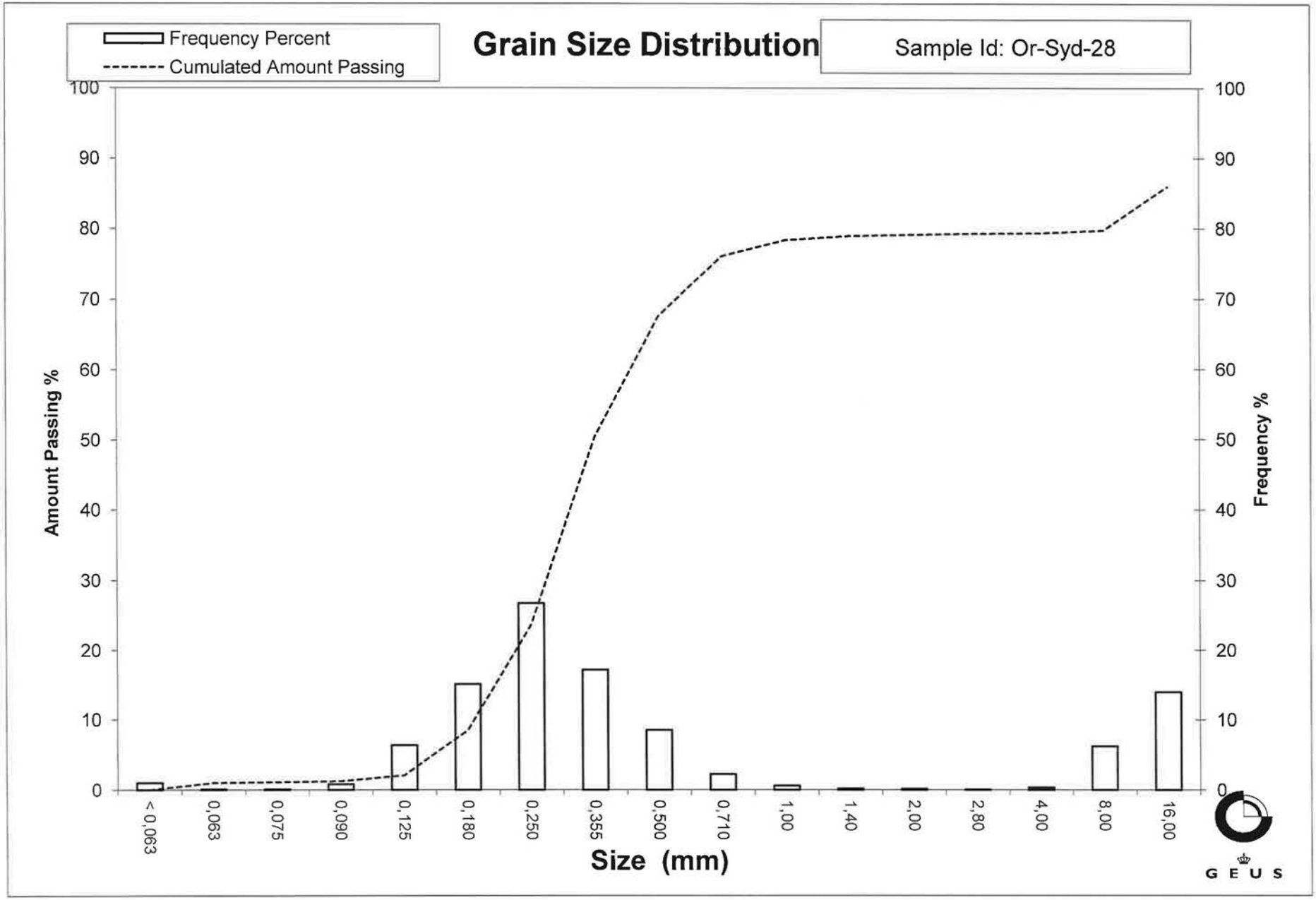
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-28
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-29
Lab. Id: 14059
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 213,29 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	31,94	14,97	85,03
	8,00	-3,00	0,00	0,00	85,03
	4,00	-2,00	0,15	0,07	84,95
	2,80	-1,49	0,05	0,02	84,93
	2,00	-1,00	0,05	0,02	84,91
Sand	1,40	-0,49	0,06	0,03	84,88
	1,00	0,00	0,17	0,08	84,80
	0,710	0,49	0,22	0,10	84,70
	0,500	1,00	0,43	0,20	84,50
	0,355	1,49	1,17	0,55	83,95
	0,250	2,00	3,91	1,83	82,11
	0,180	2,47	11,34	5,32	76,80
	0,125	3,00	65,18	30,56	46,24
	0,090	3,47	68,00	31,88	14,36
	0,075	3,74	7,46	3,50	10,86
	0,063	3,99	4,24	1,99	8,87
	< 0,063	> 3,99	18,92	8,87	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	8,87
Sand, fine	(0,063 mm - 0,200 mm):	69,45
Sand, medium	(0,2 mm - 0,6 mm):	6,28
Sand, coarse	(0,6 mm - 2 mm):	0,32
Gravel	(> 2 mm):	15,09
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	-------	-------
16%	84%	0,37	1,44
25%	75%	0,18	2,50
40%	60%	0,15	2,74
Median 50%	50%	0,13	2,92
75%	25%	0,10	3,30
84%	16%	0,09	3,45
90%	10%	0,07	3,84
95%	5%	-------	-------

Moments Statistics

Mean	2,60
Sorting	-------
Skewness	-------
Kurtosis	-------
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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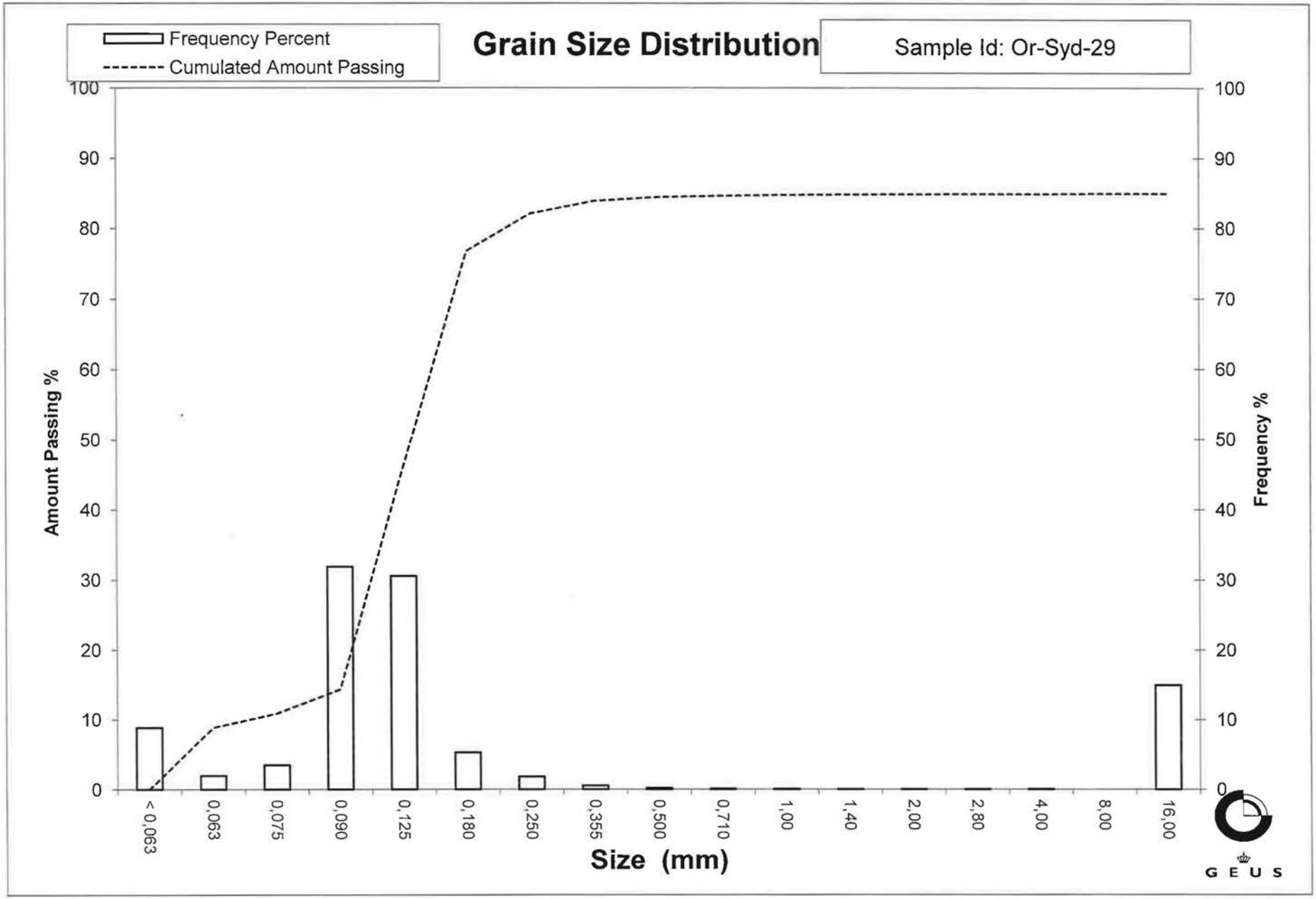
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-29
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-30
Lab. Id: 14060
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 113,2 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,17	0,15	99,85
	1,00	0,00	0,20	0,18	99,67
	0,710	0,49	0,71	0,63	99,05
	0,500	1,00	3,31	2,92	96,12
	0,355	1,49	8,84	7,81	88,31
	0,250	2,00	17,02	15,04	73,28
	0,180	2,47	20,76	18,34	54,94
	0,125	3,00	37,49	33,12	21,82
	0,090	3,47	15,28	13,50	8,32
	0,075	3,74	2,16	1,91	6,41
	0,063	3,99	1,31	1,16	5,26
	< 0,063	> 3,99	5,95	5,26	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,26
Sand, fine	(0,063 mm - 0,200 mm):	54,92
Sand, medium	(0,2 mm - 0,6 mm):	37,34
Sand, coarse	(0,6 mm - 2 mm):	2,49
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,48	1,06
16%	84%	0,32	1,62
25%	75%	0,26	1,93
40%	60%	0,20	2,33
Median 50%	50%	0,17	2,54
75%	25%	0,13	2,94
84%	16%	0,11	3,19
90%	10%	0,09	3,41
95%	5%	-------	-------

Moments Statistics

Mean	2,45
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,11

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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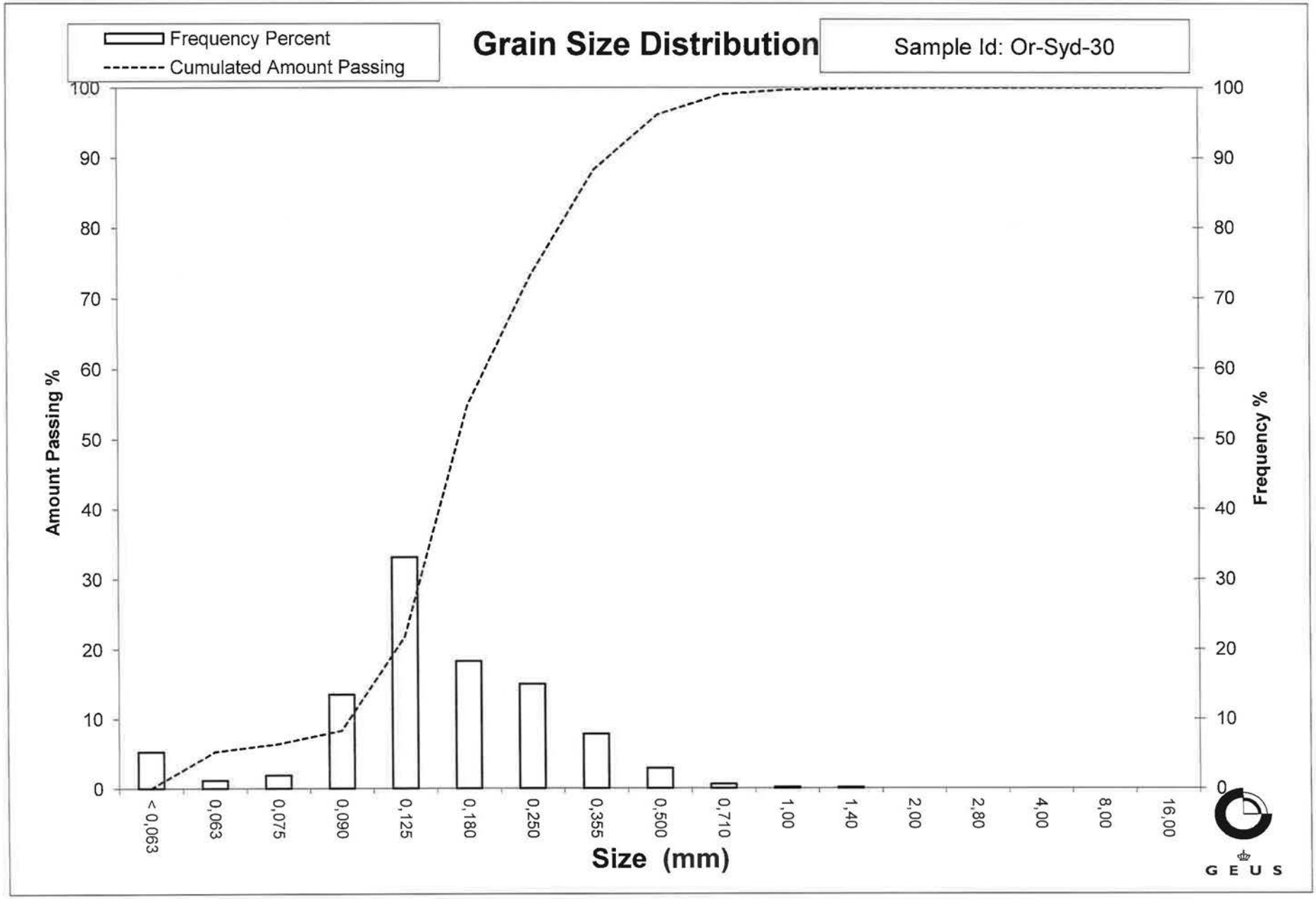
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-30
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-31
Lab. Id: 14061
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 107,42 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,03	0,03	99,97
	1,00	0,00	0,05	0,05	99,93
	0,710	0,49	0,04	0,04	99,89
	0,500	1,00	0,11	0,10	99,79
	0,355	1,49	0,28	0,26	99,53
	0,250	2,00	0,98	0,91	98,61
	0,180	2,47	3,99	3,71	94,90
	0,125	3,00	55,45	51,62	43,28
	0,090	3,47	31,91	29,71	13,57
	0,075	3,74	3,28	3,05	10,52
	0,063	3,99	2,48	2,31	8,21
	< 0,063	> 3,99	8,82	8,21	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	8,21
Sand, fine	(0,063 mm - 0,200 mm):	87,75
Sand, medium	(0,2 mm - 0,6 mm):	3,87
Sand, coarse	(0,6 mm - 2 mm):	0,17
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,18	2,46
16%	84%	0,17	2,57
25%	75%	0,16	2,65
40%	60%	0,14	2,81
Median 50%	50%	0,13	2,92
75%	25%	0,10	3,27
84%	16%	0,09	3,43
90%	10%	0,07	3,79
95%	5%	-------	-------

Moments Statistics

Mean	2,97
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,98

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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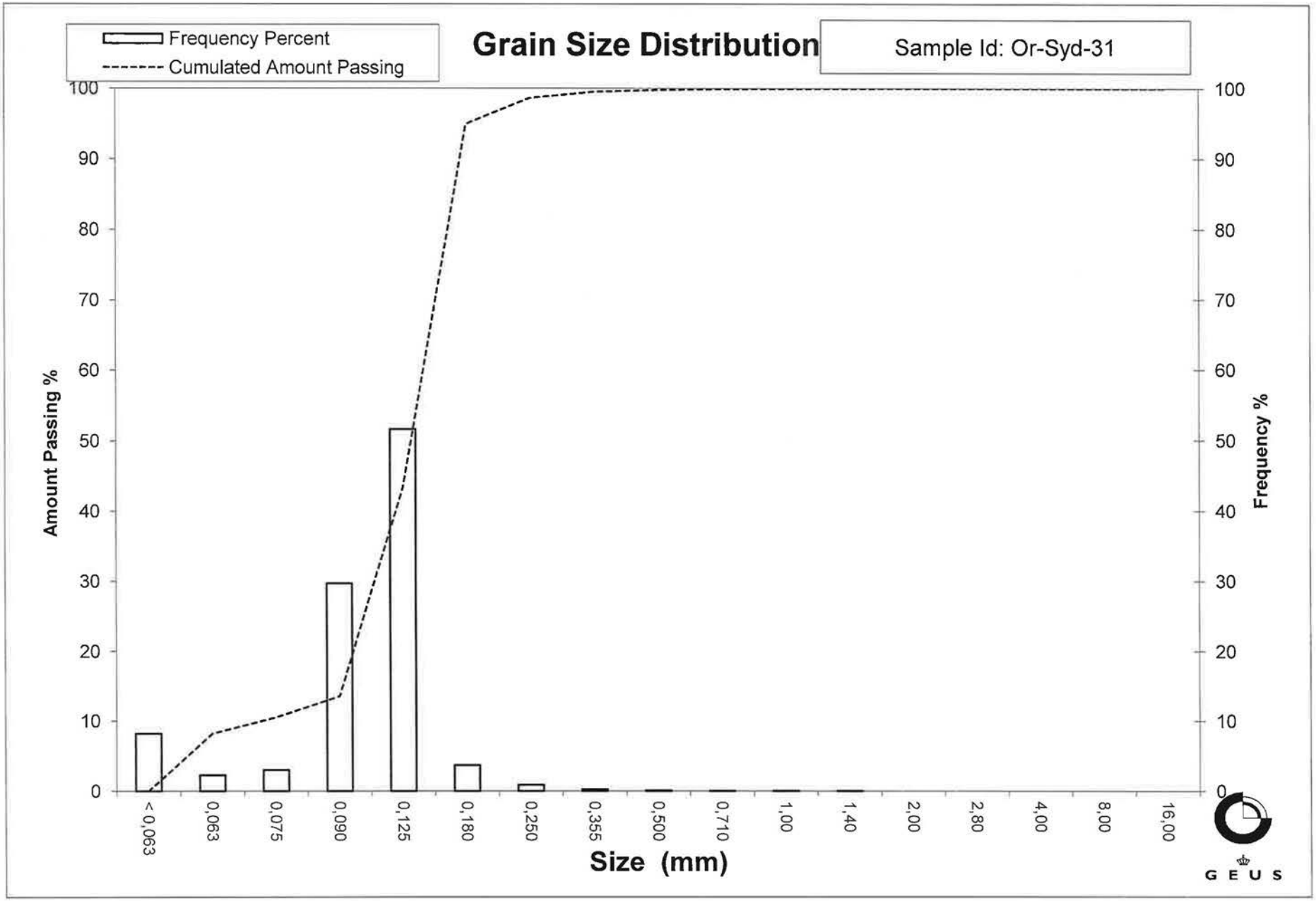
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-31
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-32
Lab. Id: 14062
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 115,07 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,05	0,04	99,96
	1,00	0,00	0,04	0,03	99,92
	0,710	0,49	0,07	0,06	99,86
	0,500	1,00	0,10	0,09	99,77
	0,355	1,49	0,14	0,12	99,65
	0,250	2,00	0,37	0,32	99,33
	0,180	2,47	0,43	0,37	98,96
	0,125	3,00	0,44	0,38	98,57
	0,090	3,47	2,30	2,00	96,58
	0,075	3,74	4,14	3,60	92,98
	0,063	3,99	7,27	6,32	86,66
	< 0,063	> 3,99	99,72	86,66	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	86,66
Sand, fine	(0,063 mm - 0,200 mm):	12,40
Sand, medium	(0,2 mm - 0,6 mm):	0,75
Sand, coarse	(0,6 mm - 2 mm):	0,18
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,08	3,58
16%	84%	-------	-------
25%	75%	-------	-------
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	-------
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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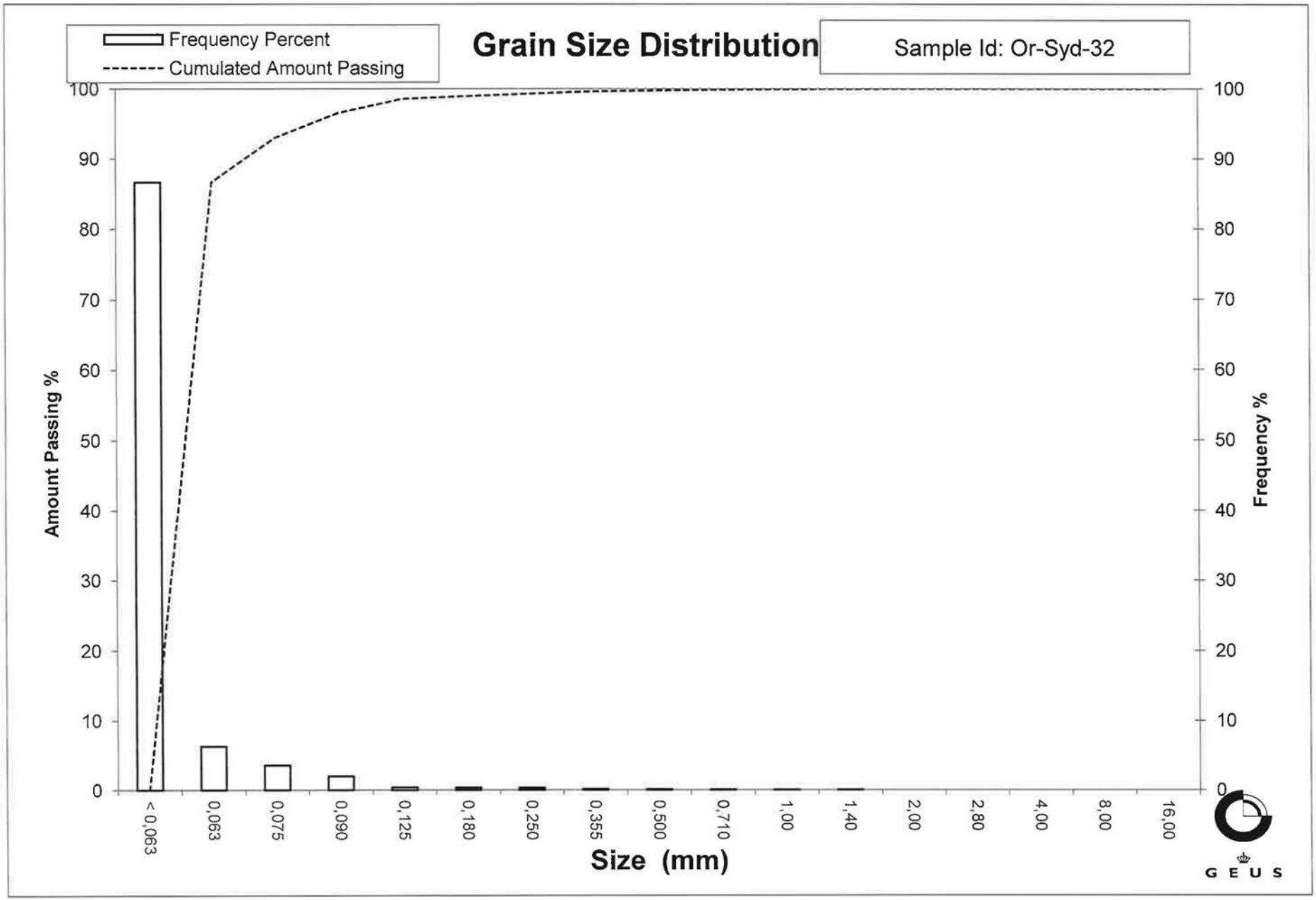
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-32
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-33
Lab. Id: 14063
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 101,42 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	1,71	1,69	98,31
	1,00	0,00	2,05	2,02	96,29
	0,710	0,49	2,60	2,56	93,73
	0,500	1,00	5,93	5,85	87,88
	0,355	1,49	12,98	12,80	75,08
	0,250	2,00	22,62	22,30	52,78
	0,180	2,47	13,55	13,36	39,42
	0,125	3,00	5,38	5,30	34,12
	0,090	3,47	8,55	8,43	25,69
	0,075	3,74	4,18	4,12	21,56
	0,063	3,99	4,14	4,08	17,48
	< 0,063	> 3,99	17,73	17,48	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	17,48
Sand, fine	(0,063 mm - 0,200 mm):	25,76
Sand, medium	(0,2 mm - 0,6 mm):	47,43
Sand, coarse	(0,6 mm - 2 mm):	9,33
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,85	0,23
16%	84%	0,46	1,13
25%	75%	0,35	1,50
40%	60%	0,28	1,82
Median 50%	50%	0,24	2,09
75%	25%	0,09	3,51
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	1,61
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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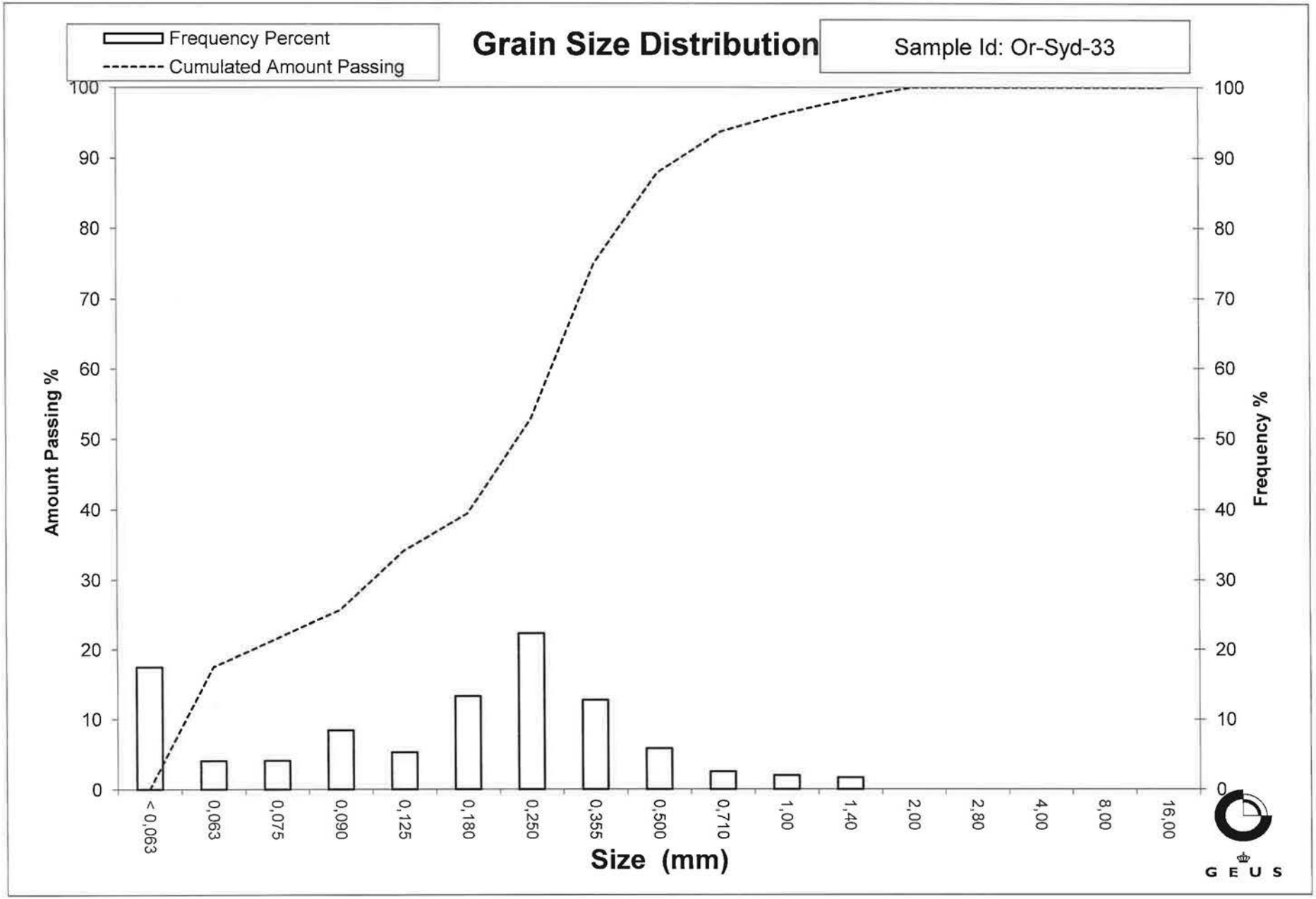
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-33
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-34
Lab. Id: 14064
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 119,32 g

Size Fractions

Sieve Analysis (Gravel / Sand)

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	0,98	0,82	99,18
2,80	-1,49	0,60	0,50	98,68
2,00	-1,00	0,70	0,59	98,09
1,40	-0,49	1,06	0,89	97,20
1,00	0,00	2,00	1,68	95,52
0,710	0,49	4,22	3,54	91,99
0,500	1,00	7,87	6,60	85,39
0,355	1,49	12,03	10,08	75,31
0,250	2,00	23,93	20,06	55,25
0,180	2,47	15,95	13,37	41,89
0,125	3,00	5,71	4,79	37,10
0,090	3,47	10,86	9,10	28,00
0,075	3,74	7,78	6,52	21,48
0,063	3,99	7,22	6,05	15,43
< 0,063	> 3,99	18,41	15,43	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	15,43
Sand, fine	(0,063 mm - 0,200 mm):	30,28
Sand, medium	(0,2 mm - 0,6 mm):	42,83
Sand, coarse	(0,6 mm - 2 mm):	9,56
Gravel	(> 2 mm):	1,91
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,96	0,06
16%	84%	0,48	1,06
25%	75%	0,35	1,50
40%	60%	0,27	1,86
Median 50%	50%	0,22	2,17
75%	25%	0,08	3,59
84%	16%	0,06	3,96
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,40
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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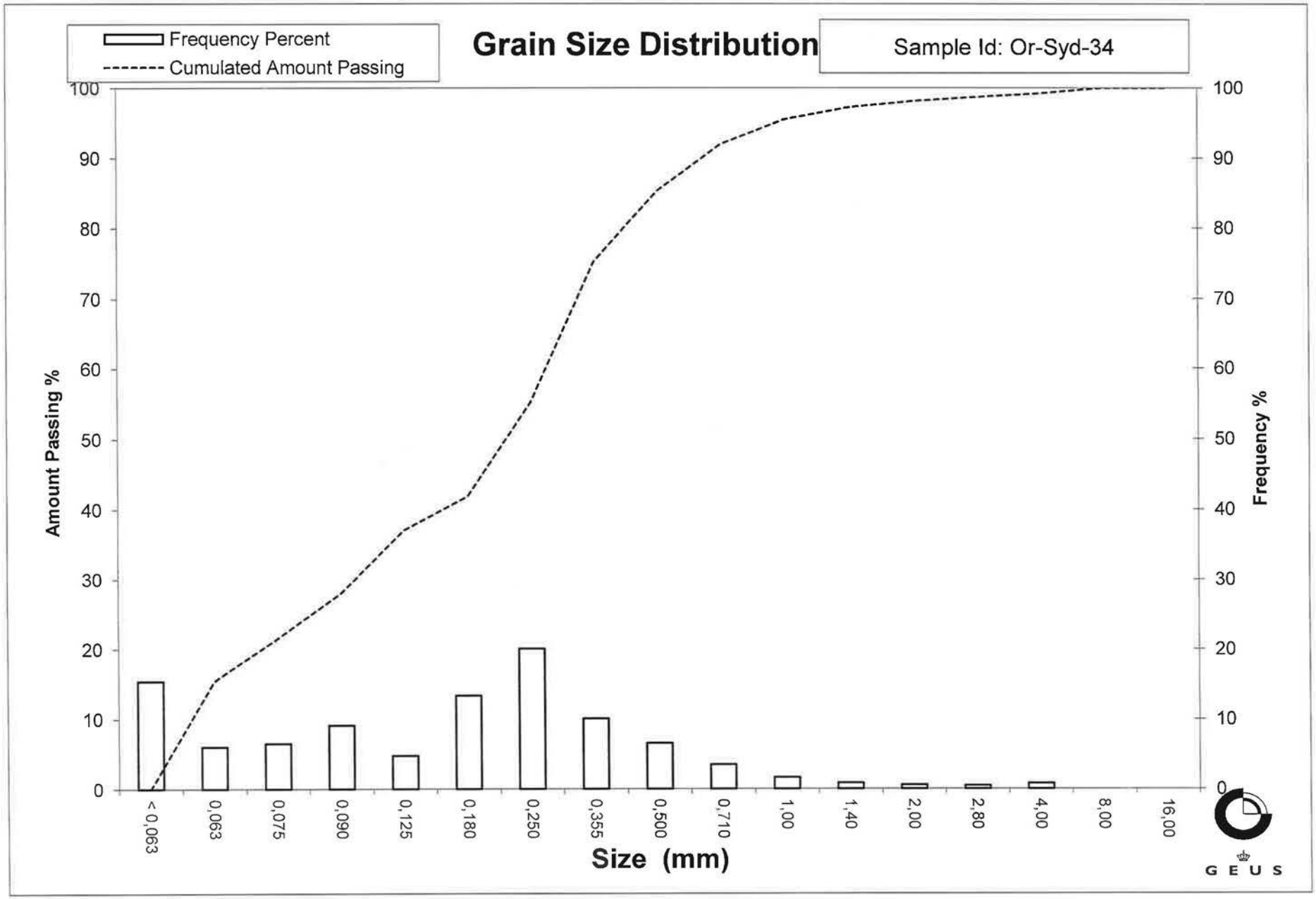
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-34
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-35
Lab. Id: 14065
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 114,22 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,09	0,08	99,92
	1,00	0,00	0,11	0,10	99,82
	0,710	0,49	0,30	0,26	99,56
	0,500	1,00	1,56	1,37	98,20
	0,355	1,49	7,16	6,27	91,93
	0,250	2,00	22,97	20,11	71,82
	0,180	2,47	27,90	24,43	47,39
	0,125	3,00	16,78	14,69	32,70
	0,090	3,47	6,94	6,08	26,62
	0,075	3,74	3,85	3,37	23,25
	0,063	3,99	4,21	3,69	19,57
	< 0,063	> 3,99	22,35	19,57	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	19,57
Sand, fine	(0,063 mm - 0,200 mm):	34,80
Sand, medium	(0,2 mm - 0,6 mm):	44,48
Sand, coarse	(0,6 mm - 2 mm):	1,15
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,43	1,23
16%	84%	0,31	1,67
25%	75%	0,27	1,91
40%	60%	0,22	2,21
Median 50%	50%	0,19	2,42
75%	25%	0,08	3,59
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,04
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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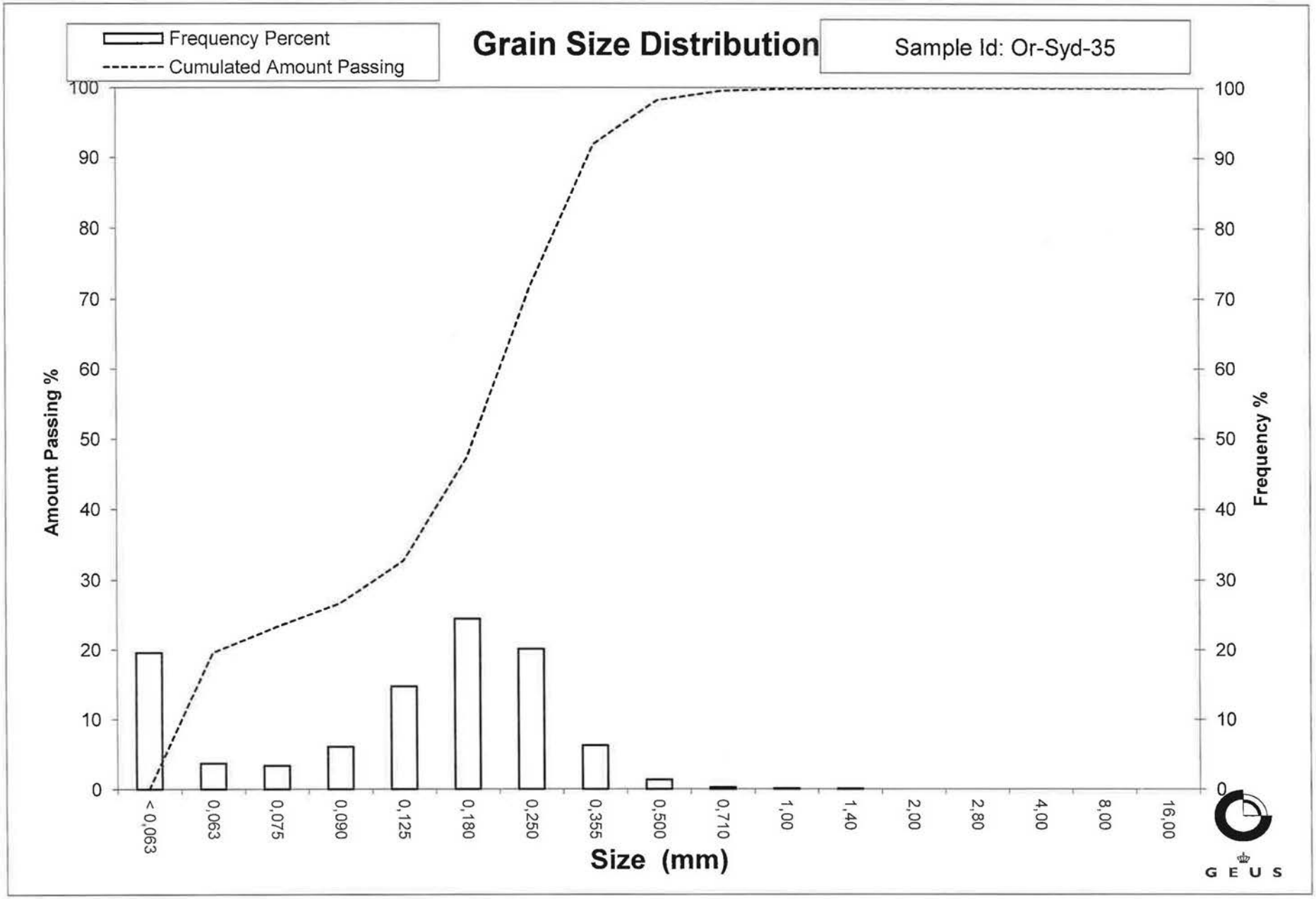
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-35
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Or-Syd-36
Lab. Id: 14066
Submitter: Naturstyrelsen
Subject: Grab Øresund Syd
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 108,93 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	1,35	1,24	98,76
	1,00	0,00	0,11	0,10	98,66
	0,710	0,49	0,12	0,11	98,55
	0,500	1,00	0,14	0,13	98,42
	0,355	1,49	0,20	0,18	98,24
	0,250	2,00	0,85	0,78	97,46
	0,180	2,47	7,75	7,11	90,34
	0,125	3,00	49,08	45,06	45,29
	0,090	3,47	27,74	25,47	19,82
	0,075	3,74	5,76	5,29	14,53
	0,063	3,99	3,76	3,45	11,08
	< 0,063	> 3,99	12,07	11,08	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	11,08
Sand, fine	(0,063 mm - 0,200 mm):	81,29
Sand, medium	(0,2 mm - 0,6 mm):	6,11
Sand, coarse	(0,6 mm - 2 mm):	1,52
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,23	2,15
16%	84%	0,17	2,54
25%	75%	0,16	2,63
40%	60%	0,14	2,81
Median 50%	50%	0,13	2,94
75%	25%	0,10	3,36
84%	16%	0,08	3,66
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,04
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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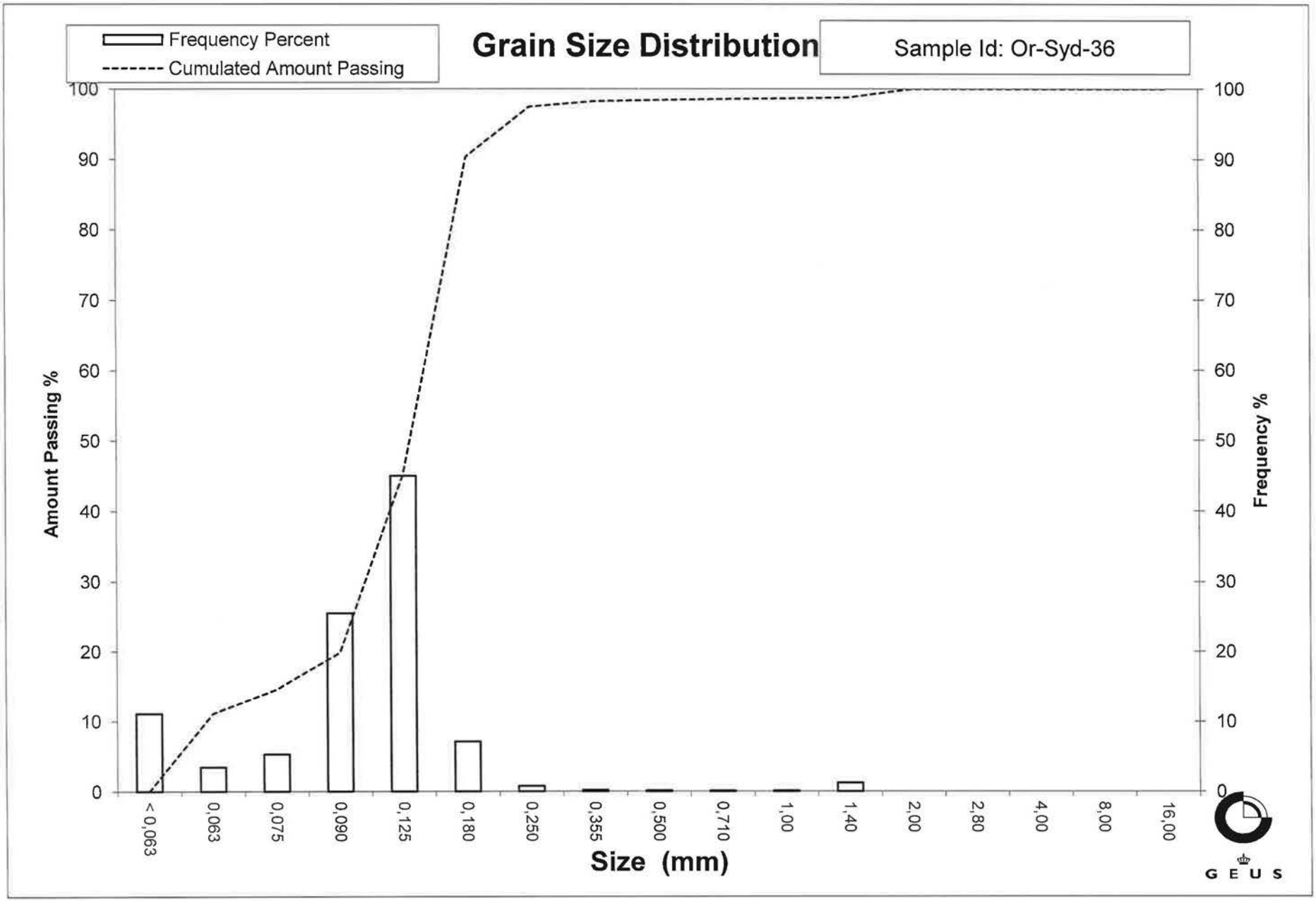
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Or-Syd-36
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Ni-01
Lab. Id: 14067
Submitter: Naturstyrelsen
Subject: Grab Nivå Flak
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 129,51 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	1,15	0,89	99,11
	2,80	-1,49	0,00	0,00	99,11
	2,00	-1,00	0,00	0,00	99,11
Sand	1,40	-0,49	0,36	0,28	98,83
	1,00	0,00	0,08	0,06	98,77
	0,710	0,49	0,10	0,08	98,70
	0,500	1,00	0,19	0,15	98,55
	0,355	1,49	0,37	0,29	98,26
	0,250	2,00	0,88	0,68	97,58
	0,180	2,47	1,61	1,24	96,34
	0,125	3,00	5,95	4,59	91,75
	0,090	3,47	6,34	4,90	86,85
	0,075	3,74	4,49	3,47	83,38
	0,063	3,99	6,39	4,93	78,45
	< 0,063	> 3,99	101,60	78,45	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	78,45
Sand, fine	(0,063 mm - 0,200 mm):	18,25
Sand, medium	(0,2 mm - 0,6 mm):	1,92
Sand, coarse	(0,6 mm - 2 mm):	0,49
Gravel	(> 2 mm):	0,89
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,16	2,61
16%	84%	0,08	3,69
25%	75%	-------	-------
40%	60%	-------	-------
Median 50%	50%	-------	-------
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,69
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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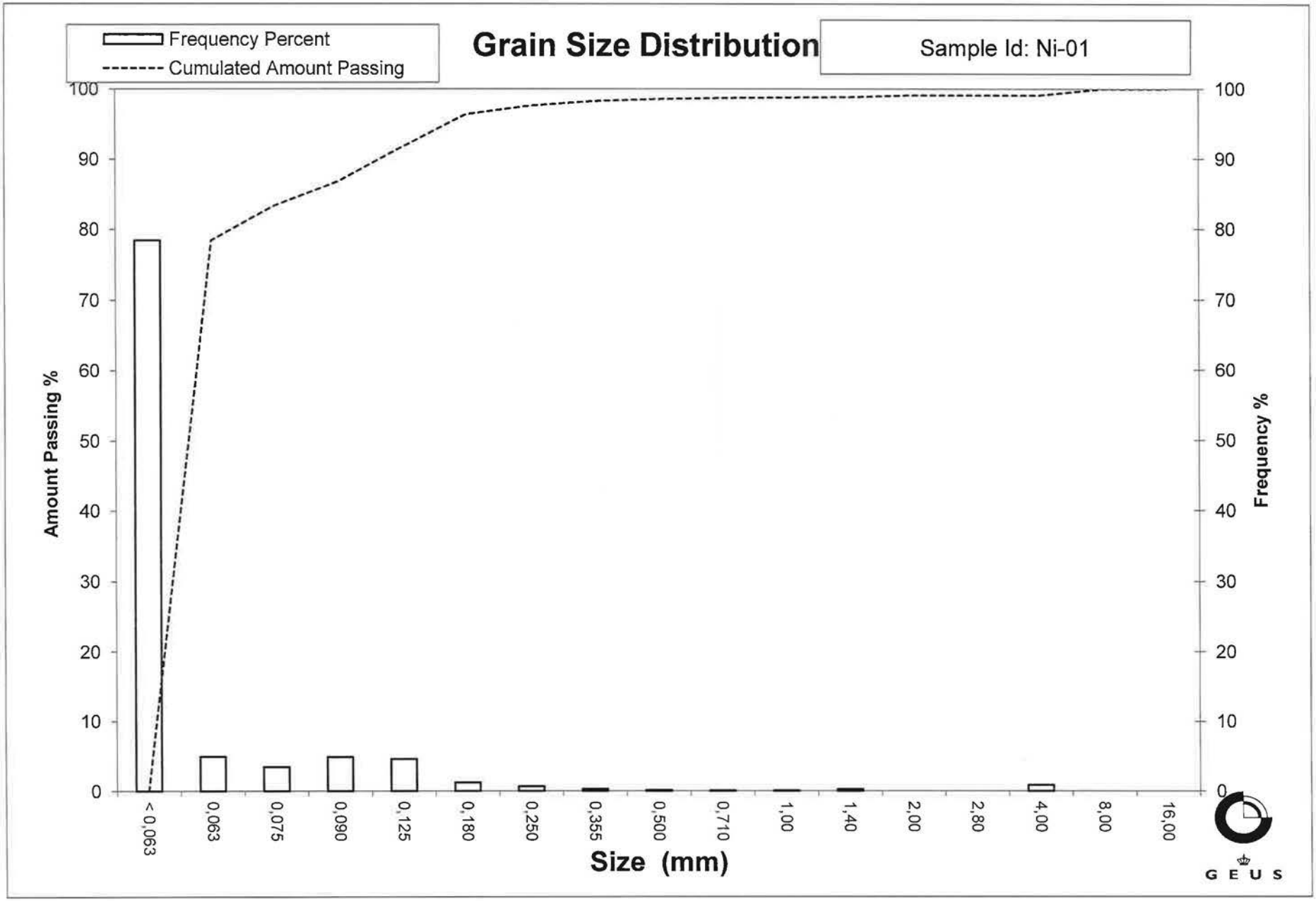
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Ni-01
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Ni-02
Lab. Id: 14068
Submitter: Naturstyrelsen
Subject: Grab Nivå Flak
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 105,03 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	1,15	1,09	98,91
	4,00	-2,00	0,51	0,49	98,42
	2,80	-1,49	0,18	0,17	98,25
	2,00	-1,00	0,43	0,41	97,84
Sand	1,40	-0,49	0,52	0,50	97,34
	1,00	0,00	0,61	0,58	96,76
	0,710	0,49	0,94	0,89	95,87
	0,500	1,00	1,62	1,54	94,33
	0,355	1,49	2,69	2,56	91,76
	0,250	2,00	5,88	5,60	86,17
	0,180	2,47	9,04	8,61	77,56
	0,125	3,00	9,77	9,30	68,26
	0,090	3,47	12,32	11,73	56,53
	0,075	3,74	8,52	8,11	48,41
	0,063	3,99	10,13	9,64	38,77
	< 0,063	> 3,99	40,72	38,77	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	38,77
Sand, fine	(0,063 mm - 0,200 mm):	41,25
Sand, medium	(0,2 mm - 0,6 mm):	15,04
Sand, coarse	(0,6 mm - 2 mm):	2,78
Gravel	(> 2 mm):	2,16
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,59	0,76
16%	84%	0,23	2,11
25%	75%	0,16	2,60
40%	60%	0,10	3,32
Median 50%	50%	0,08	3,68
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,89
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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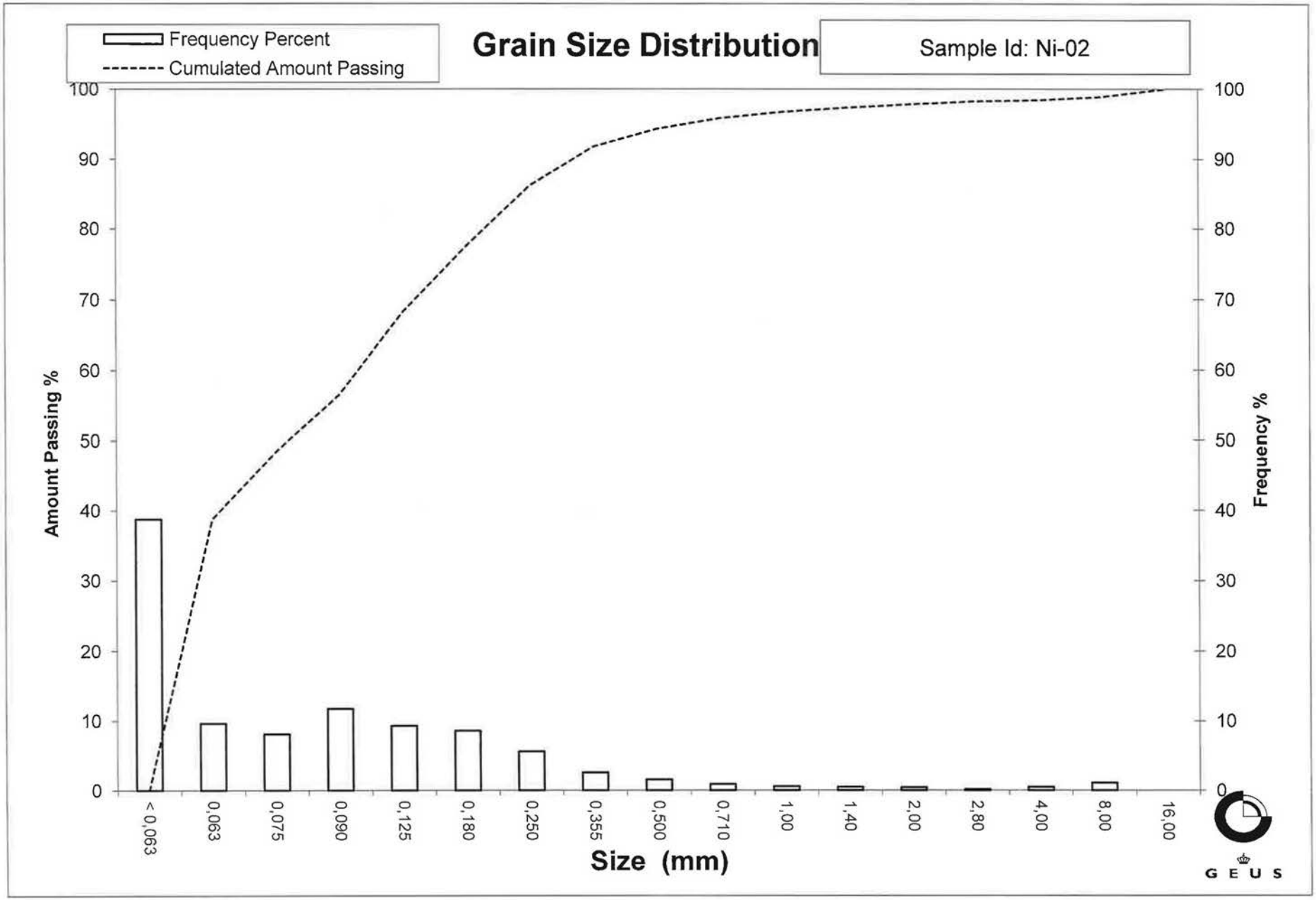
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Ni-02
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Sk-01
Lab. Id: 14069
Submitter: Naturstyrelsen
Subject: Grab Skovshoved
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 216,12 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	7,03	3,25	96,75
	8,00	-3,00	16,84	7,79	88,96
	4,00	-2,00	13,03	6,03	82,93
	2,80	-1,49	6,12	2,83	80,09
	2,00	-1,00	5,82	2,69	77,40
Sand	1,40	-0,49	4,27	1,98	75,43
	1,00	0,00	3,27	1,51	73,91
	0,710	0,49	5,12	2,37	71,54
	0,500	1,00	8,63	3,99	67,55
	0,355	1,49	10,62	4,91	62,64
	0,250	2,00	16,25	7,52	55,12
	0,180	2,47	30,84	14,27	40,85
	0,125	3,00	48,55	22,46	18,38
	0,090	3,47	20,77	9,61	8,77
	0,075	3,74	4,64	2,15	6,63
	0,063	3,99	4,30	1,99	4,64
	< 0,063	> 3,99	10,02	4,64	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,64
Sand, fine	(0,063 mm - 0,200 mm):	40,29
Sand, medium	(0,2 mm - 0,6 mm):	24,53
Sand, coarse	(0,6 mm - 2 mm):	7,95
Gravel	(> 2 mm):	22,60
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	14,21	-3,83
16%	84%	4,71	-2,24
25%	75%	1,29	-0,36
40%	60%	0,32	1,65
Median 50%	50%	0,22	2,15
75%	25%	0,14	2,82
84%	16%	0,12	3,10
90%	10%	0,09	3,40
95%	5%	0,07	3,94

Moments Statistics

Mean	1,01
Sorting	2,51
Skewness	-0,59
Kurtosis	1,00
Uniformity Coefficient	3,37

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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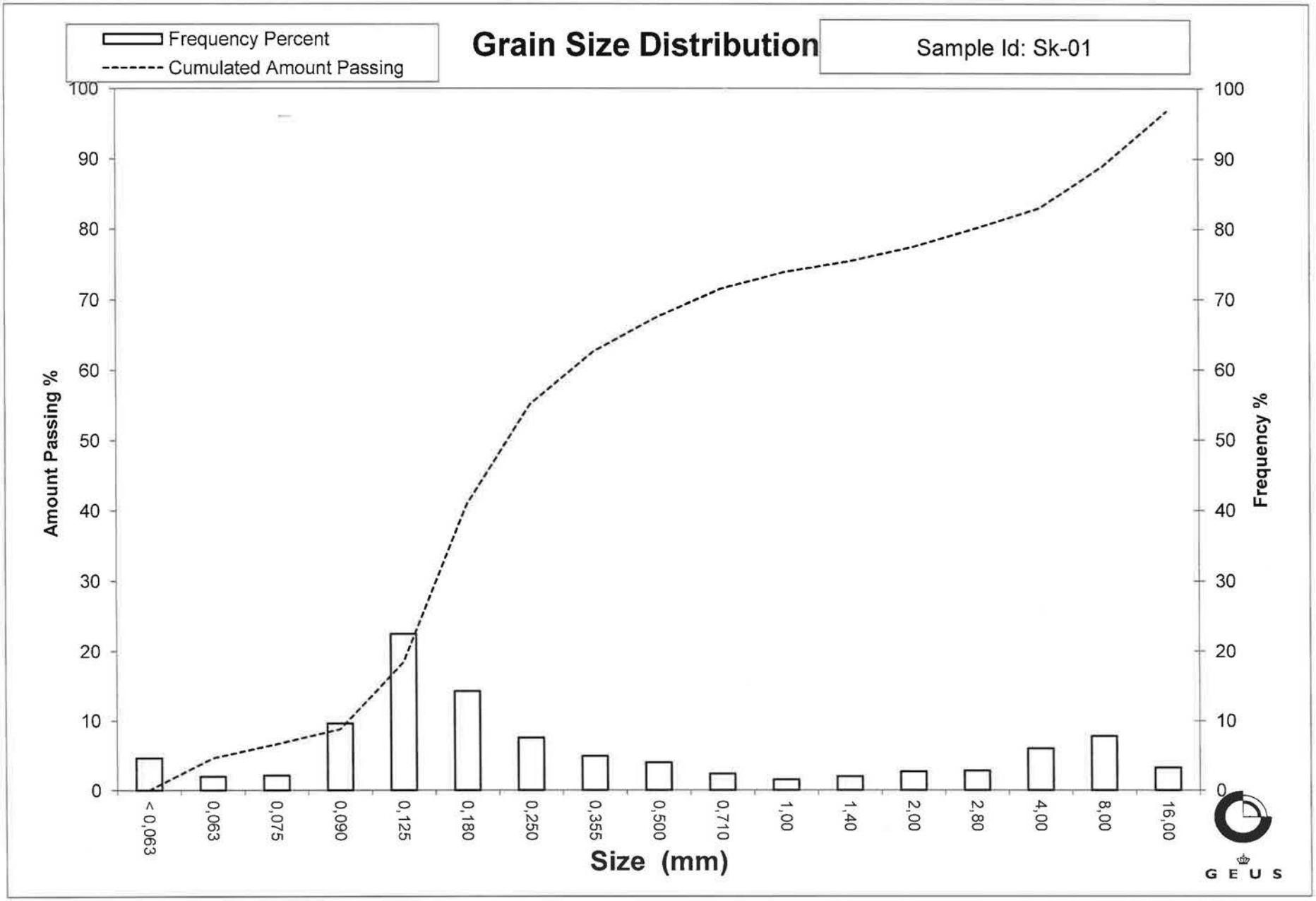
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Sk-01
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Sk-02
Lab. Id: 14070
Submitter: Naturstyrelsen
Subject: Grab Skovshoved
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <8,0mm

GEUS

Total Weight 228,12 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
Gravel	8,00	-3,00	4,74	2,08	97,92
Gravel	4,00	-2,00	2,13	0,93	96,99
Gravel	2,80	-1,49	0,64	0,28	96,71
Gravel	2,00	-1,00	0,52	0,23	96,48
Sand	1,40	-0,49	0,48	0,21	96,27
Sand	1,00	0,00	1,98	0,87	95,40
Sand	0,710	0,49	5,36	2,35	93,05
Sand	0,500	1,00	17,33	7,60	85,46
Sand	0,355	1,49	36,16	15,85	69,60
Sand	0,250	2,00	55,44	24,30	45,30
Sand	0,180	2,47	57,27	25,11	20,20
Sand	0,125	3,00	22,42	9,83	10,37
Sand	0,090	3,47	4,53	1,99	8,38
Sand	0,075	3,74	1,04	0,46	7,93
Sand	0,063	3,99	0,75	0,33	7,60
	< 0,063	> 3,99	17,33	7,60	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	7,60
Sand, fine	(0,063 mm - 0,200 mm):	19,77
Sand, medium	(0,2 mm - 0,6 mm):	61,70
Sand, coarse	(0,6 mm - 2 mm):	7,41
Gravel	(> 2 mm):	3,52
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,95	0,07
16%	84%	0,49	1,04
25%	75%	0,40	1,31
40%	60%	0,31	1,67
Median 50%	50%	0,27	1,89
75%	25%	0,19	2,37
84%	16%	0,16	2,68
90%	10%	0,12	3,08
95%	5%	-------	-------

Moments Statistics

Mean	1,87
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,65

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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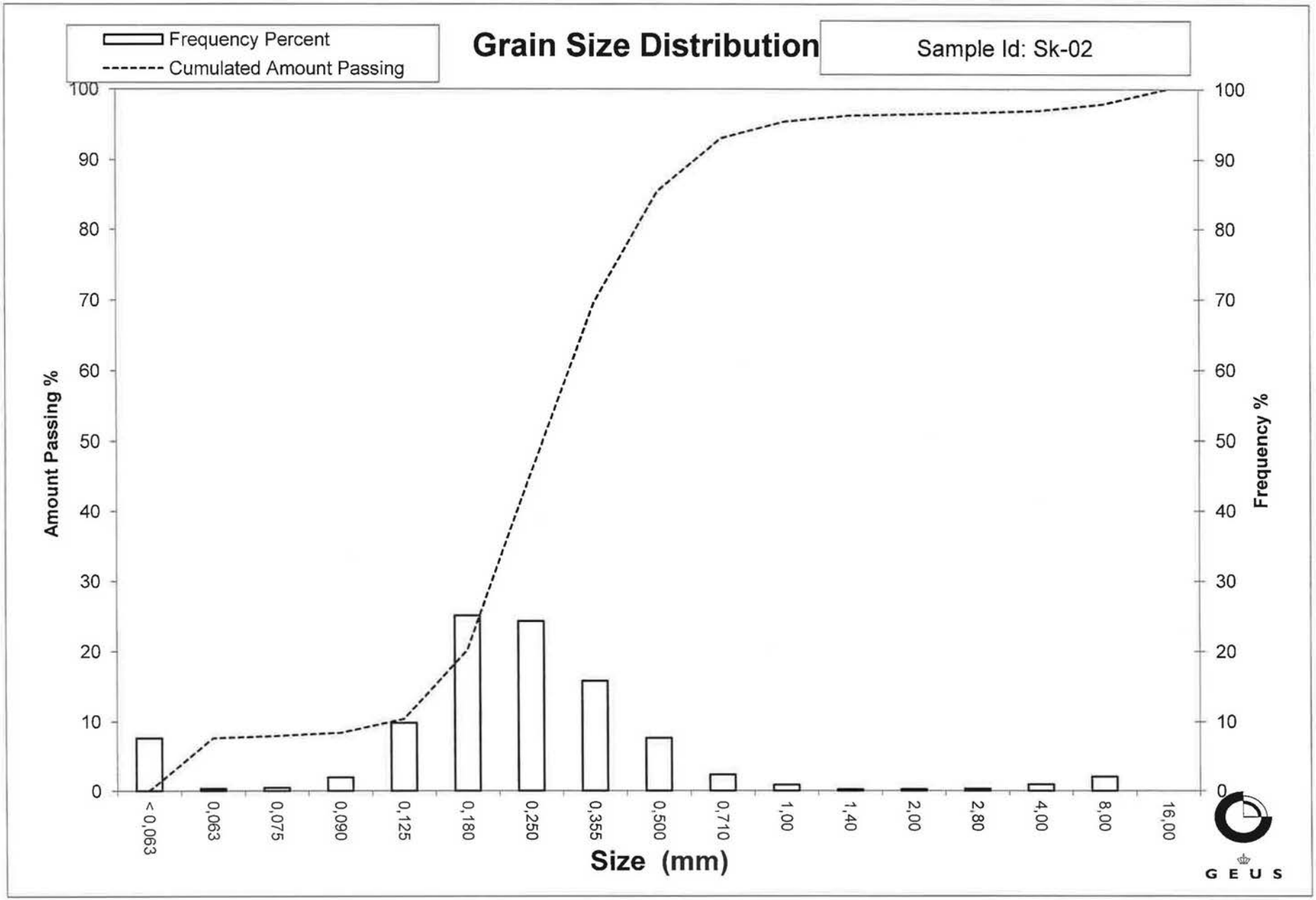
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Sk-02
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Sk-03
Lab. Id: 14071
Submitter: Naturstyrelsen
Subject: Grab Skovshoved
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 118,56 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	2,45	2,07	97,93
	2,80	-1,49	1,17	0,99	96,95
	2,00	-1,00	0,84	0,71	96,24
Sand	1,40	-0,49	0,61	0,51	95,72
	1,00	0,00	1,21	1,02	94,70
	0,710	0,49	1,47	1,24	93,46
	0,500	1,00	2,55	2,15	91,31
	0,355	1,49	3,80	3,21	88,11
	0,250	2,00	10,83	9,13	78,97
	0,180	2,47	22,97	19,37	59,60
	0,125	3,00	41,20	34,75	24,85
	0,090	3,47	16,71	14,09	10,75
	0,075	3,74	3,41	2,88	7,88
	0,063	3,99	2,10	1,77	6,11
	< 0,063	> 3,99	7,24	6,11	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	6,11
Sand, fine	(0,063 mm - 0,200 mm):	59,03
Sand, medium	(0,2 mm - 0,6 mm):	27,20
Sand, coarse	(0,6 mm - 2 mm):	3,90
Gravel	(> 2 mm):	3,76
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	1,12	-0,16
16%	84%	0,31	1,70
25%	75%	0,24	2,09
40%	60%	0,18	2,46
Median 50%	50%	0,16	2,60
75%	25%	0,13	3,00
84%	16%	0,10	3,28
90%	10%	0,09	3,54
95%	5%	-------	-------

Moments Statistics

Mean	2,53
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,11

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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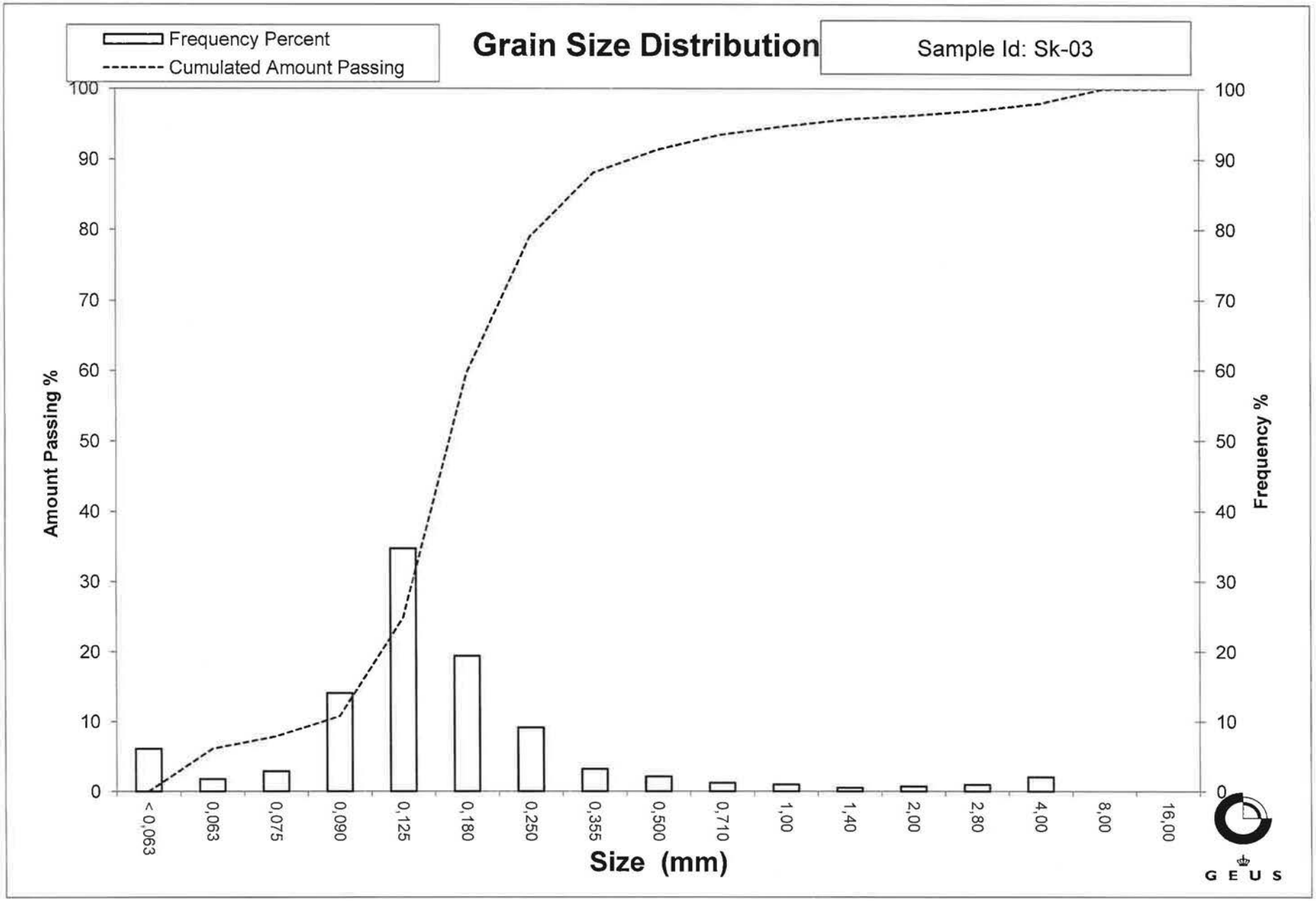
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Sk-03
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: Dis-01
Lab. Id: 14072
Submitter: Naturstyrelsen
Subject: Grab Skovshoved
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 115,4 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,79	0,68	99,32
	2,00	-1,00	0,00	0,00	99,32
Sand	1,40	-0,49	0,10	0,09	99,23
	1,00	0,00	0,10	0,09	99,14
	0,710	0,49	0,10	0,09	99,06
	0,500	1,00	0,12	0,10	98,95
	0,355	1,49	0,22	0,19	98,76
	0,250	2,00	1,44	1,25	97,51
	0,180	2,47	10,54	9,13	88,38
	0,125	3,00	37,96	32,89	55,49
	0,090	3,47	21,18	18,35	37,13
	0,075	3,74	6,40	5,55	31,59
	0,063	3,99	5,15	4,46	27,12
	< 0,063	> 3,99	31,30	27,12	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	27,12
Sand, fine	(0,063 mm - 0,200 mm):	63,87
Sand, medium	(0,2 mm - 0,6 mm):	8,01
Sand, coarse	(0,6 mm - 2 mm):	0,31
Gravel	(> 2 mm):	0,68
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,23	2,12
16%	84%	0,17	2,53
25%	75%	0,16	2,67
40%	60%	0,13	2,92
Median 50%	50%	0,11	3,13
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,83
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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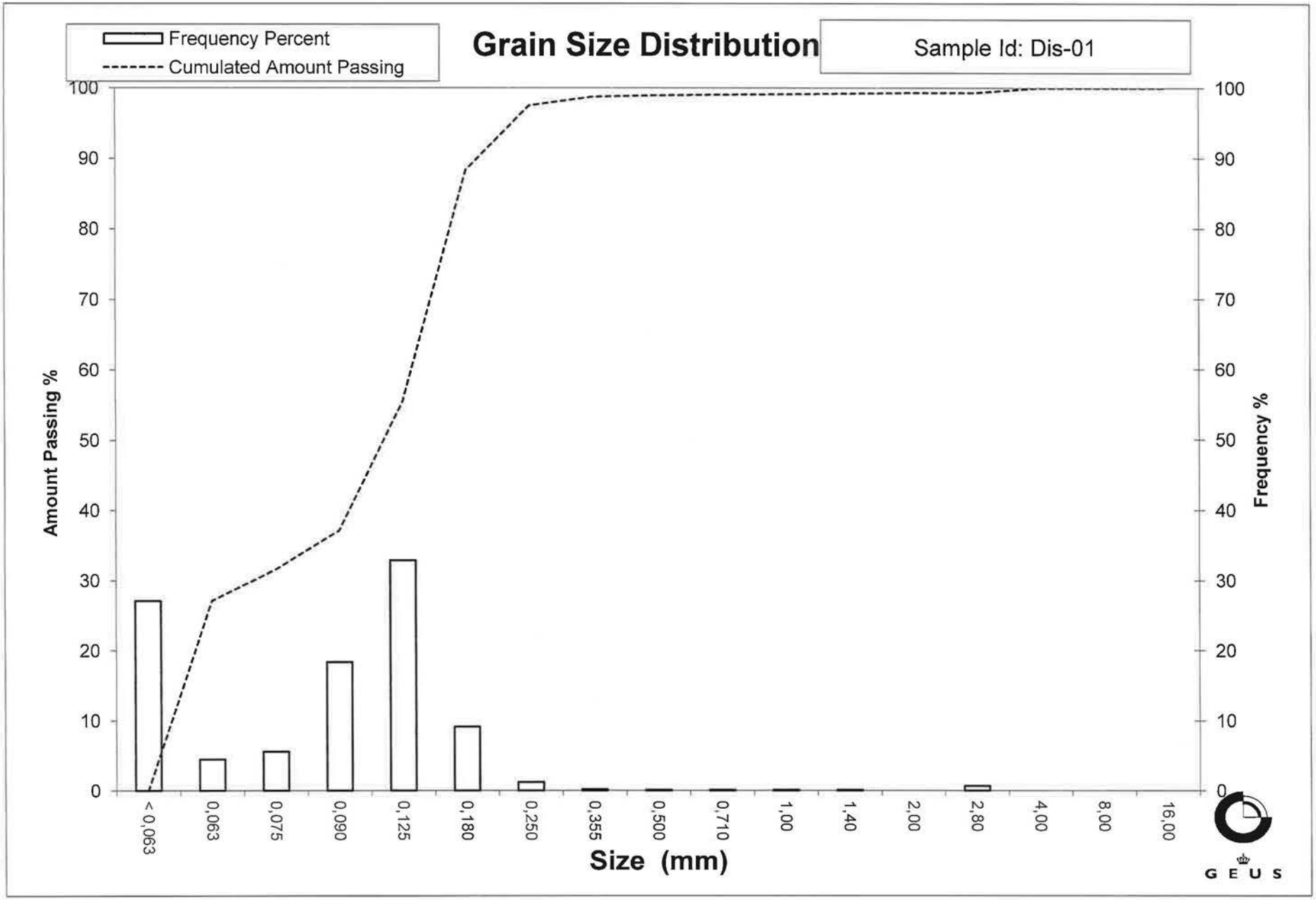
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: Dis-01
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LG 03
Lab. Id: 14073
Submitter: Naturstyrelsen
Subject: Grab Lappe Grund
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

G E U S

Total Weight 144,08 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,16	0,11	99,89
	1,00	0,00	0,27	0,19	99,70
	0,710	0,49	0,99	0,69	99,01
	0,500	1,00	10,65	7,39	91,62
	0,355	1,49	39,79	27,62	64,01
	0,250	2,00	49,21	34,15	29,85
	0,180	2,47	35,45	24,60	5,25
	0,125	3,00	6,54	4,54	0,71
	0,090	3,47	0,37	0,26	0,45
	0,075	3,74	0,04	0,03	0,42
	0,063	3,99	0,02	0,01	0,41
	< 0,063	> 3,99	0,59	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):	11,87
Sand, medium	(0,2 mm - 0,6 mm):	82,87
Sand, coarse	(0,6 mm - 2 mm):	4,86
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,60	0,75
16%	84%	0,46	1,12
25%	75%	0,41	1,28
40%	60%	0,34	1,55
Median 50%	50%	0,31	1,68
75%	25%	0,24	2,08
84%	16%	0,21	2,25
90%	10%	0,19	2,37
95%	5%	0,18	2,50

Moments Statistics

Mean	1,68
Sorting	0,55
Skewness	-0,03
Kurtosis	0,89
Uniformity Coefficient	1,77

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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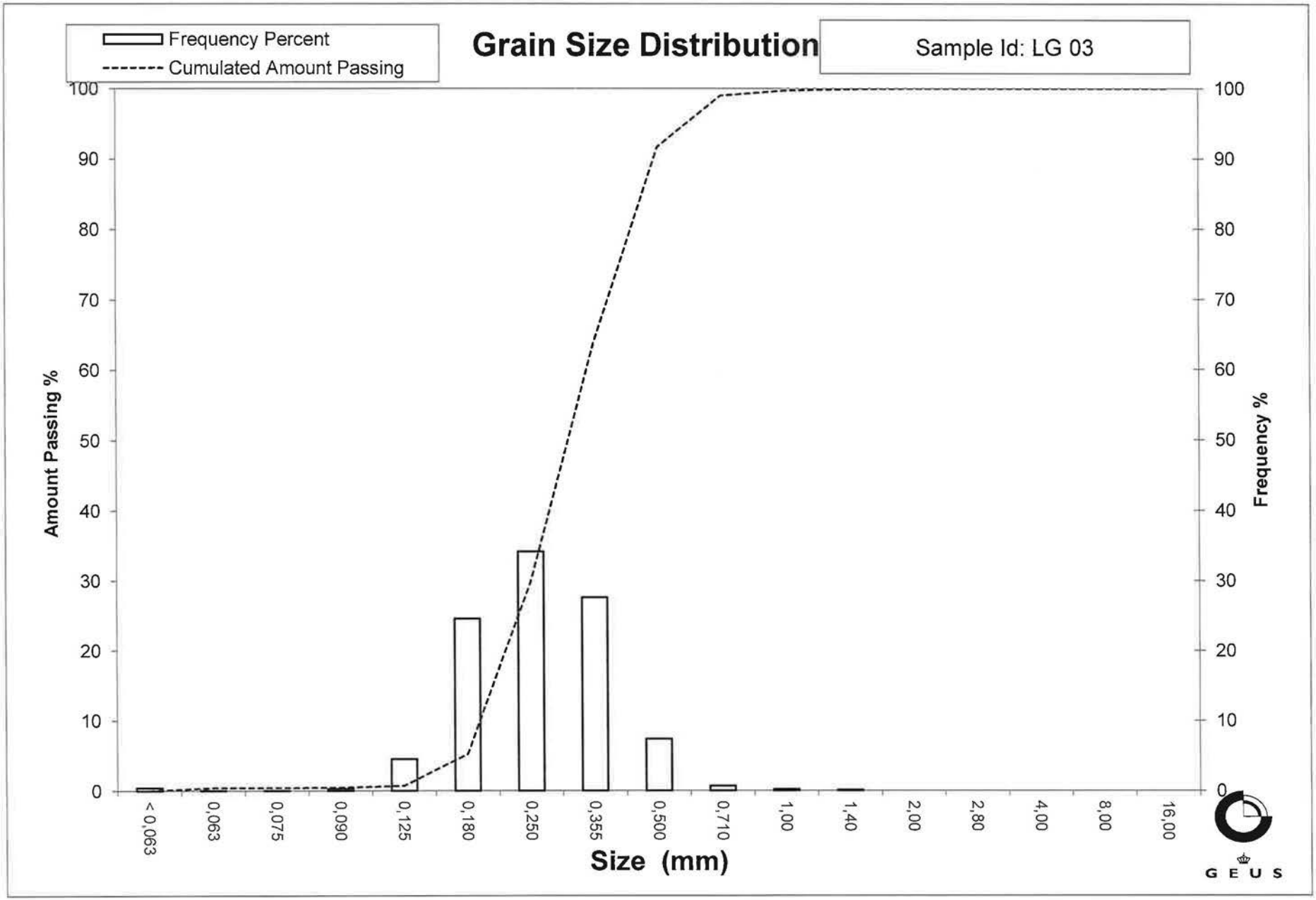
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LG 03
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LG 23
Lab. Id: 14074
Submitter: Naturstyrelsen
Subject: Grab Lappe Grund
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 116,35 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,02	0,02	99,98
	1,00	0,00	0,00	0,00	99,98
	0,710	0,49	0,00	0,00	99,98
	0,500	1,00	0,04	0,03	99,95
	0,355	1,49	0,11	0,09	99,85
	0,250	2,00	2,70	2,32	97,53
	0,180	2,47	30,38	26,11	71,42
	0,125	3,00	44,87	38,56	32,86
	0,090	3,47	11,41	9,81	23,05
	0,075	3,74	2,55	2,19	20,86
	0,063	3,99	1,69	1,45	19,41
	< 0,063	> 3,99	22,58	19,41	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	19,41
Sand, fine	(0,063 mm - 0,200 mm):	59,48
Sand, medium	(0,2 mm - 0,6 mm):	21,08
Sand, coarse	(0,6 mm - 2 mm):	0,04
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,24	2,04
16%	84%	0,21	2,23
25%	75%	0,19	2,40
40%	60%	0,16	2,61
Median 50%	50%	0,15	2,74
75%	25%	0,10	3,37
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,48
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	-------

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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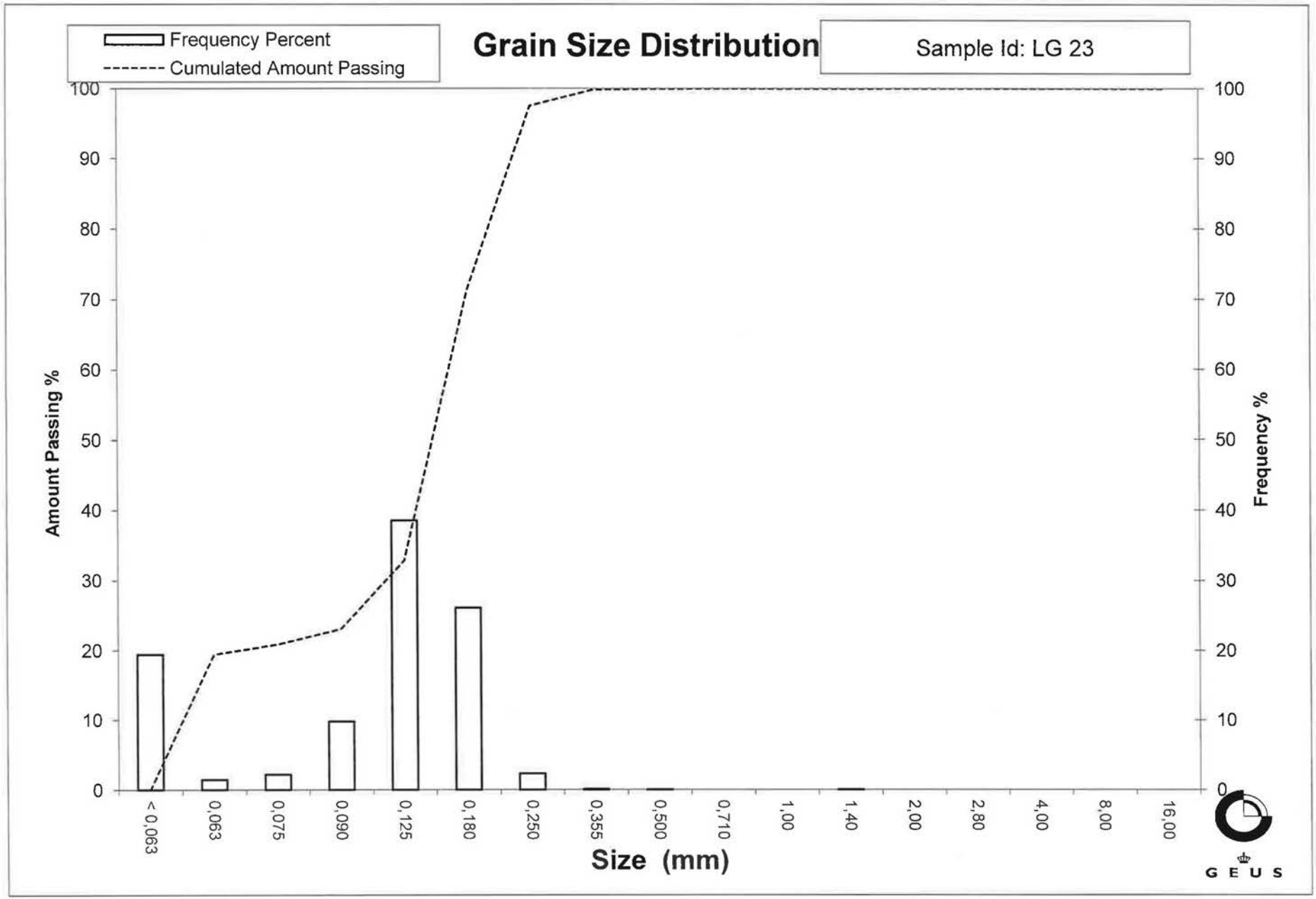
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LG 23
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 21
Lab. Id: 14075
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

G E U S

Total Weight 118,35 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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
Sand	1,40	-0,49	0,01	0,01	99,99
	1,00	0,00	0,12	0,10	99,89
	0,710	0,49	0,21	0,18	99,71
	0,500	1,00	0,81	0,68	99,03
	0,355	1,49	3,85	3,25	95,78
	0,250	2,00	31,29	26,44	69,34
	0,180	2,47	63,80	53,91	15,43
	0,125	3,00	16,25	13,73	1,70
	0,090	3,47	1,02	0,86	0,84
	0,075	3,74	0,19	0,16	0,68
	0,063	3,99	0,10	0,08	0,59
	< 0,063	> 3,99	0,70	0,59	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,59
Sand, fine	(0,063 mm - 0,200 mm):	30,24
Sand, medium	(0,2 mm - 0,6 mm):	68,52
Sand, coarse	(0,6 mm - 2 mm):	0,65
Gravel	(> 2 mm):	0,00
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,35	1,51
16%	84%	0,31	1,70
25%	75%	0,27	1,88
40%	60%	0,24	2,07
Median 50%	50%	0,22	2,15
75%	25%	0,19	2,38
84%	16%	0,18	2,47
90%	10%	0,16	2,66
95%	5%	0,14	2,85

Moments Statistics

Mean	2,11
Sorting	0,40
Skewness	-0,07
Kurtosis	1,10
Uniformity Coefficient	1,50

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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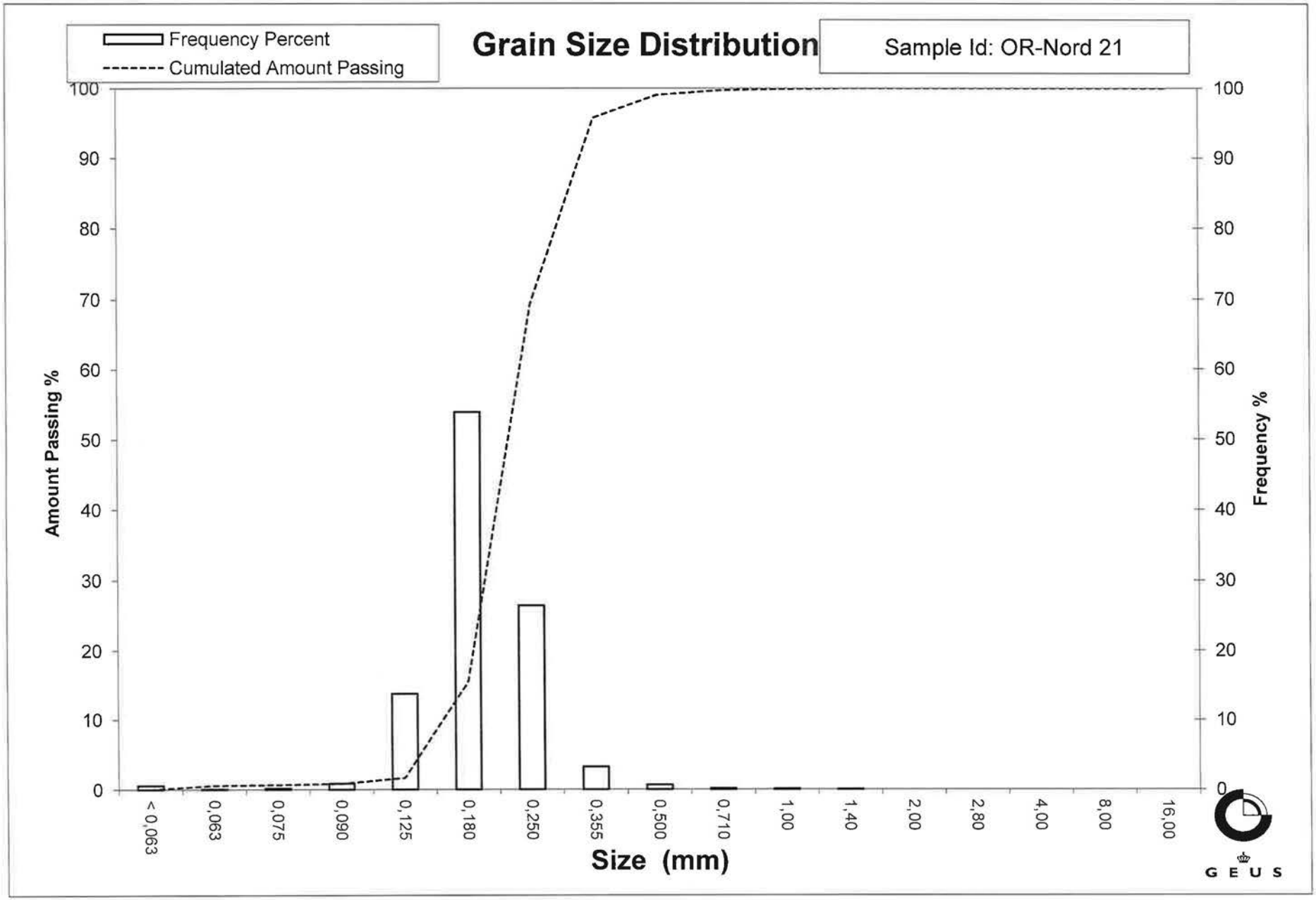
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 21
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 22
Lab. Id: 14076
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 116,84 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	1,15	0,98	99,02
	4,00	-2,00	1,16	0,99	98,02
	2,80	-1,49	0,68	0,58	97,44
	2,00	-1,00	0,58	0,50	96,94
Sand	1,40	-0,49	0,64	0,55	96,40
	1,00	0,00	2,47	2,11	94,28
	0,710	0,49	4,66	3,99	90,29
	0,500	1,00	10,76	9,21	81,09
	0,355	1,49	30,76	26,33	54,76
	0,250	2,00	46,52	39,82	14,94
	0,180	2,47	13,16	11,26	3,68
	0,125	3,00	1,88	1,61	2,07
	0,090	3,47	0,33	0,28	1,79
	0,075	3,74	0,33	0,28	1,51
	0,063	3,99	0,03	0,03	1,48
	< 0,063	> 3,99	1,73	1,48	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,48
Sand, fine	(0,063 mm - 0,200 mm):	5,42
Sand, medium	(0,2 mm - 0,6 mm):	78,57
Sand, coarse	(0,6 mm - 2 mm):	11,47
Gravel	(> 2 mm):	3,06
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	1,14	-0,18
16%	84%	0,57	0,82
25%	75%	0,47	1,10
40%	60%	0,38	1,38
Median 50%	50%	0,34	1,55
75%	25%	0,28	1,85
84%	16%	0,25	1,98
90%	10%	0,22	2,19
95%	5%	0,19	2,41

Moments Statistics

Mean	1,45
Sorting	0,68
Skewness	-0,29
Kurtosis	1,41
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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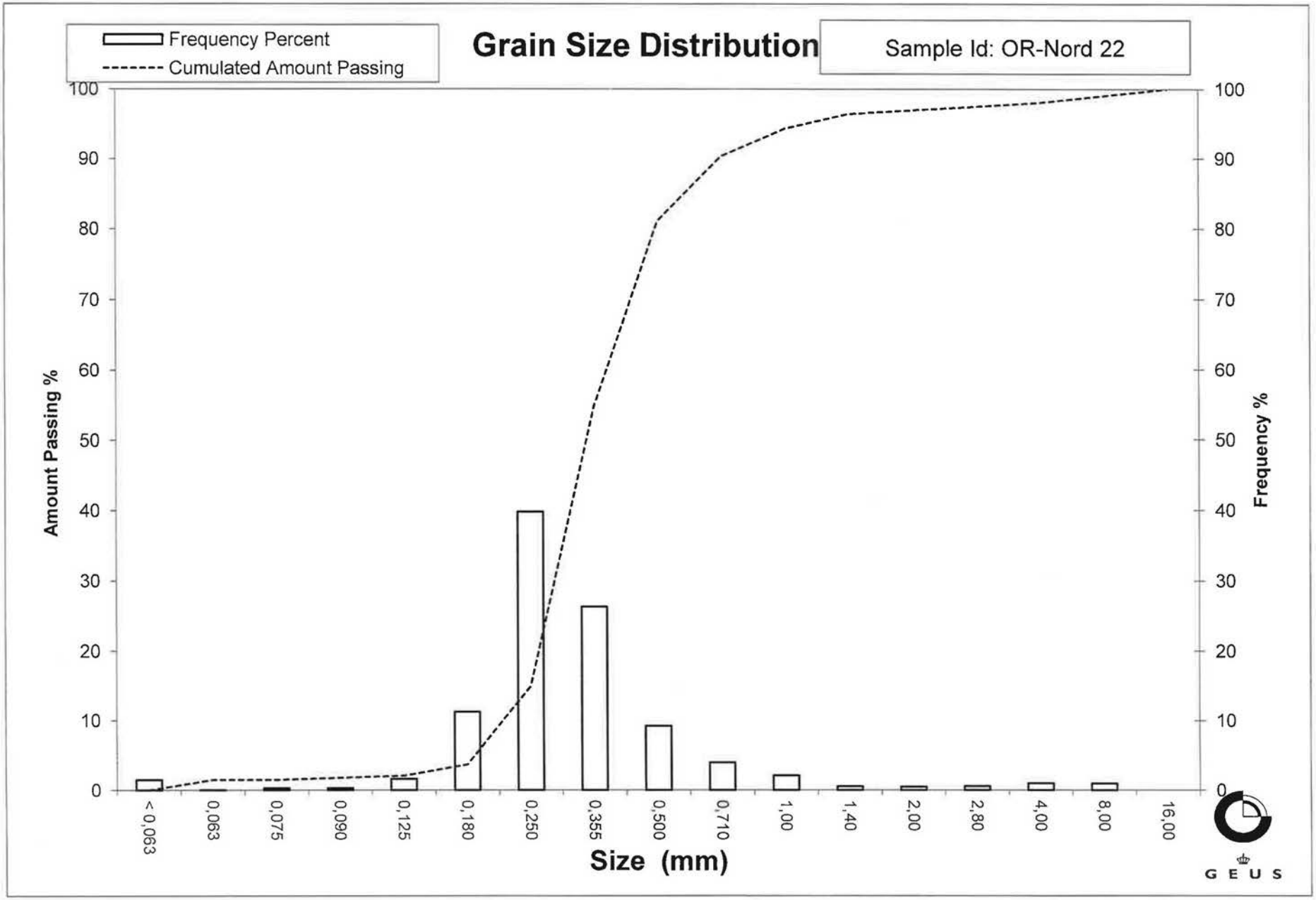
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 22
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 14
Lab. Id: 14077
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 119,61 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,18	99,82
	2,80	-1,49	0,16	0,13	99,69
	2,00	-1,00	0,19	0,16	99,53
Sand	1,40	-0,49	0,14	0,12	99,41
	1,00	0,00	0,72	0,60	98,81
	0,710	0,49	2,87	2,40	96,41
	0,500	1,00	21,57	18,03	78,38
	0,355	1,49	50,77	42,45	35,93
	0,250	2,00	34,21	28,60	7,33
	0,180	2,47	7,31	6,11	1,22
	0,125	3,00	0,83	0,69	0,53
	0,090	3,47	0,12	0,10	0,43
	0,075	3,74	0,03	0,03	0,40
	0,063	3,99	0,01	0,01	0,39
	< 0,063	> 3,99	0,47	0,39	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,39
Sand, fine	(0,063 mm - 0,200 mm):	2,57
Sand, medium	(0,2 mm - 0,6 mm):	84,00
Sand, coarse	(0,6 mm - 2 mm):	12,56
Gravel	(> 2 mm):	0,47
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,69	0,53
16%	84%	0,57	0,82
25%	75%	0,49	1,03
40%	60%	0,44	1,19
Median 50%	50%	0,40	1,31
75%	25%	0,31	1,67
84%	16%	0,28	1,83
90%	10%	0,26	1,94
95%	5%	0,22	2,16

Moments Statistics

Mean	1,32
Sorting	0,50
Skewness	0,03
Kurtosis	1,06
Uniformity Coefficient	1,68

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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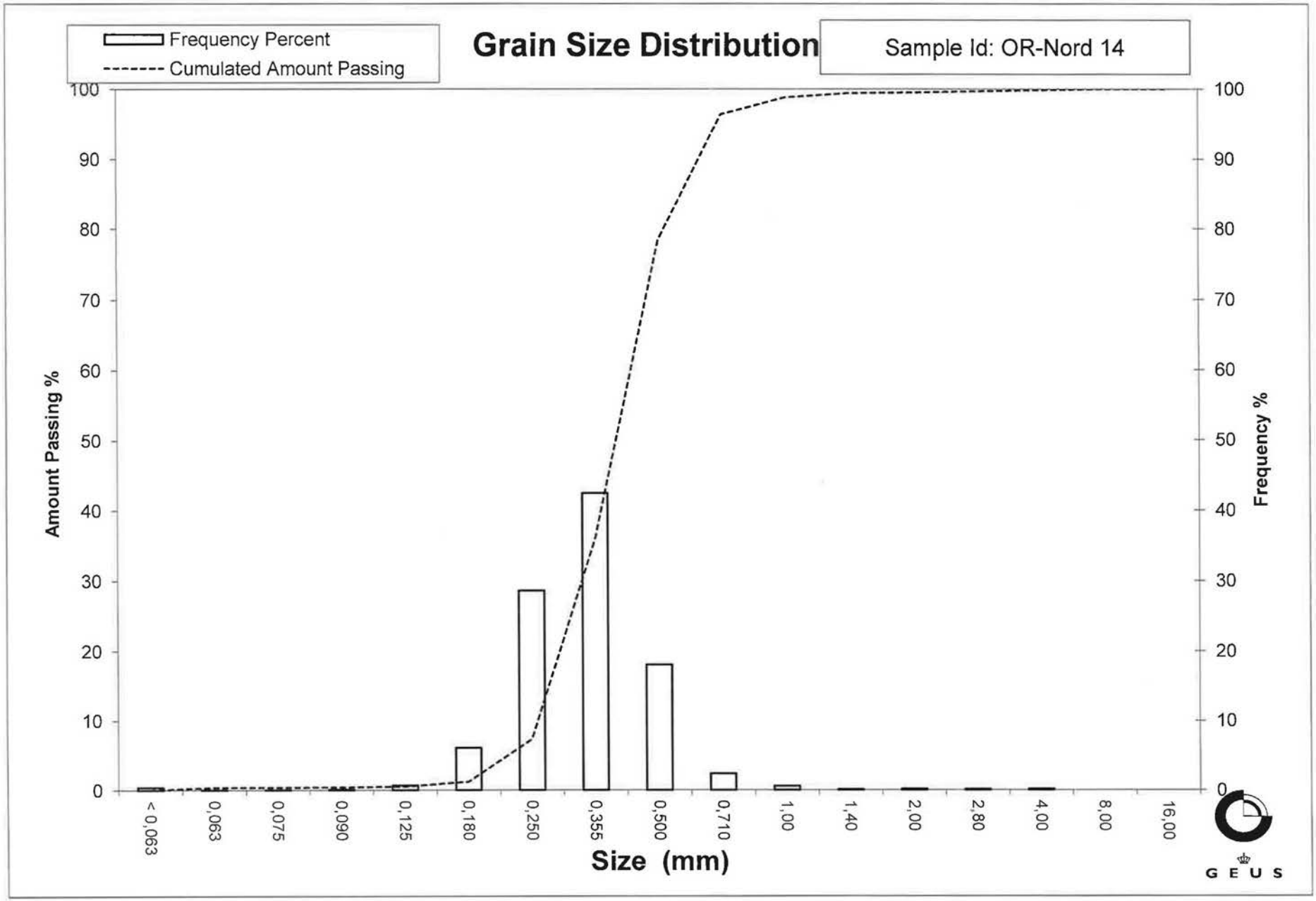
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 14
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 24
Lab. Id: 14078
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 110,97 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	2,41	2,17	97,83
	4,00	-2,00	0,84	0,76	97,07
	2,80	-1,49	0,52	0,47	96,60
	2,00	-1,00	0,79	0,71	95,89
Sand	1,40	-0,49	1,61	1,45	94,44
	1,00	0,00	4,04	3,64	90,80
	0,710	0,49	6,56	5,91	84,89
	0,500	1,00	15,39	13,87	71,02
	0,355	1,49	38,33	34,54	36,48
	0,250	2,00	34,15	30,77	5,70
	0,180	2,47	3,69	3,33	2,38
	0,125	3,00	0,46	0,41	1,96
	0,090	3,47	0,50	0,45	1,51
	0,075	3,74	0,23	0,21	1,31
	0,063	3,99	0,18	0,16	1,14
	< 0,063	> 3,99	1,27	1,14	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,14
Sand, fine	(0,063 mm - 0,200 mm):	2,18
Sand, medium	(0,2 mm - 0,6 mm):	74,29
Sand, coarse	(0,6 mm - 2 mm):	18,27
Gravel	(> 2 mm):	4,11
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	1,63	-0,71
16%	84%	0,70	0,52
25%	75%	0,56	0,84
40%	60%	0,45	1,14
Median 50%	50%	0,41	1,28
75%	25%	0,32	1,66
84%	16%	0,29	1,81
90%	10%	0,26	1,92
95%	5%	0,24	2,09

Moments Statistics

Mean	1,20
Sorting	0,75
Skewness	-0,30
Kurtosis	1,38
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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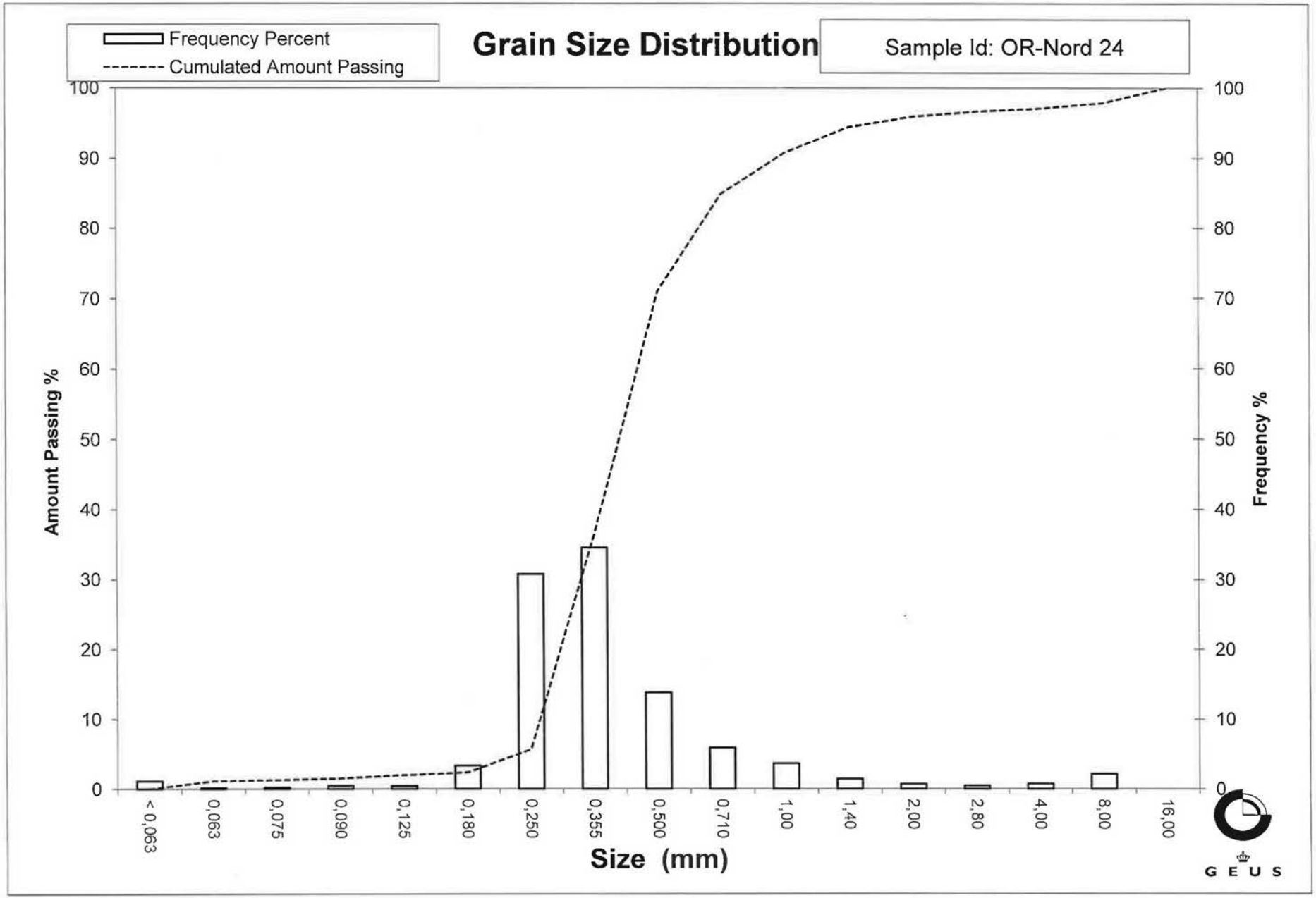
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 24
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 17
Lab. Id: 14079
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 103,71 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	0,00	0,00	100,00
	8,00	-3,00	0,00	0,00	100,00
	4,00	-2,00	0,03	0,03	99,97
	2,80	-1,49	0,15	0,14	99,83
	2,00	-1,00	0,09	0,09	99,74
Sand	1,40	-0,49	0,26	0,25	99,49
	1,00	0,00	0,69	0,67	98,82
	0,710	0,49	2,87	2,77	96,06
	0,500	1,00	26,62	25,67	70,39
	0,355	1,49	52,35	50,48	19,91
	0,250	2,00	17,56	16,93	2,98
	0,180	2,47	2,36	2,28	0,70
	0,125	3,00	0,36	0,35	0,36
	0,090	3,47	0,02	0,02	0,34
	0,075	3,74	0,00	0,00	0,34
	0,063	3,99	0,00	0,00	0,34
	< 0,063	> 3,99	0,35	0,34	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,34
Sand, fine	(0,063 mm - 0,200 mm):	1,02
Sand, medium	(0,2 mm - 0,6 mm):	81,26
Sand, coarse	(0,6 mm - 2 mm):	17,13
Gravel	(> 2 mm):	0,26
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,70	0,51
16%	84%	0,61	0,71
25%	75%	0,54	0,90
40%	60%	0,47	1,09
Median 50%	50%	0,44	1,18
75%	25%	0,37	1,44
84%	16%	0,33	1,60
90%	10%	0,29	1,77
95%	5%	0,26	1,93

Moments Statistics

Mean	1,16
Sorting	0,44
Skewness	0,00
Kurtosis	1,07
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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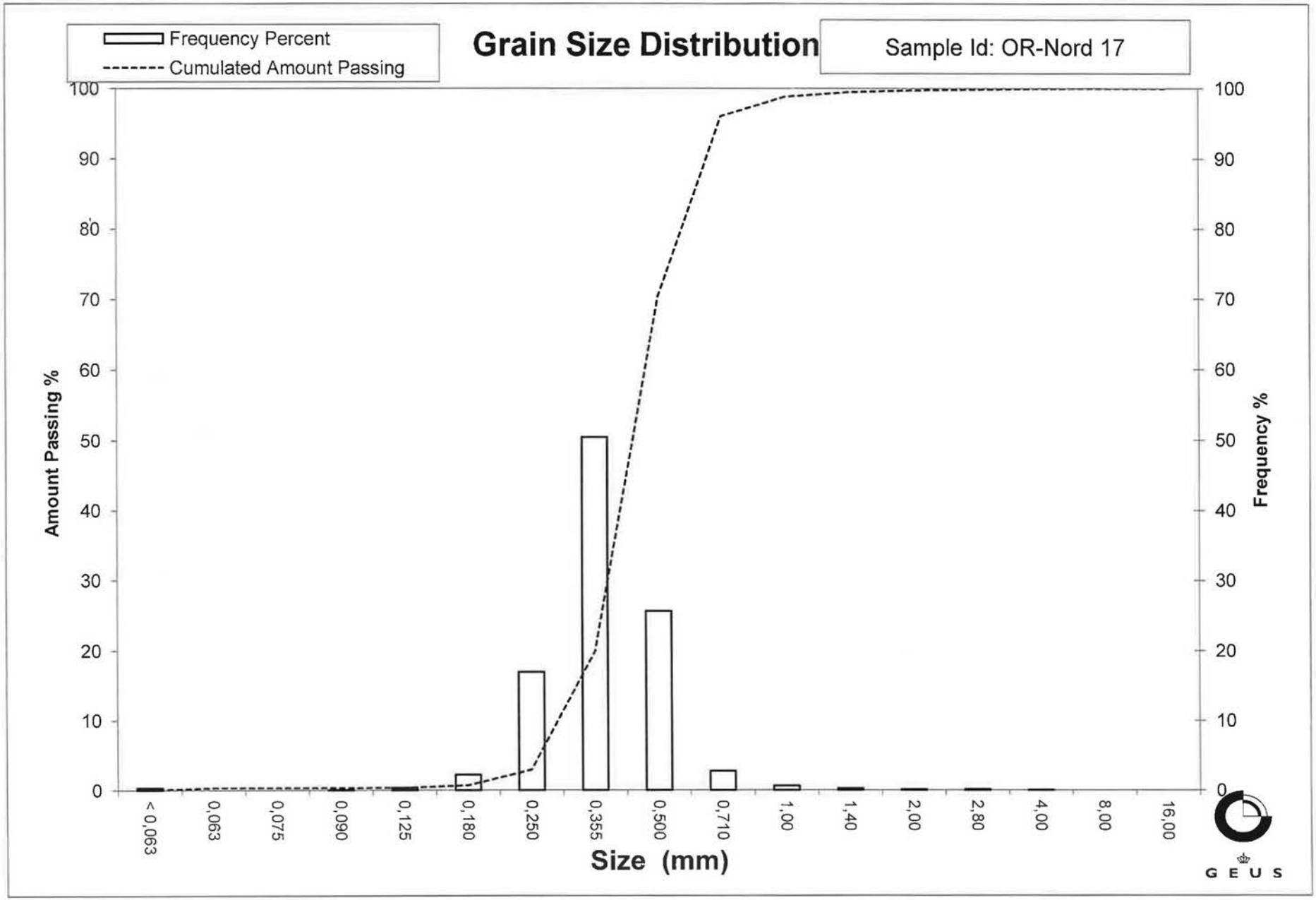
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 17
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 31
Lab. Id: 14080
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

G E U S

Total Weight 112,5 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,01	0,01	99,92
Sand	1,40	-0,49	0,02	0,02	99,90
	1,00	0,00	0,08	0,07	99,83
	0,710	0,49	0,35	0,31	99,52
	0,500	1,00	7,64	6,79	92,73
	0,355	1,49	36,91	32,81	59,92
	0,250	2,00	47,79	42,48	17,44
	0,180	2,47	14,31	12,72	4,72
	0,125	3,00	1,97	1,75	2,97
	0,090	3,47	0,16	0,14	2,83
	0,075	3,74	0,02	0,02	2,81
	0,063	3,99	0,01	0,01	2,80
	< 0,063	> 3,99	3,15	2,80	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,80
Sand, fine	(0,063 mm - 0,200 mm):	5,55
Sand, medium	(0,2 mm - 0,6 mm):	87,61
Sand, coarse	(0,6 mm - 2 mm):	3,96
Gravel	(> 2 mm):	0,08
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,57	0,81
16%	84%	0,46	1,12
25%	75%	0,42	1,25
40%	60%	0,36	1,49
Median 50%	50%	0,33	1,60
75%	25%	0,27	1,90
84%	16%	0,24	2,05
90%	10%	0,21	2,26
95%	5%	0,18	2,46

Moments Statistics

Mean	1,59
Sorting	0,48
Skewness	0,01
Kurtosis	1,04
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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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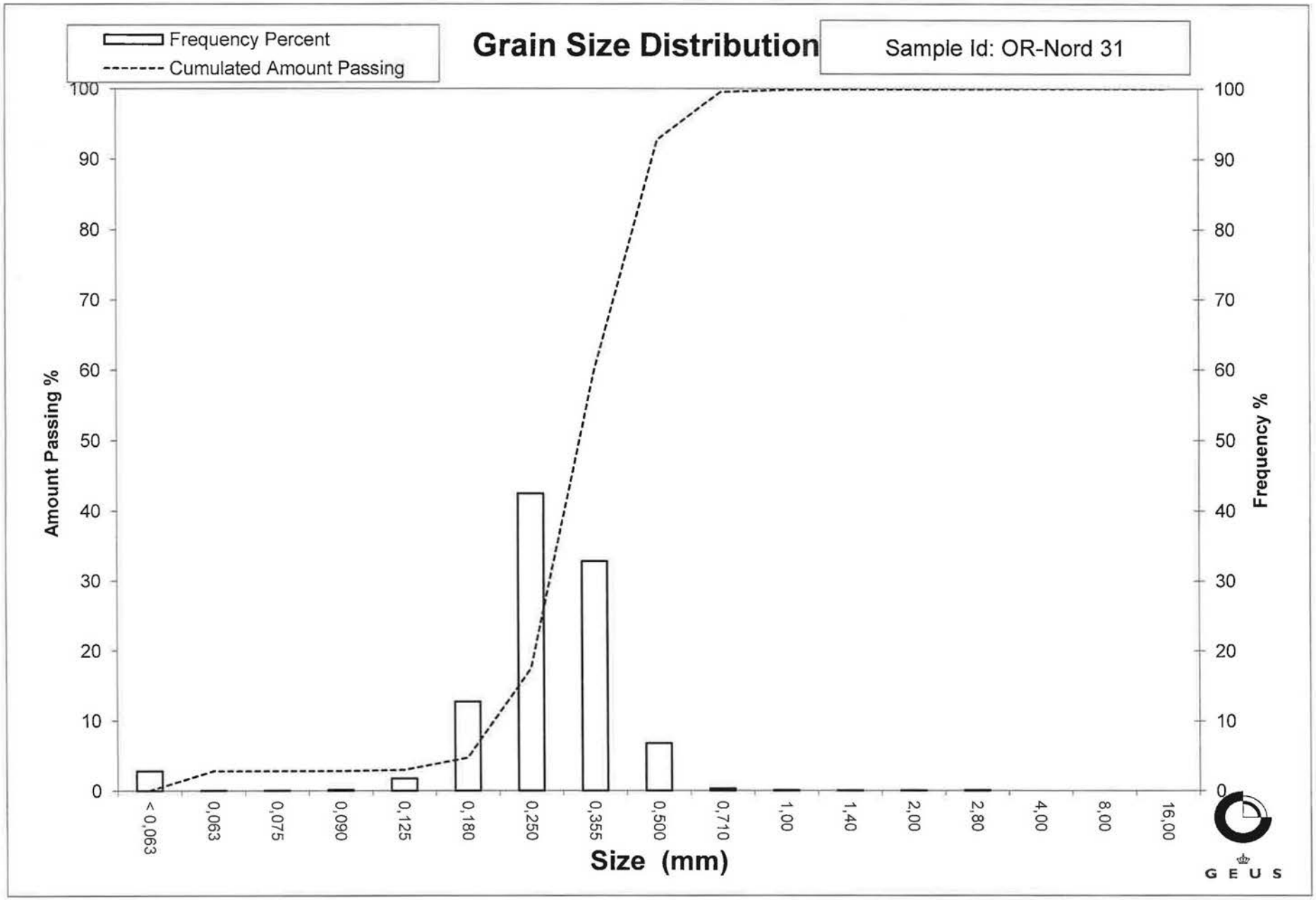
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 31
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: OR-Nord 26
Lab. Id: 14081
Submitter: Naturstyrelsen
Subject: Grab Øresund Nord
Date: Oktober 2014
Executed: I. Nørgaard & M. Engqvist
Remarks: Mat <2,0mm

GEUS

Total Weight 111,17 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	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	0,06	99,94
	2,00	-1,00	0,06	0,05	99,88
Sand	1,40	-0,49	0,12	0,11	99,78
	1,00	0,00	0,27	0,24	99,53
	0,710	0,49	0,81	0,73	98,80
	0,500	1,00	4,33	3,89	94,91
	0,355	1,49	13,02	11,71	83,20
	0,250	2,00	18,11	16,29	66,91
	0,180	2,47	44,38	39,92	26,99
	0,125	3,00	24,88	22,38	4,61
	0,090	3,47	2,38	2,14	2,46
	0,075	3,74	0,38	0,34	2,12
	0,063	3,99	0,22	0,20	1,92
	< 0,063	> 3,99	2,14	1,92	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,92
Sand, fine	(0,063 mm - 0,200 mm):	36,47
Sand, medium	(0,2 mm - 0,6 mm):	58,37
Sand, coarse	(0,6 mm - 2 mm):	3,12
Gravel	(> 2 mm):	0,12
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,50	0,99
16%	84%	0,36	1,45
25%	75%	0,30	1,73
40%	60%	0,24	2,07
Median 50%	50%	0,22	2,18
75%	25%	0,18	2,51
84%	16%	0,15	2,71
90%	10%	0,14	2,85
95%	5%	0,13	2,99

Moments Statistics

Mean	2,11
Sorting	0,62
Skewness	-0,18
Kurtosis	1,04
Uniformity Coefficient	1,72

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 (ϕ16%+ϕ84%+ϕ50%) / 3 (Folk and Ward 1957)

Sorting (ϕ84%-ϕ16%) / 4 + (ϕ95%-ϕ5%) / 6,6 (Folk and Ward 1957)

Kurtosis (ϕ95% - ϕ5%) / (2,44 * (ϕ75% - ϕ25%)) (Folk and Ward 1957)

Skewness (ϕ16%+ϕ84% - 2*ϕ50%) / (2*(ϕ84%-ϕ16%)) + (ϕ5%+ϕ95% - 2*ϕ50%) / (2*(ϕ95%-ϕ5%)) (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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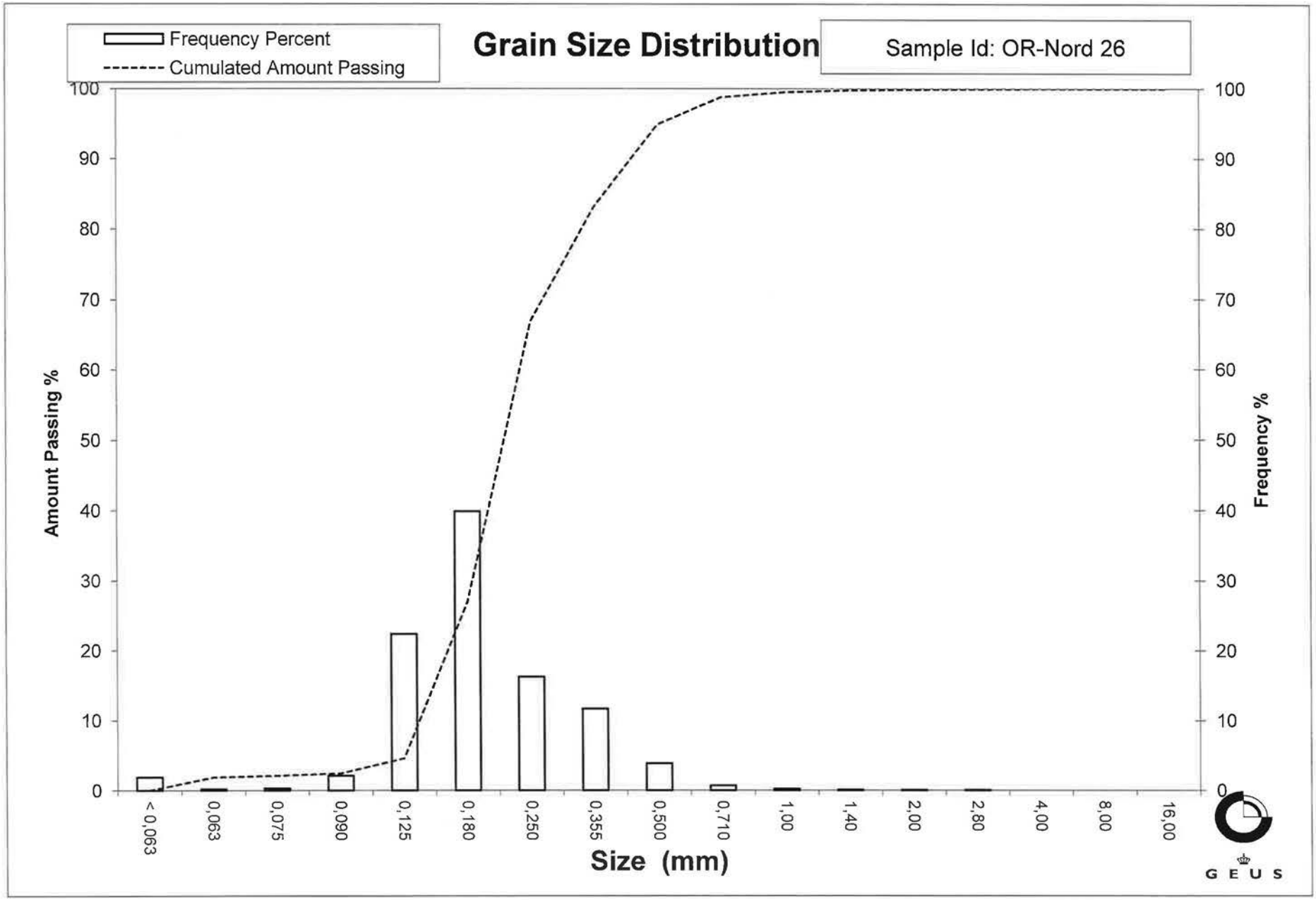
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: OR-Nord 26
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS