DANMARKS OG GRØNLANDS GEOLOGISKE UNDERSØGELSE **RAPPORT 2025/9**

Screening af sandressourcer ved Lønstrup og Løkken for Hjørring Kommune

Nicklas Christensen & Niels Nørgaard-Pedersen

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

GEUS

Indhold

1. Introduktion

Hjørring kommune har bedt WSP/GEUS om at undersøge mulighederne for at lokalisere anvendelige sandressourcer tæt på kysten, for at mindske sejlafstanden. Kommunen er interesseret i to områder i nærheden af Løkken og Lønstrup. De to områder er tidligere undersøgt for Kystdirektoratet i 2023 (Nørgaard-Pedersen et al., 2024), men i disse undersøgelser blev der defineret et afskæringskriterie for kornstørrelsesmiddelværdien på 0,20 mm. Hjørring kommune er dog interesseret i mægtigheden af ressourcer, som har en kornstørrelsesmiddelværdi på ned til 0,11 mm eller alternativt ned til 0,16 mm.

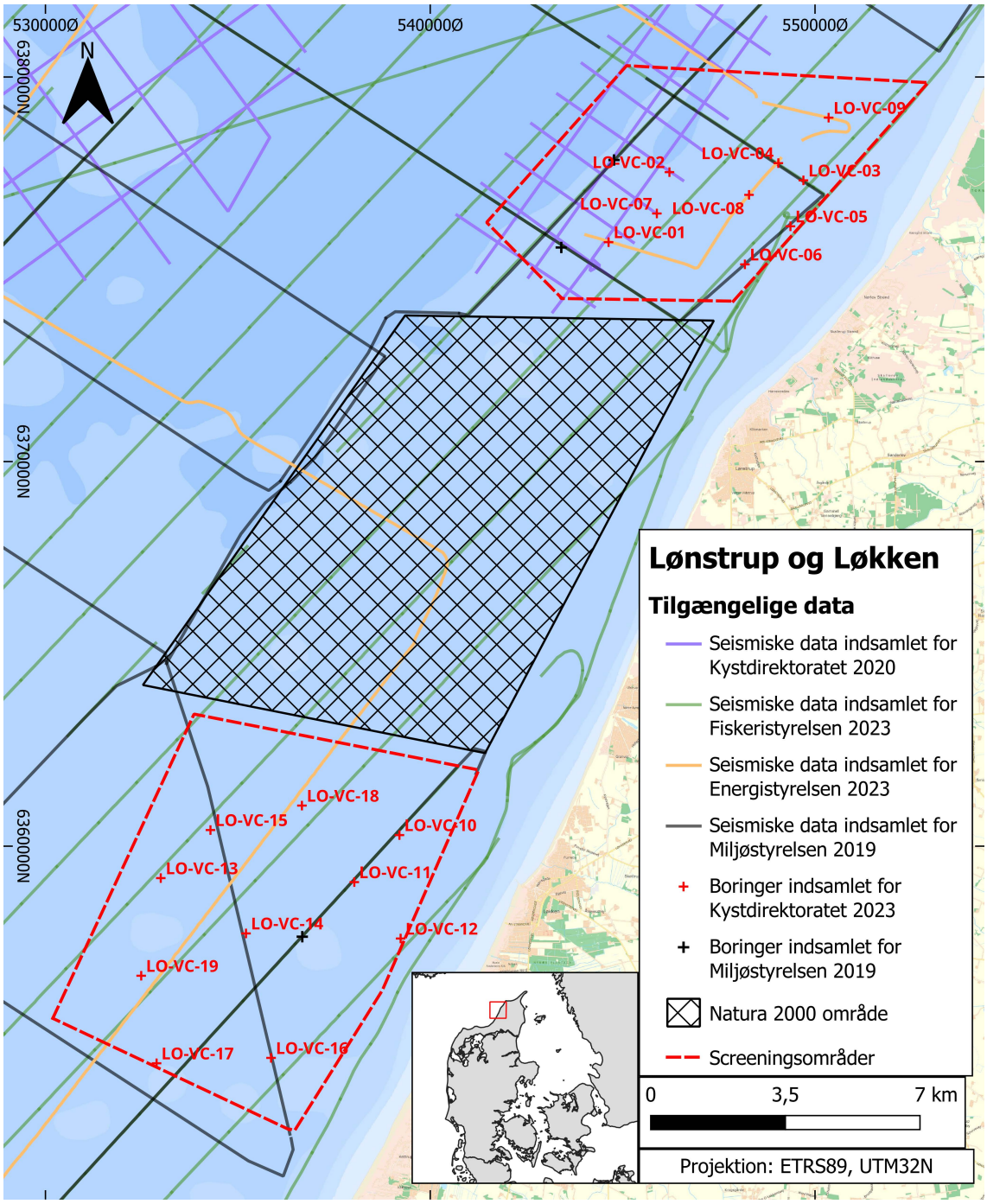
1.1 Krav til sandkvalitet og mængder

For sandressourcer til kystfodring i området har Hjørring kommune stillet krav om at kornstørrelsesmiddelværdien skal være over 0,11 mm. Der skal desuden tages stilling til om der kan laves et realistisk højere afskæringskriterie på f.eks. 0,15-0,18 mm. Hjørring kommune har et årligt kystfodringsbehov på 600.000 m^3. Ressourcen skal derfor minimum være på 6 millioner m^3, da en potentiel indvindingstilladelse vil gælde i 10 år.

1.2 Tilgængelige data

I de to områder er der lavet en række overfladenære vibrationskerneboringer for kystdirektoratet i 2023 (Nørgaard-Pedersen et al., 2024) som blev udpeget på baggrund af eksisterende geofysisk data. I området nær Lønstrup blev der lavet ni boringer, og i området nær Løkken 10 boringer. Derudover findes der tre boringer fra 2020, som blev lavet for Miljøstyrelsen (Nørgaard-Pedersen et al., 2023).

De eksisterende geofysiske data er indsamlet for Miljøstyrelsen i 2019 (Nørgaard-Pedersen et al., 2023), Kystdirektoratet i 2020 (Nørgaard-Pedersen et al., 2021), Energistyrelsen i 2023 (Vangkilde-Pedersen et al., 2023) og Fiskeristyrelsen i 2023 (Hansen et al., 2023). Denne screening er udelukkende baseret på højopløselige seismiske data af typen Sub Bottom Profiler (SBP). Datatypen er ideél til at kortlægge tykkelsen af de positive Holocæne bundformer med en tykkelse på maksimalt 10 meter, som findes i området. Figur 1.1 viser de tilgængelige data indenfor de to områder.



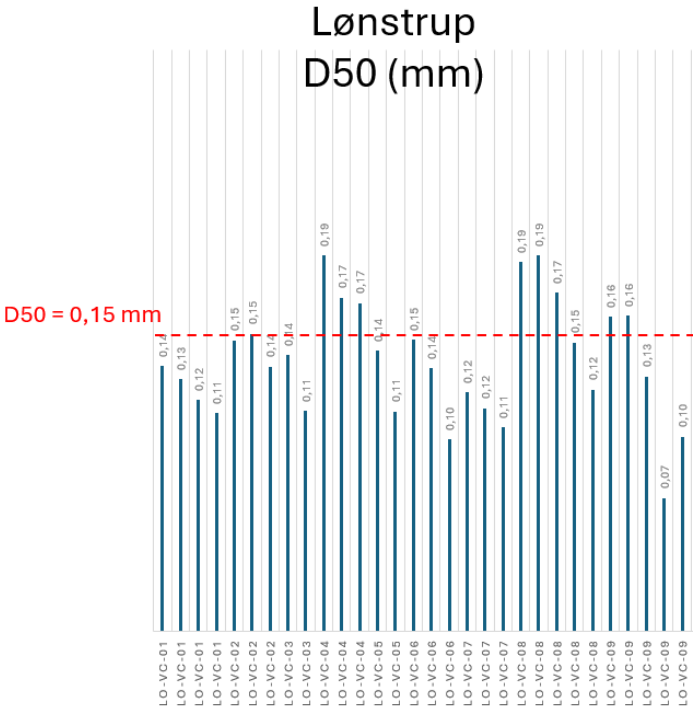
Figur 1.1: Oversigtskort som viser tilgængelige data i de to screeningsområder.

2. Resultater

Vurderingen af kornstørrelsesmiddelværdien for ressourcerne i de to områder ved Lønstrup og Løkken er sket på baggrund af boringskampagnen fra 2023 for Kystdirektoratet (Nørgaard-Pedersen et al., 2024). Der blev i alt indsamlet 19 boringer under denne kampagne, hvor der blev udtaget prøver til kornstørrelsesbestemmelse, glødetab og vandindhold for ca. hver hele meter i kernerne (Appendiks 1 og 2). Prøverne blev udtaget som ca. 0,5 m sektioner og der er blevet udtaget i alt 66 prøver. De sedimentologiske logs for prøverne findes i Appendiks 3. I de to områder viser sedimentkernebeskrivelserne, suppleret med sigtedata, at kernerne har gennemboret Holocænt fin-mellemkornet sand og enkelte steder underliggende senglacialt siltet, meget fint sand som ikke udgør en brugbar ressource. Overgangen fra det Holocæne sand til de ældre aflejringer er ofte karakteriseret ved et tyndt gruset og småstenet lag med skaller - et såkaldt transgressionskonglomerat. Det Holocæne sand kan opdeles i en ældre nedre enhed og et yngre øvre toplag. I flere kerner er den nedre Holocæne enhed præget af vekslende tynde lerlag og sandlag (en såkaldt heterolith).

2.1 Lønstrup

Kernerne ved Lønstrup viser, at kornstørrelsesmiddelværdierne (D_{50}) ligger mellem 0,11 mm og 0,19 mm for det Holocæne sand (Tabel 1). Tre af prøverne viser en kornstørrelsesmiddelværdi på under 0,11 mm (i boring LO-VC-06 og LO-VC-09), men de alle er udtaget i den senglaciale enhed.



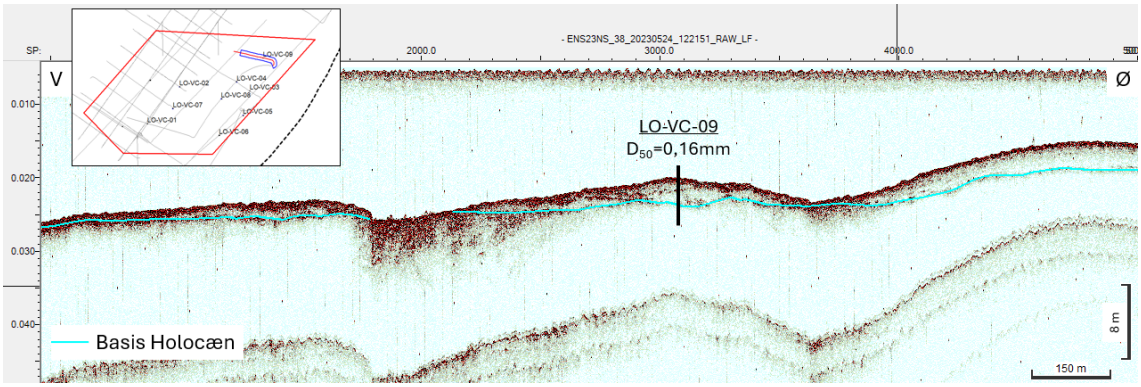
Tabel 1: Tabellen viser kornstørrelsesmiddelværdierne (D_{50}) for prøverne der er udtaget i kernerne ved Lønstrup. Prøverne, hvor D_{50} er over 0,15, er udtaget i det Holocæne toplag.

2.1.1 Den nedre Holocæne enhed

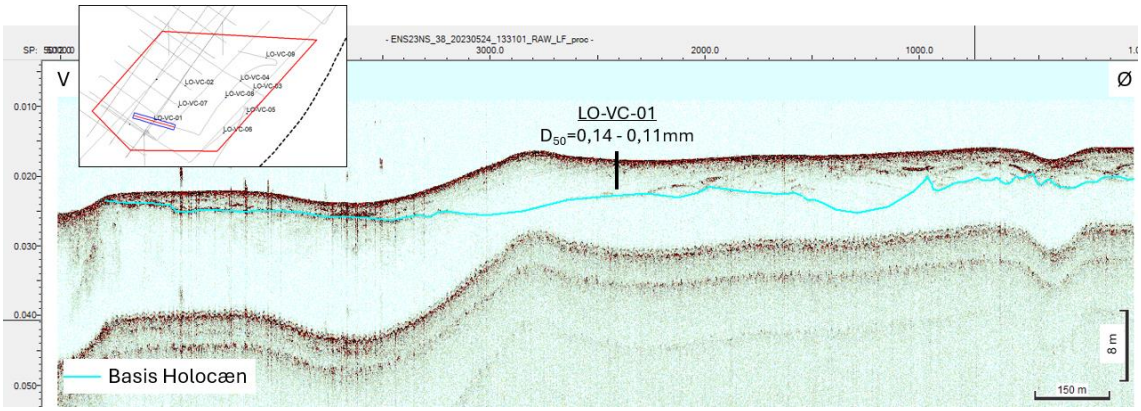
Alle prøverne udtaget i den nedre Holocæne enhed, hvor heterolith laget også optræder i enkelte kerner (LO-VC-06 og LO-VC-09), har en D_{50} på 0,11 mm til 0,15 mm. Der er dog en enkelt undtagelse i boring LO-VC-09, hvor D_{50} er 0,16 mm i en prøve der er udtaget i den nedre Holocæne enhed (Figur 2.1). De udtagne prøver af den nedre Holocæne enhed viste en finstofandel fra 27% til 71%, og et glødetab i intervallet 0,4% til 1%.

Den nedre Holocæne enhed har en varierende tykkelse i området og er op til 8 meter omkring boring LO-VC-01 og LO-VC-02. Seismiske profiler ved de to boringer er vist i Figur 2.2 og Figur 2.3.

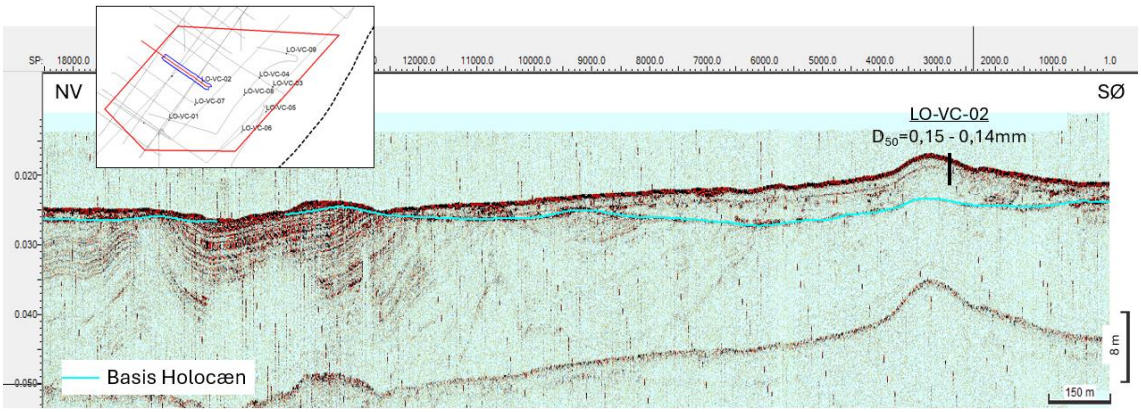
Figur 2.4 viser et tykkelseskort af den nedre Holocæne enhed, hvor der er interpoleret mellem de seismiske linjer. Tykkelseskortet er behæftet med stor usikkerhed, da der er 1 km mellem linjerne og tættest på land kun få krydsende øst-vest orienterende linjer. Tykkelseskortet giver trods det sparsomme datagrundlag et indtryk af enhedens mægtighed, og baseret på det præsenterede tykkelseskort har enheden et volumen på 85,6 millioner m^3.



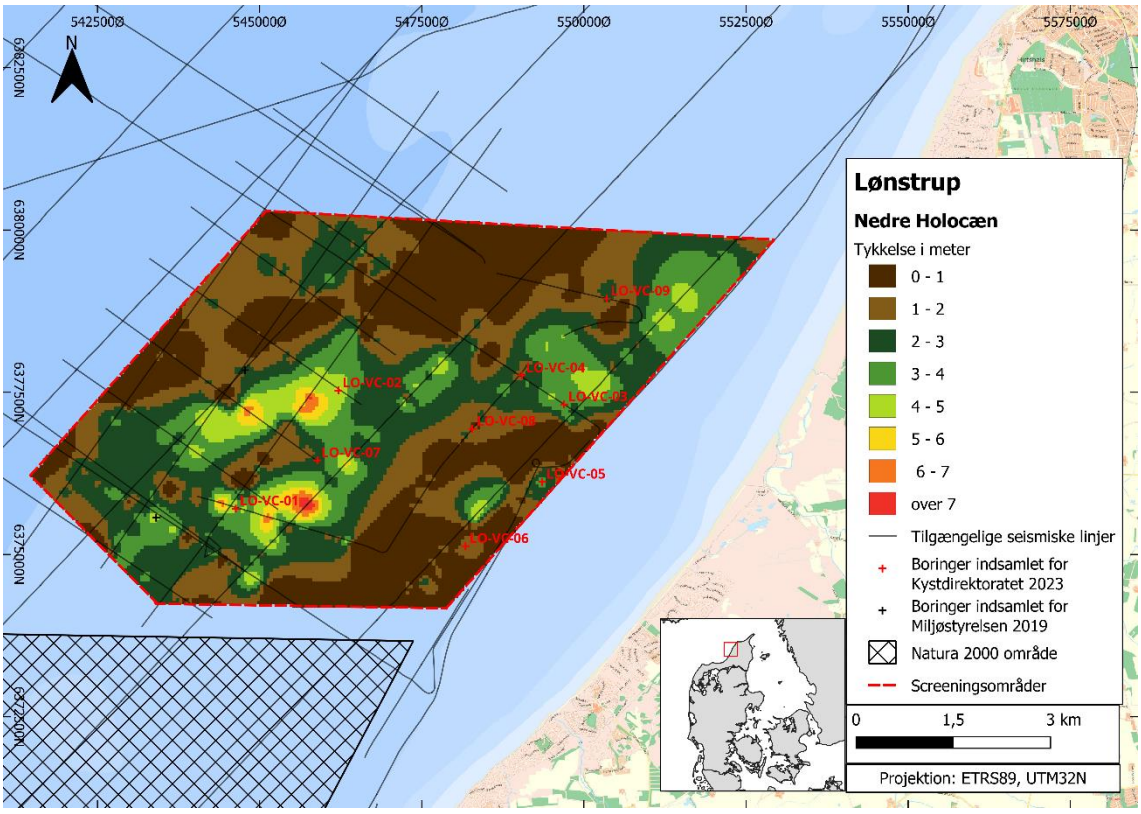
Figur 2.1:Seismisk profil ved boring LO-VC-09, hvor D_{50} var på 0,16 mm selvom prøven er udtaget i den nedre Holocæne enhed. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne



Figur 2.2: Seismisk profil ved boring LO-VC-01, hvor den nedre Holocæne enhed er op til 8 meter tyk. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



Figur 2.3: Seismisk profil ved boring LO-VC-02, hvor den nedre Holocæne enhed er op til 8 meter tyk. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne



Figur 2.4: Tykkelseskort for den nedre Holocæne enhed i området nær Lønstrup. De tolkede seismiske linjer og tilgængelige boringer er vist på kortet.

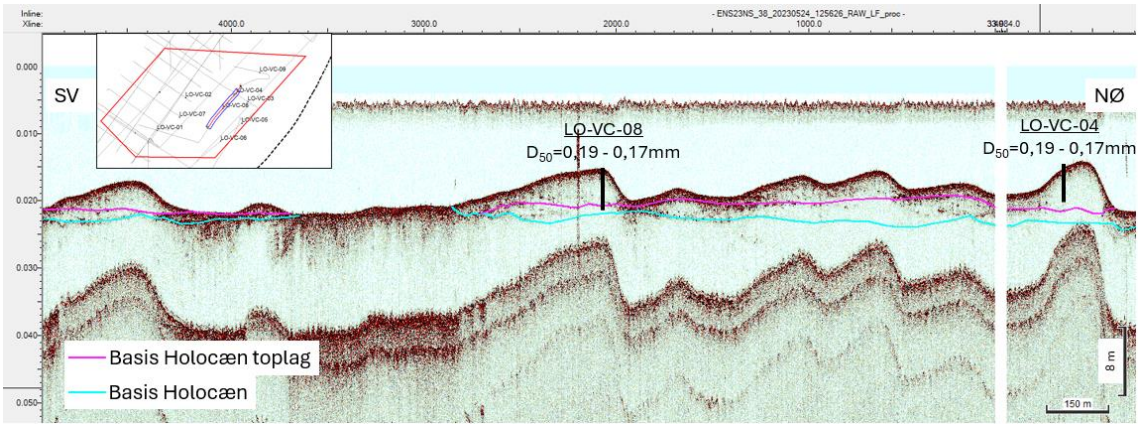
2.1.2 Det Holocæne toplag

I boringerne LO-VC-04 og LO-VC-08 er der udtaget prøver i et Holocænt toplag med kornstørrelsesmiddelværdier fra 0,15 mm til 0,19 mm. De udtagne prøver af toplaget har vist en finstofandel på 11% til 30%, og et glødetab i intervallet 0,3% til 0,5%.

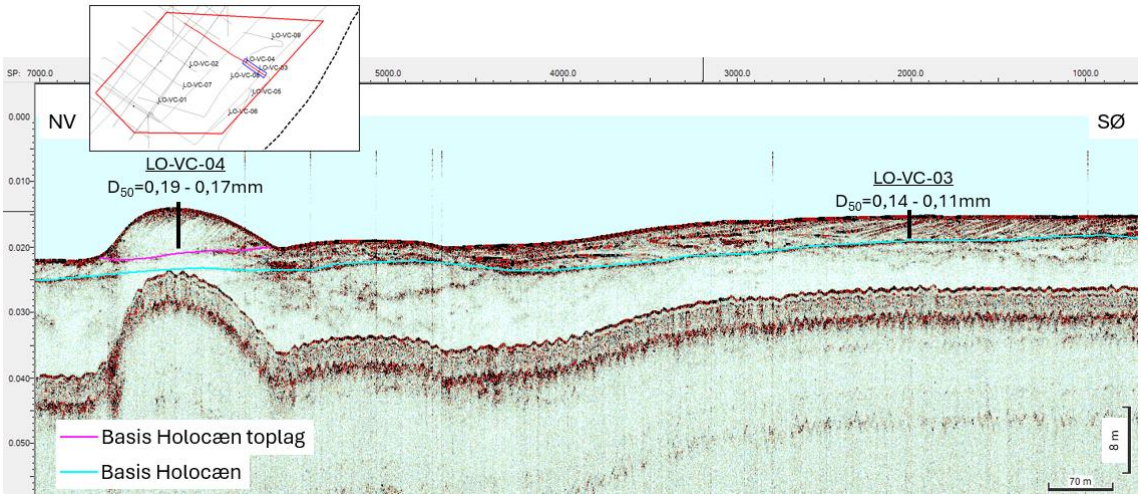
På det seismiske SV-NØ orienterede profil (Figur 2.5) der skærer de to boringer, har enheden en meget varierende tykkelse fra 0 til 6 meter. Det eneste NV-SØ orienterende profil der

skærer enheden, viser tilsvarende en lokal stor tykkelse på op til 6 meter, men kun i en bredde på ca. 180 meter (Figur 2.6). På de to parallellinjer er enheden ikke til stede.

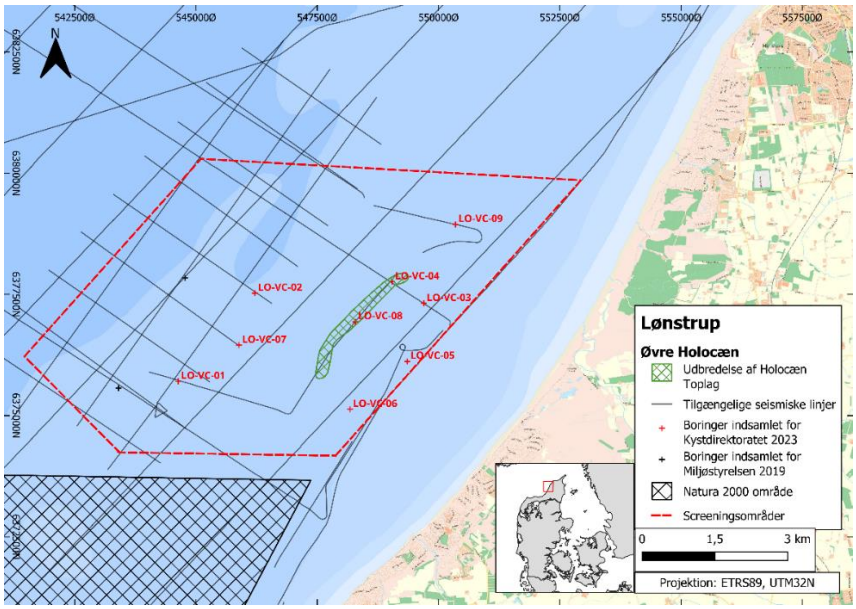
Ud fra det eksisterende datasæt tolkes enheden som værende en ca. 3 km lang revle, som er omkring 180 meter bred (markeret med et grønt polygon på Figur 2.7) og med en gennemsnitlig tykkelse på 4 meter. Dette giver et forsigtigt estimat for volumen på 2,16 millioner m^3 og en mere præcis tilnærmelse af volumen vil kræve yderligere data.



Figur 2.5: Seismisk profil ved boringerne LO-VC-08 og LO-VC-04, hvor det Holocæne toplag er op til 6 meter tykt. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



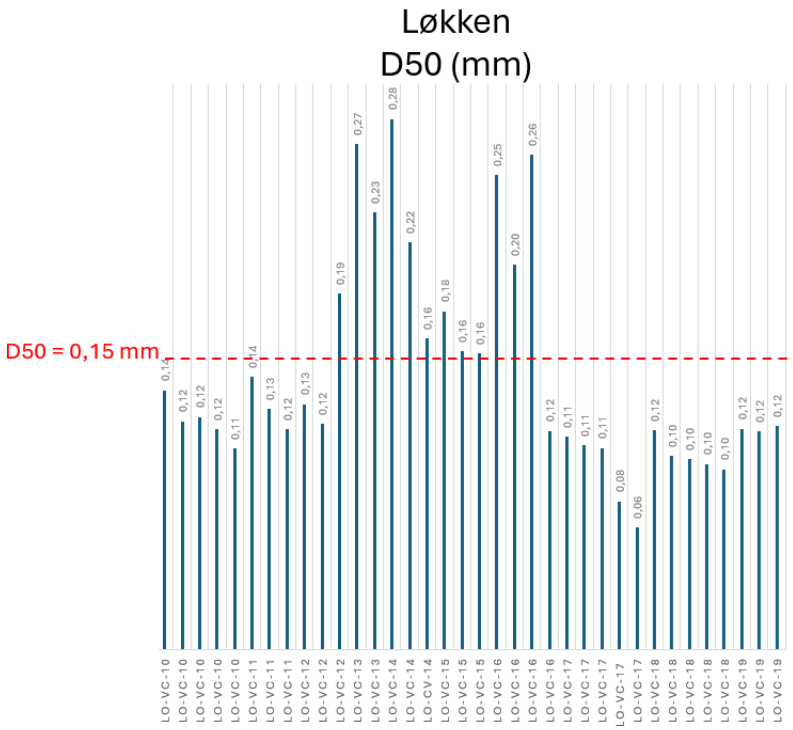
Figur 2.6: Seismisk profil ved boring LO-VC-04, hvor det Holocæne toplag er op til 6 meter tykt, men kun 180 meter bredt. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



Figur 2.7: Den tolkede udbredelse af det Holocæne toplag er vist med et grønt skraveret polygon.

2.2 Løkken

Kernerne ved Løkken viser at kornstørrelsesmiddelværdierne (D_{50}) ligger mellem 0,11 mm og 0,28 mm for det Holocæne sand (Tabel 2), bortset fra to prøver i boring LO-VC-18 med D_{50} på 0,10 mm. Fire andre prøver med en kornstørrelsesmiddelværdi på under 0,11 mm (i boring LO-VC-17 og LO-VC-18) er udtaget i den senglaciale enhed.



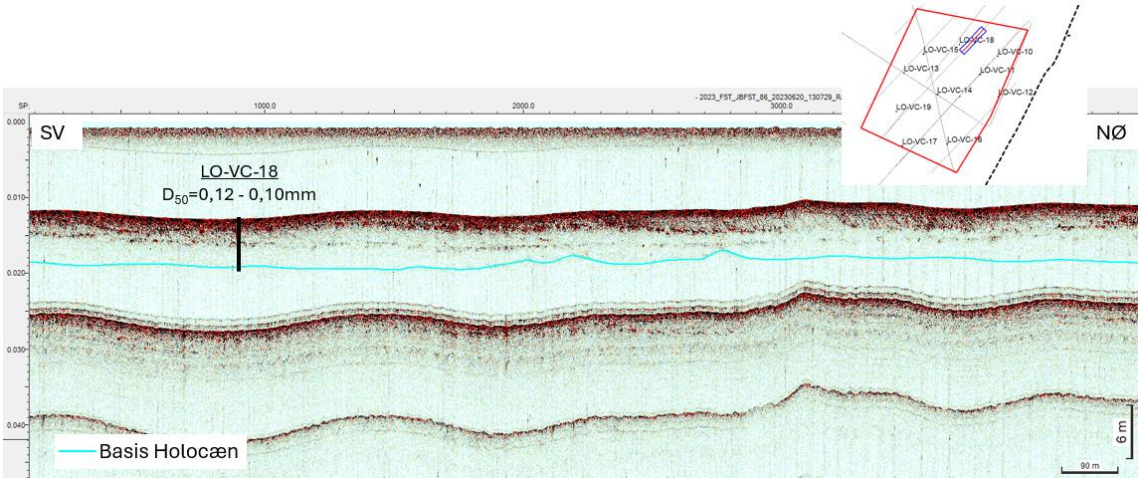
Tabel 2 Tabellen viser kornstørrelsesmiddelværdierne (D_{50}) for prøverne der er udtaget i kernerne ved Lønstrup. Prøverne, hvor D_{50} er over 0,15, er udtaget i det Holocæne toplag.

2.2.1 Den nedre Holocæne enhed

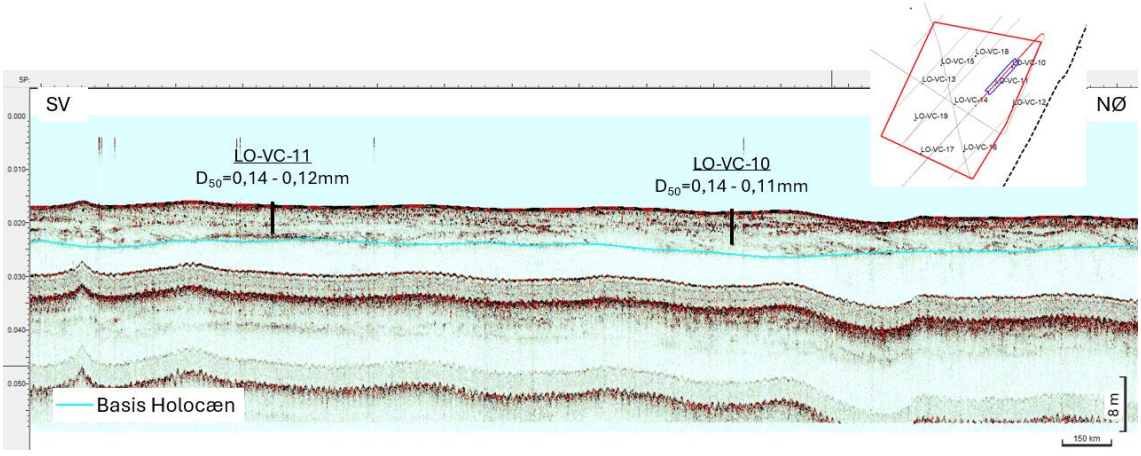
Alle prøverne udtaget i den nedre Holocæne enhed har en kornstørrelsesmiddelværdi (D_{50}) på 0,11 mm til 0,15 mm. Der er dog to undtagelser i boring LO-VC-18, hvor D_{50} er 0,10 mm i prøver udtaget i den nedre Holocæne enhed (Figur 2.8). De udtagne prøver af den nedre Holocæne enhed har vist en finstofandel fra 36% til 85%, og et glødetab i intervallet 0,5% til 1,3%.

Enheden har en tykkelse på op til 7 meter omkring boringerne LO-VC-10 og LO-VC-11. Et seismisk profil ved de to boringer er vist på (Figur 2.9).

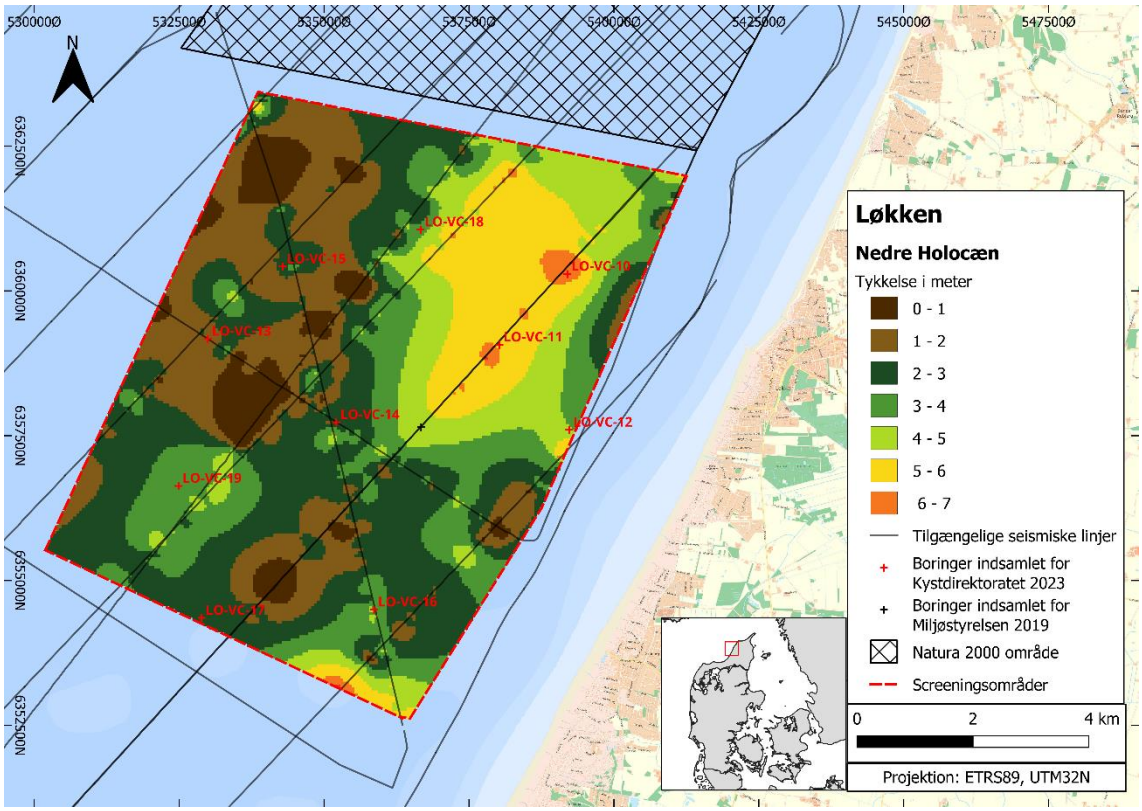
Figur 2.10 viser et tykkelseskort af enheden, hvor der er interpoleret mellem de seismiske linjer. Tykkelseskortet er behæftet med stor usikkerhed, da der er 2 km mellem linjerne og kun to tværgående linjer. Tykkelseskortet giver trods det sparsomme datagrundlag et indtryk af enhedens mægtighed, og baseret på det præsenterede tykkelseskort har enheden et volumen på 211,4 millioner m^3.



Figur 2.8: Seismisk profil ved boringen LO-VC-18, hvor D_{50} i to prøver i den nedre Holocæne enhed var på 0,10 mm. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



Figur 2.9: Seismisk profil ved boringerne LO-VC-10 og LO-VC-11, hvor den nedre Holocæne enhed er op til 7 meter tyk. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



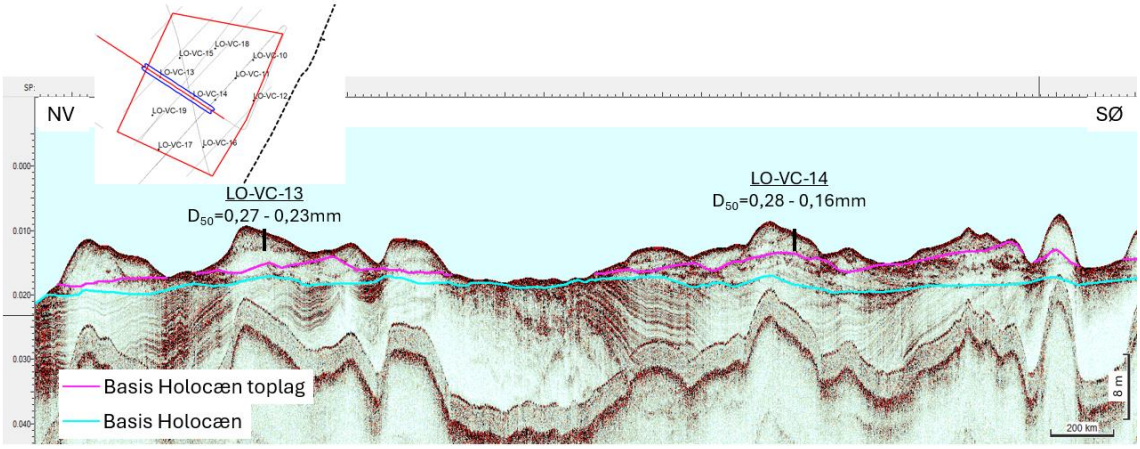
Figur 2.10: Tykkelseskort for den nedre Holocæne enhed i området nær Løkken. De tolkede seismiske linjer og tilgængelige boringer er vist på kortet.

2.2.2 Det Holocæne toplag

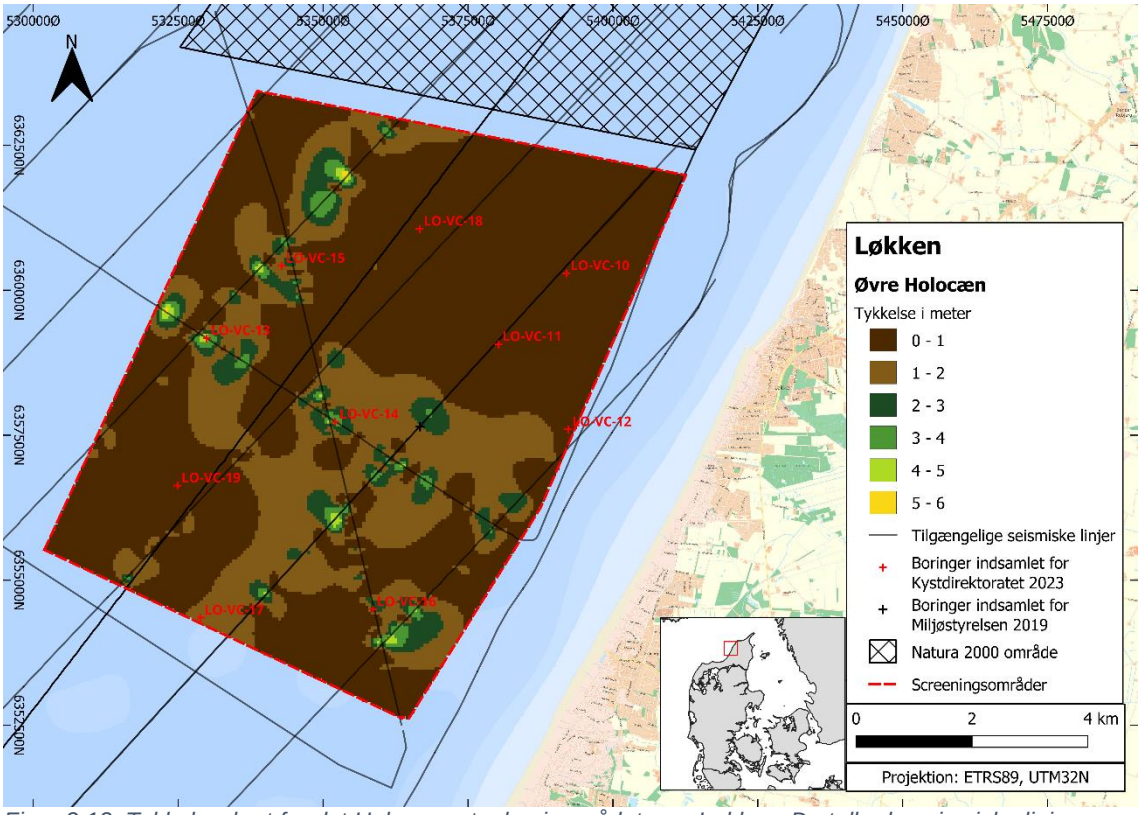
I boringerne LO-VC-12, LO-VC-13, LO-VC-14 og LO-VC-15 er der udtaget prøver i et Holocænt toplag med kornstørrelsesmiddelværdier fra 0,16 mm til 0,28 mm. De udtagne prøver af toplaget har vist en finstofandel på 3% til 29%, og et glødetab i intervallet 0,2% til 0,4%.

På det seismiske NØ-SV orienterende profil (Figur 2.11), der skærer de to boringer LO-VC-13 og LO-VC-14, har enheden en meget varierende tykkelse fra 0 til 6 meter.

Figur 2.12 viser et tykkelseskort af enheden, hvor der er interpoleret mellem linjerne. Der skal igen tages forbehold for den store linjeafstand i området, men ud fra det eksisterende datagrundlag tolkes enheden som værende en dynamisk og mobil enhed, som giver anledning til markante bundformer i området. Det vil kræve yderligere data for at præcisere enhedens udbredelse og volumen, men ud fra det præsenterede tykkelseskort (Figur 2.12) har enheden et volumen på 54,1 millioner m^3. En mere detaljeret kortlægning i området vil sandsynligvis give et større volumen, da enheden formentlig også vil have en markant tykkelse mellem de tolkede linjer.



Figur 2.11: Seismisk profil ved boringerne LO-VC-13 og LO-VC-14, hvor det Holocæne toplag er op til 6 meter tykt. Bemærk at Y-aksen er i tovejstid. Skala i meter findes nederst i højre hjørne.



Figur 2.12: Tykkelseskort for det Holocæne toplag i området nær Løkken. De tolkede seismiske linjer og tilgængelige boringer er vist på kortet.

3. Konklusion

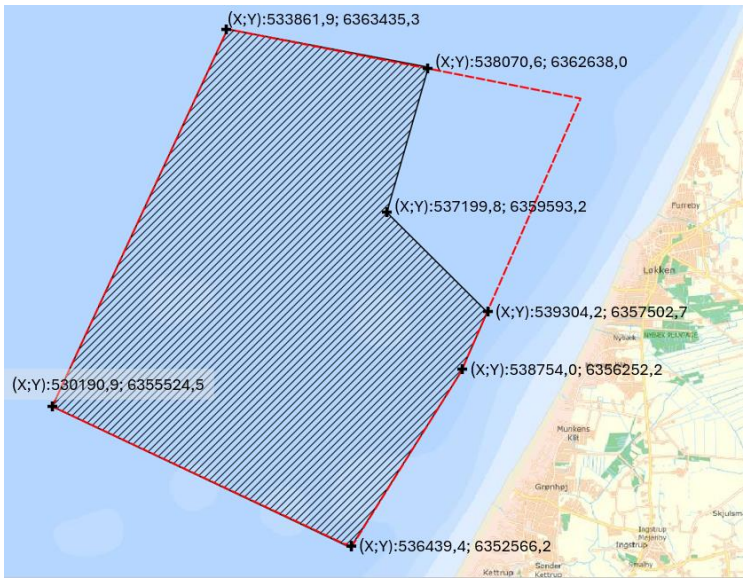
På baggrund af det eksisterende datagrundlag i de to undersøgelsesområder må det konstateres, at langt hovedparten af de Holocæne sandforekomster er af fin kvalitet, med kornstørrelsesmiddelværdier mellem 0,11 mm og 0,16 mm.

Der er tolket sandforekomster af formodet senglacial, ældre Holocæn, og yngre Holocæn alder. De senglaciale forekomster består af fint lagdelt meget finkornet og ofte siltet sand af formodet non-marin oprindelse, som ikke udgør en brugbar ressource.

De ældre Holocæne, marine finkornede sandforekomster, med indslag af lerlag i den nedre del, er udbredt over det meste af begge områder, som en 0 til 8 m tyk enhed, der ofte er eksponeret på havbunden. Kornstørrelsesmiddelværdierne ligger mellem 0,11 mm og 0,15 mm og volumen af den nedre Holocæne enhed er 85,6 og 211,4 millioner m^3 ved henholdsvis Lønstrup og Løkken.

De yngre Holocæne, typisk fin til mellemkornede, sandforekomster har en kornstørrelsesmiddelværdi på 0,16 mm eller derover, og er relaterede til store dynamiske bundformer. Ved området nær Løkken vurderes volumen af det Holocæne toplag at være på 54,1 millioner m^3, men en mere detaljeret undersøgelse af området vil sandsynligvis give et større volumen. På Figur 3.1 præsenteres udstrækningen af det område der bør undersøges mere detaljeret for at få en mere præcis kortlægning af det yngre Holocæne toplag i området nær Løkken.

Ved området nær Lønstrup har det derimod vist sig, at det yngre Holocæne toplag kun kan tolkes som en formodet relativt smal (ca. 180 m) revle med et volumen på 2,16 millioner m^3. Det kan dog ikke udelukkes at en mere detaljeret undersøgelse af området nær Lønstrup vil give et andet billede af ressourcen, men ressourcen vil sandsynligvis ikke have det ønskede volumen på mere end 6 million m^3.



Figur 3.1: Med sort skravering er angivet det område som bør undersøges mere detaljeret, for få en mere præcis kortlægning af det yngre Holocæne toplag.

4. Referencer

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Appendiks 1 – Vibrationskerne sigteanalyser

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-01 0-50
Lab. Id: 230492
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

Total Weight 95,83 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	0,02	0,03	99,97
	2,00	-1,00	0,06	0,06	99,91
Sand	1,40	-0,49	0,10	0,10	99,81
	1,00	0,00	0,13	0,13	99,68
	0,710	0,49	0,22	0,23	99,45
	0,500	1,00	0,41	0,42	99,03
	0,355	1,49	1,44	1,51	97,52
	0,250	2,00	4,44	4,63	92,89
	0,180	2,47	10,43	10,88	82,01
	0,125	3,00	39,33	41,04	40,97
	0,090	3,47	32,08	33,47	7,50
	0,075	3,74	3,81	3,98	3,52
	0,063	3,99	1,47	1,53	1,99
	< 0,063	> 3,99	1,90	1,99	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,99
Sand, fine	(0,063 mm - 0,200 mm):	83,13
Sand, medium	(0,2 mm - 0,6 mm):	14,11
Sand, coarse	(0,6 mm - 2 mm):	0,68
Gravel	(> 2 mm):	0,09
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,30	1,75
16%	84%	0,19	2,37
25%	75%	0,17	2,55
40%	60%	0,15	2,73
Median 50%	50%	0,14	2,87
75%	25%	0,11	3,21
84%	16%	0,10	3,34
90%	10%	0,09	3,43
95%	5%	0,08	3,63

Moments Statistics

Mean	2,86
Sorting	0,53
Skewness	-0,10
Kurtosis	1,18
Uniformity Coefficient	1,63

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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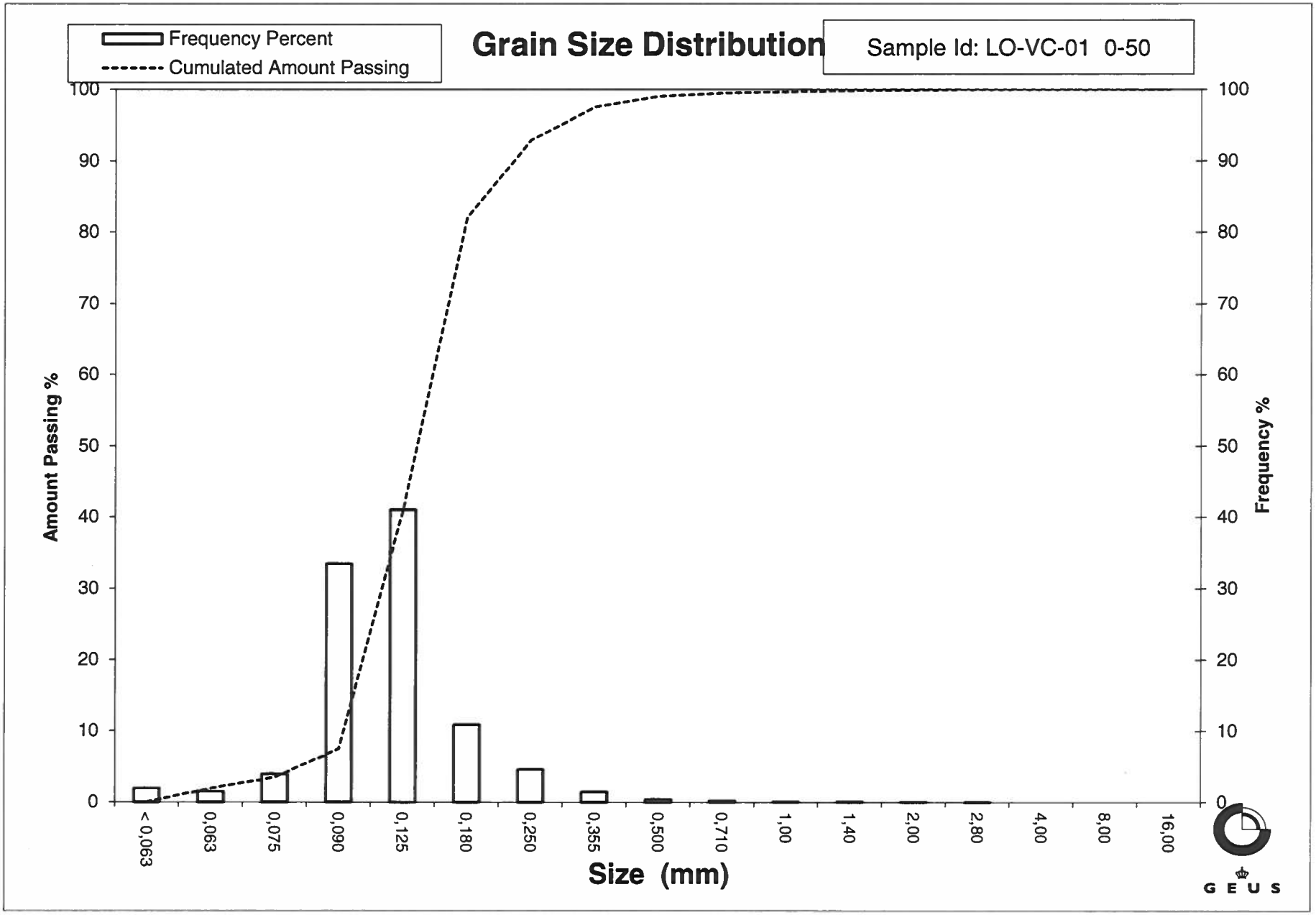
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-01 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-01 100-150
Lab. Id: 230493
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

GEUS

Total Weight 93,59 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	0,01	0,01	99,99
	2,00	-1,00	0,06	0,06	99,93
Sand	1,40	-0,49	0,09	0,10	99,83
	1,00	0,00	0,16	0,17	99,66
	0,710	0,49	0,33	0,35	99,31
	0,500	1,00	0,54	0,57	98,73
	0,355	1,49	1,01	1,08	97,65
	0,250	2,00	2,21	2,37	95,29
	0,180	2,47	7,44	7,95	87,34
	0,125	3,00	38,48	41,12	46,22
	0,090	3,47	33,56	35,86	10,36
	0,075	3,74	5,21	5,57	4,80
	0,063	3,99	1,38	1,48	3,32
	< 0,063	> 3,99	3,11	3,32	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,32
Sand, fine	(0,063 mm - 0,200 mm):	86,29
Sand, medium	(0,2 mm - 0,6 mm):	9,40
Sand, coarse	(0,6 mm - 2 mm):	0,93
Gravel	(> 2 mm):	0,07
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,25	2,01
16%	84%	0,18	2,51
25%	75%	0,16	2,61
40%	60%	0,14	2,80
Median 50%	50%	0,13	2,94
75%	25%	0,10	3,26
84%	16%	0,10	3,39
90%	10%	0,09	3,49
95%	5%	0,08	3,73

Moments Statistics

Mean	2,95
Sorting	0,48
Skewness	-0,03
Kurtosis	1,08
Uniformity Coefficient	1,61

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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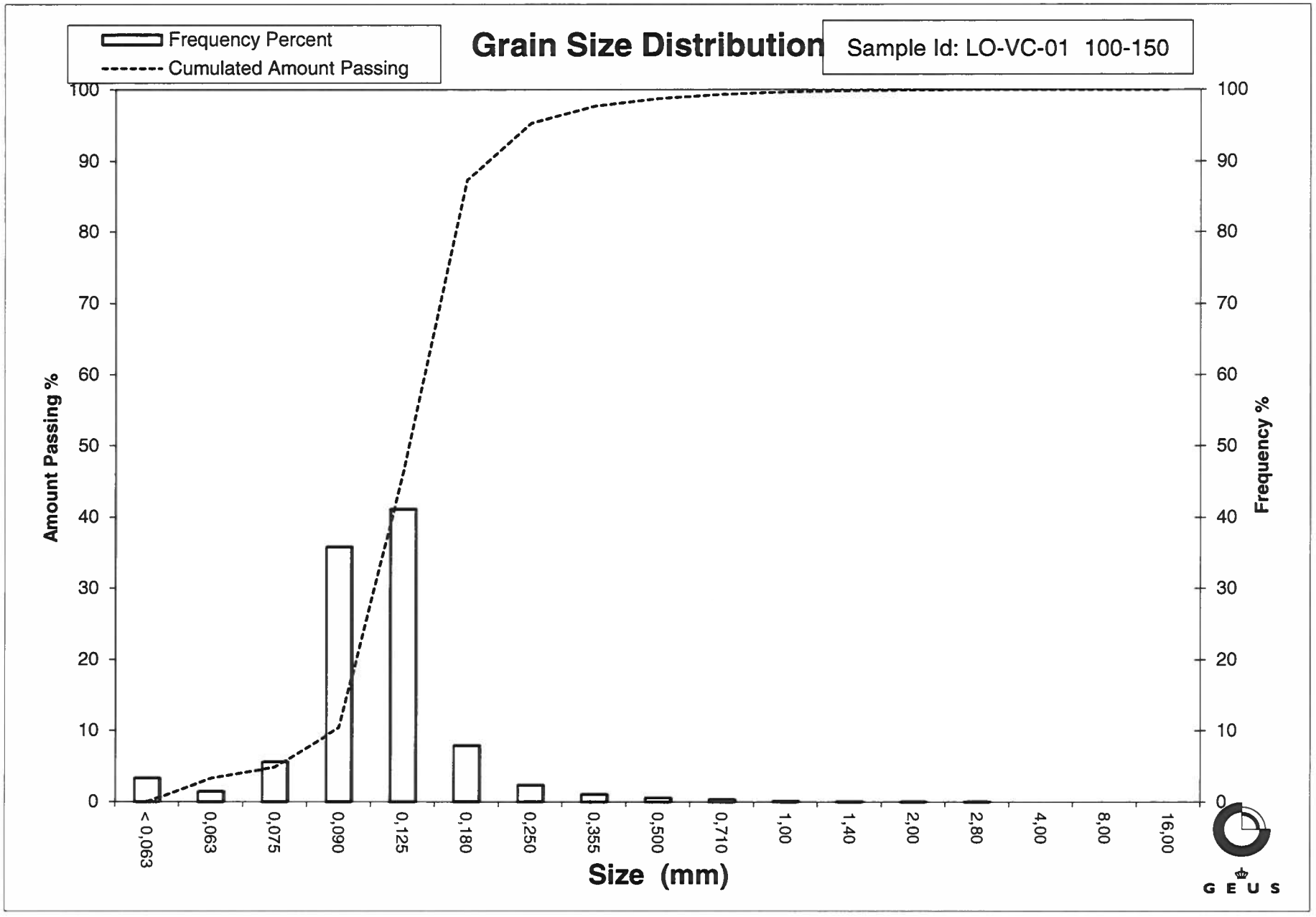
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-01 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-01 200-250
Lab. Id: 230494
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >0,5mm heraf 0,8g skaller

GEUS

Total Weight 94,496 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	0,08	99,92
	2,00	-1,00	0,12	0,13	99,79
Sand	1,40	-0,49	0,14	0,14	99,65
	1,00	0,00	0,39	0,42	99,23
	0,710	0,49	0,56	0,59	98,64
	0,500	1,00	1,15	1,21	97,42
	0,355	1,49	1,57	1,66	95,76
	0,250	2,00	2,64	2,80	92,96
	0,180	2,47	5,43	5,75	87,21
	0,125	3,00	28,84	30,52	56,69
	0,090	3,47	40,04	42,37	14,32
	0,075	3,74	5,12	5,42	8,90
	0,063	3,99	1,71	1,81	7,09
	< 0,063	> 3,99	6,70	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):	81,76
Sand, medium	(0,2 mm - 0,6 mm):	9,15
Sand, coarse	(0,6 mm - 2 mm):	1,79
Gravel	(> 2 mm):	0,21
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,33	1,61
16%	84%	0,17	2,52
25%	75%	0,16	2,66
40%	60%	0,13	2,93
Median 50%	50%	0,12	3,07
75%	25%	0,10	3,34
84%	16%	0,09	3,45
90%	10%	0,08	3,68
95%	5%	-------	-------

Moments Statistics

Mean	3,01
Sorting	-------
Skewness	-------
Kurtosis	-------
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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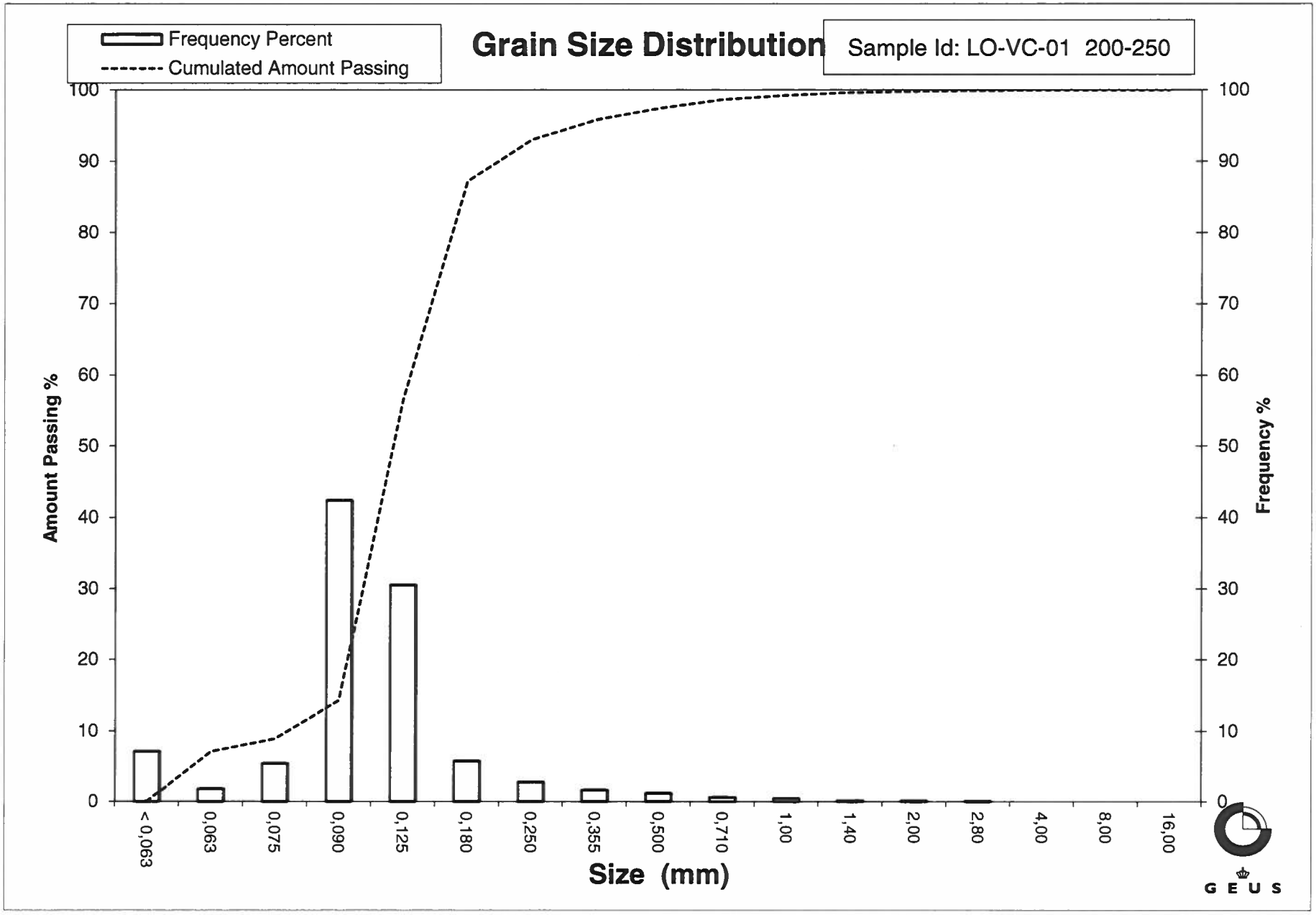
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-01 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-01 300-350
Lab. Id: 230495
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >0,5mm heraf 0,7g skaller

GEUS

Total Weight 91,714 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	0,00	0,00	100,00
Gravel	4,00	-2,00	0,13	0,14	99,86
Gravel	2,80	-1,49	0,04	0,05	99,81
Gravel	2,00	-1,00	0,06	0,07	99,74
Sand	1,40	-0,49	0,15	0,17	99,58
Sand	1,00	0,00	0,21	0,22	99,35
Sand	0,710	0,49	0,31	0,34	99,02
Sand	0,500	1,00	0,56	0,61	98,41
Sand	0,355	1,49	0,75	0,82	97,59
Sand	0,250	2,00	0,97	1,06	96,53
Sand	0,180	2,47	4,77	5,20	91,33
Sand	0,125	3,00	20,07	21,88	69,45
Sand	0,090	3,47	49,91	54,42	15,03
Sand	0,075	3,74	7,38	8,04	6,99
Sand	0,063	3,99	2,25	2,45	4,53
	< 0,063	> 3,99	4,16	4,53	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,53
Sand, fine	(0,063 mm - 0,200 mm):	88,28
Sand, medium	(0,2 mm - 0,6 mm):	5,88
Sand, coarse	(0,6 mm - 2 mm):	1,05
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%	0,23	2,12
16%	84%	0,16	2,63
25%	75%	0,14	2,85
40%	60%	0,12	3,07
Median 50%	50%	0,11	3,15
75%	25%	0,10	3,37
84%	16%	0,09	3,46
90%	10%	0,08	3,63
95%	5%	0,07	3,94

Moments Statistics

Mean	3,08
Sorting	0,48
Skewness	-0,19
Kurtosis	1,41
Uniformity Coefficient	1,48

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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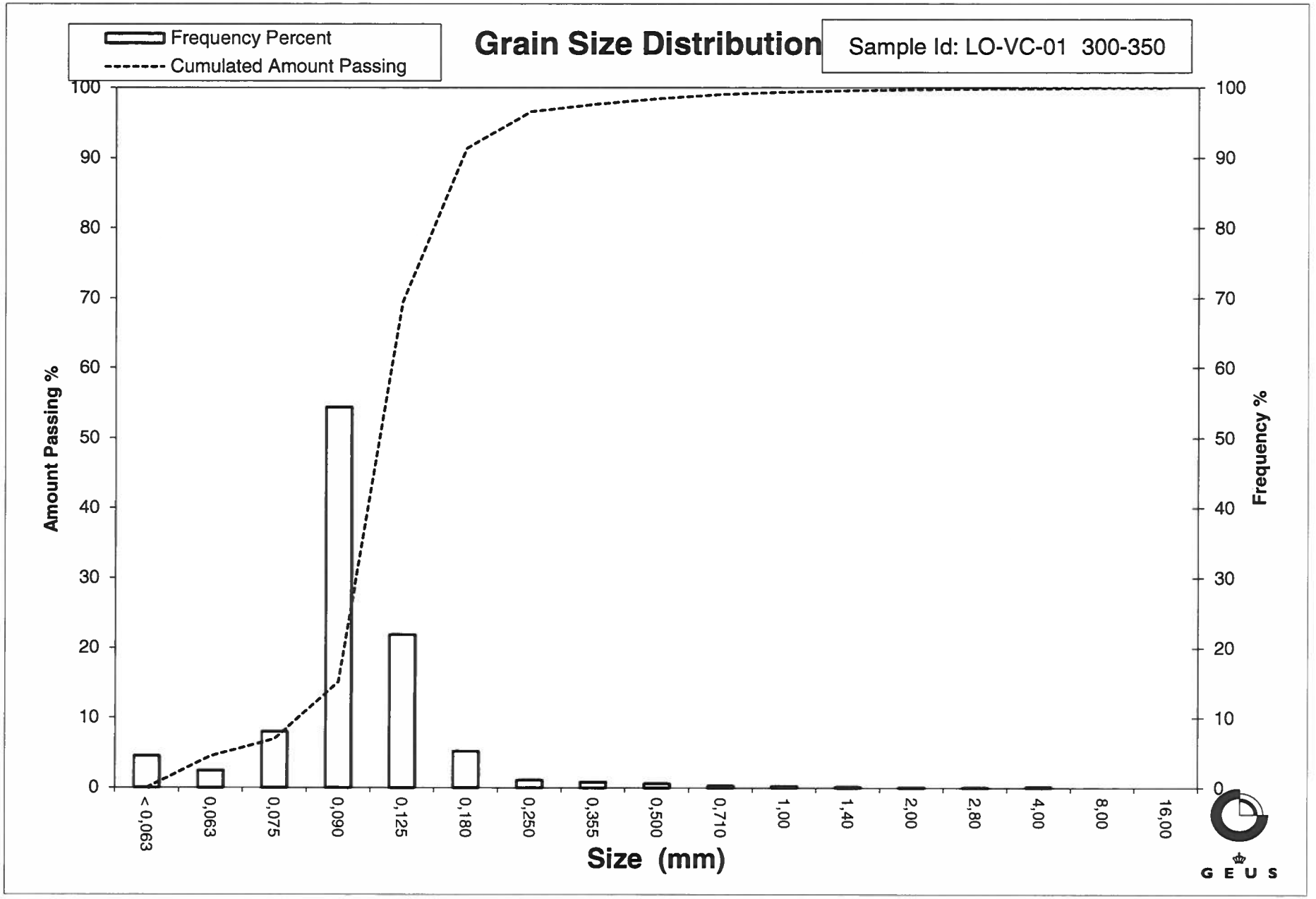
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-01 300-350
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-02 0-50
Lab. Id: 230496
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

GEUS

Total Weight 87,241 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	0,11	0,12	99,88
	2,80	-1,49	0,00	0,00	99,88
	2,00	-1,00	0,02	0,02	99,86
Sand	1,40	-0,49	0,09	0,10	99,76
	1,00	0,00	0,14	0,16	99,60
	0,710	0,49	0,14	0,16	99,44
	0,500	1,00	0,27	0,31	99,14
	0,355	1,49	0,86	0,99	98,15
	0,250	2,00	2,67	3,06	95,08
	0,180	2,47	20,78	23,82	71,26
	0,125	3,00	34,33	39,35	31,91
	0,090	3,47	22,88	26,23	5,68
	0,075	3,74	2,69	3,08	2,60
	0,063	3,99	0,80	0,91	1,68
	< 0,063	> 3,99	1,47	1,68	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,68
Sand, fine	(0,063 mm - 0,200 mm):	76,38
Sand, medium	(0,2 mm - 0,6 mm):	21,22
Sand, coarse	(0,6 mm - 2 mm):	0,58
Gravel	(> 2 mm):	0,14
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,25	2,00
16%	84%	0,22	2,20
25%	75%	0,19	2,39
40%	60%	0,16	2,61
Median 50%	50%	0,15	2,73
75%	25%	0,12	3,11
84%	16%	0,10	3,27
90%	10%	0,10	3,38
95%	5%	0,09	3,53

Moments Statistics

Mean	2,73
Sorting	0,50
Skewness	0,02
Kurtosis	0,87
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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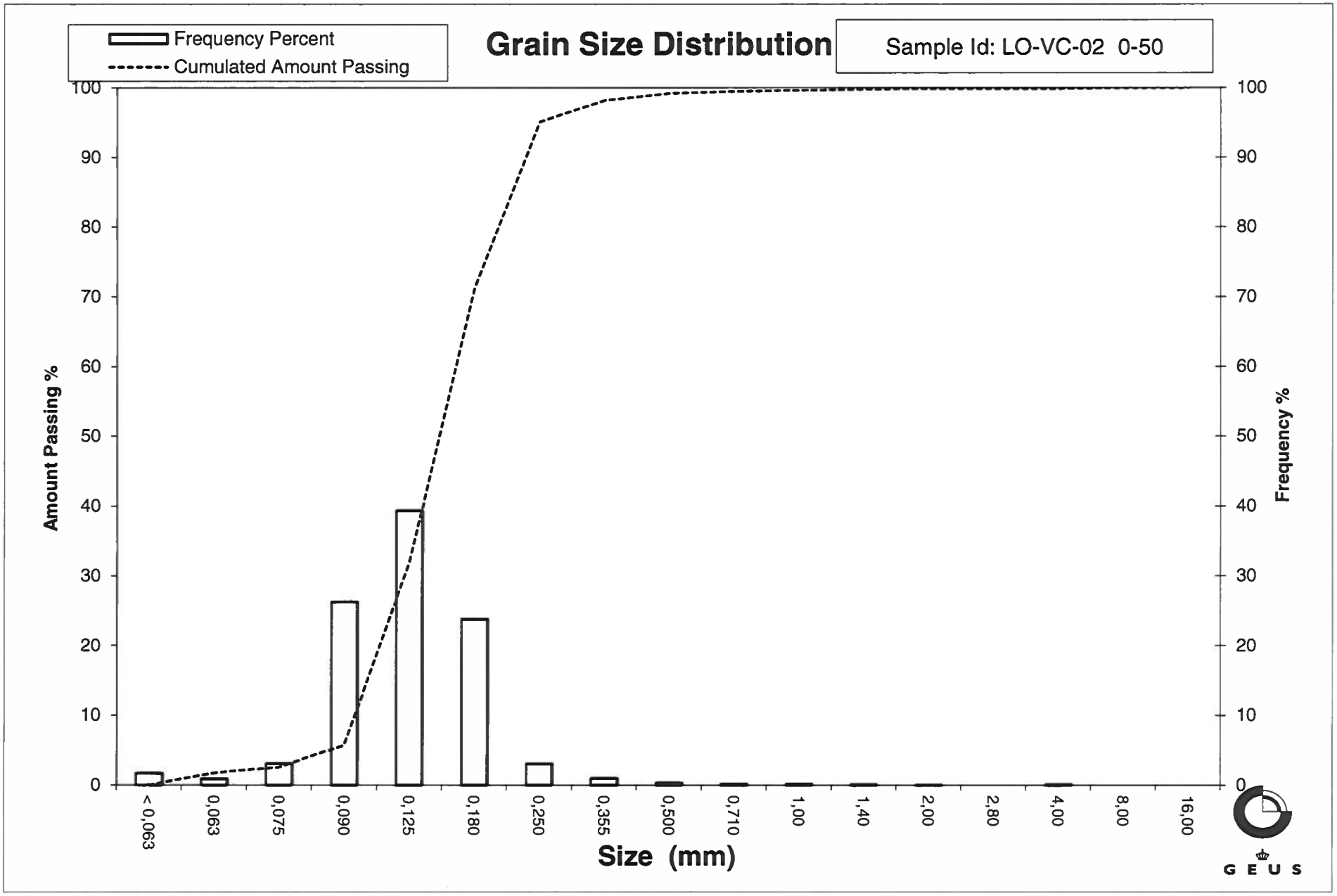
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-02 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-02 100-150
Lab. Id: 230497
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 95,83 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	0,05	0,05	99,95
	2,00	-1,00	0,03	0,03	99,92
Sand	1,40	-0,49	0,06	0,06	99,86
	1,00	0,00	0,13	0,13	99,73
	0,710	0,49	0,15	0,15	99,58
	0,500	1,00	0,42	0,44	99,14
	0,355	1,49	1,61	1,68	97,46
	0,250	2,00	6,12	6,39	91,07
	0,180	2,47	18,93	19,75	71,32
	0,125	3,00	42,52	44,37	26,95
	0,090	3,47	20,51	21,40	5,55
	0,075	3,74	3,01	3,14	2,41
	0,063	3,99	0,87	0,90	1,51
	< 0,063	> 3,99	1,44	1,51	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,51
Sand, fine	(0,063 mm - 0,200 mm):	75,45
Sand, medium	(0,2 mm - 0,6 mm):	22,38
Sand, coarse	(0,6 mm - 2 mm):	0,58
Gravel	(> 2 mm):	0,08
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,31	1,67
16%	84%	0,22	2,15
25%	75%	0,19	2,37
40%	60%	0,17	2,59
Median 50%	50%	0,15	2,70
75%	25%	0,12	3,04
84%	16%	0,11	3,22
90%	10%	0,10	3,36
95%	5%	0,09	3,52

Moments Statistics

Mean	2,69
Sorting	0,55
Skewness	-0,07
Kurtosis	1,14
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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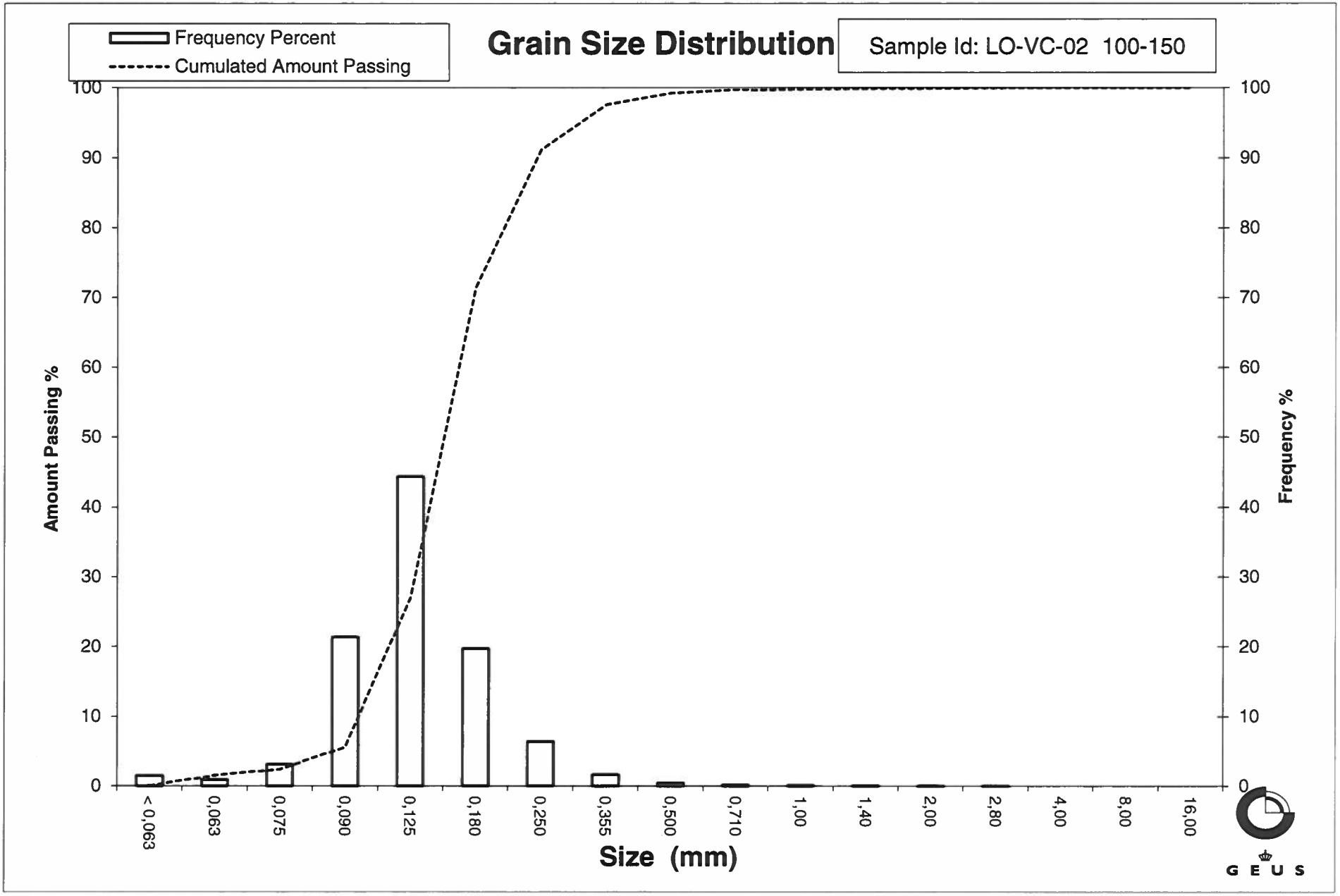
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-02 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-02 200-250
Lab. Id: 230498
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

Total Weight 94,162 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	0,04	0,04	99,96
	2,80	-1,49	0,05	0,05	99,90
	2,00	-1,00	0,05	0,05	99,85
Sand	1,40	-0,49	0,20	0,21	99,64
	1,00	0,00	0,26	0,27	99,37
	0,710	0,49	0,53	0,56	98,81
	0,500	1,00	0,92	0,97	97,84
	0,355	1,49	1,89	2,01	95,83
	0,250	2,00	3,97	4,22	91,61
	0,180	2,47	11,67	12,39	79,22
	0,125	3,00	34,98	37,15	42,07
	0,090	3,47	30,57	32,47	9,60
	0,075	3,74	4,95	5,26	4,35
	0,063	3,99	1,85	1,96	2,39
	< 0,063	> 3,99	2,25	2,39	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,39
Sand, fine	(0,063 mm - 0,200 mm):	80,38
Sand, medium	(0,2 mm - 0,6 mm):	15,54
Sand, coarse	(0,6 mm - 2 mm):	1,55
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%	0,33	1,58
16%	84%	0,21	2,27
25%	75%	0,17	2,52
40%	60%	0,15	2,72
Median 50%	50%	0,14	2,87
75%	25%	0,11	3,23
84%	16%	0,10	3,37
90%	10%	0,09	3,47
95%	5%	0,08	3,70

Moments Statistics

Mean	2,84
Sorting	0,60
Skewness	-0,15
Kurtosis	1,23
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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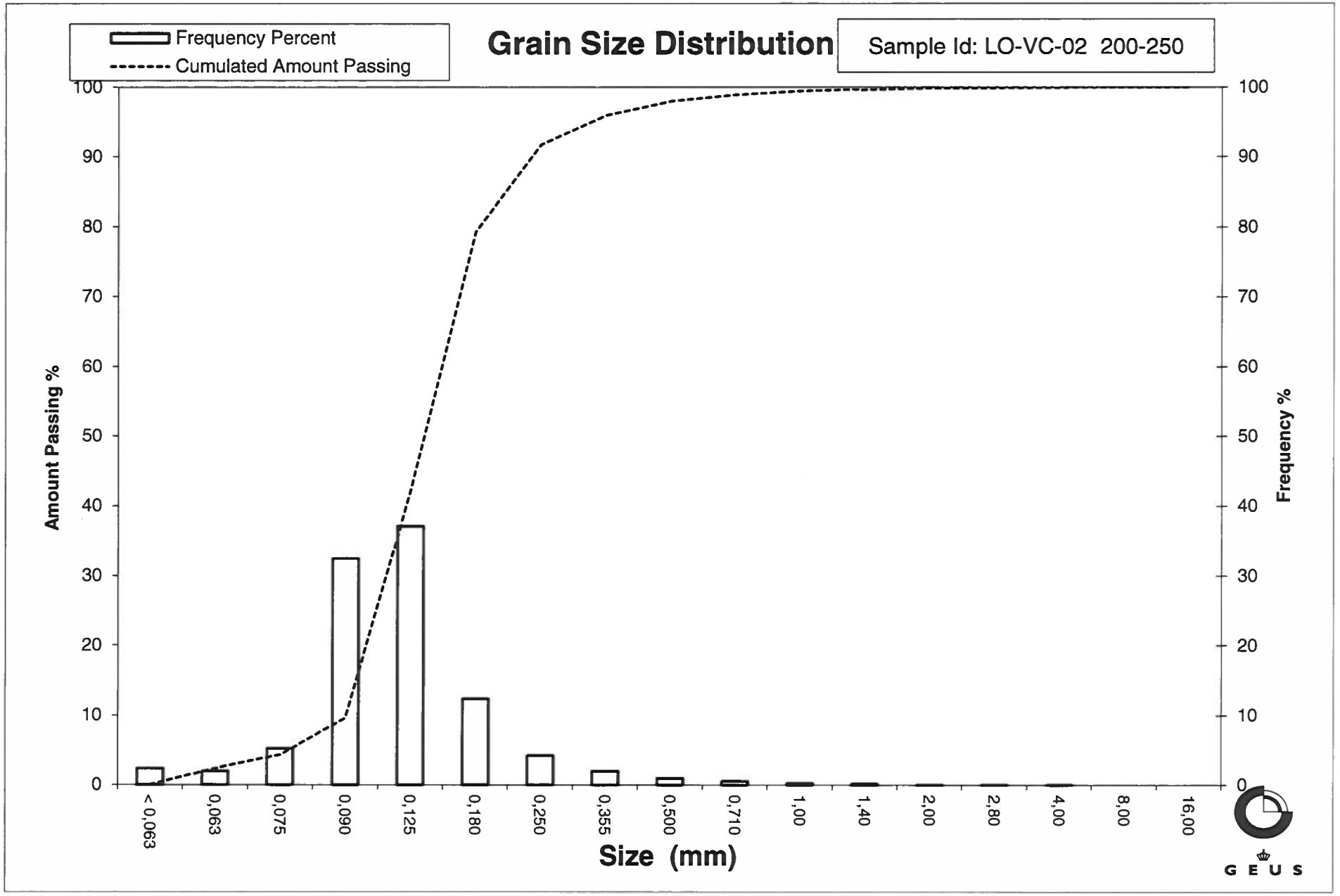
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-02 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-03 0-50
Lab. Id: 230499
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,535 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	0,02	0,03	99,97
Sand	1,40	-0,49	0,04	0,04	99,94
	1,00	0,00	0,11	0,12	99,82
	0,710	0,49	0,19	0,20	99,62
	0,500	1,00	0,65	0,69	98,93
	0,355	1,49	1,93	2,04	96,89
	0,250	2,00	5,34	5,65	91,23
	0,180	2,47	11,74	12,42	78,82
	0,125	3,00	40,15	42,47	36,35
	0,090	3,47	28,52	30,17	6,19
	0,075	3,74	3,26	3,44	2,74
	0,063	3,99	0,73	0,78	1,97
	< 0,063	> 3,99	1,86	1,97	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,97
Sand, fine	(0,063 mm - 0,200 mm):	80,40
Sand, medium	(0,2 mm - 0,6 mm):	16,89
Sand, coarse	(0,6 mm - 2 mm):	0,72
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%	0,32	1,64
16%	84%	0,21	2,26
25%	75%	0,18	2,51
40%	60%	0,16	2,68
Median 50%	50%	0,14	2,81
75%	25%	0,11	3,16
84%	16%	0,10	3,30
90%	10%	0,09	3,40
95%	5%	0,08	3,56

Moments Statistics

Mean	2,79
Sorting	0,55
Skewness	-0,14
Kurtosis	1,21
Uniformity Coefficient	1,65

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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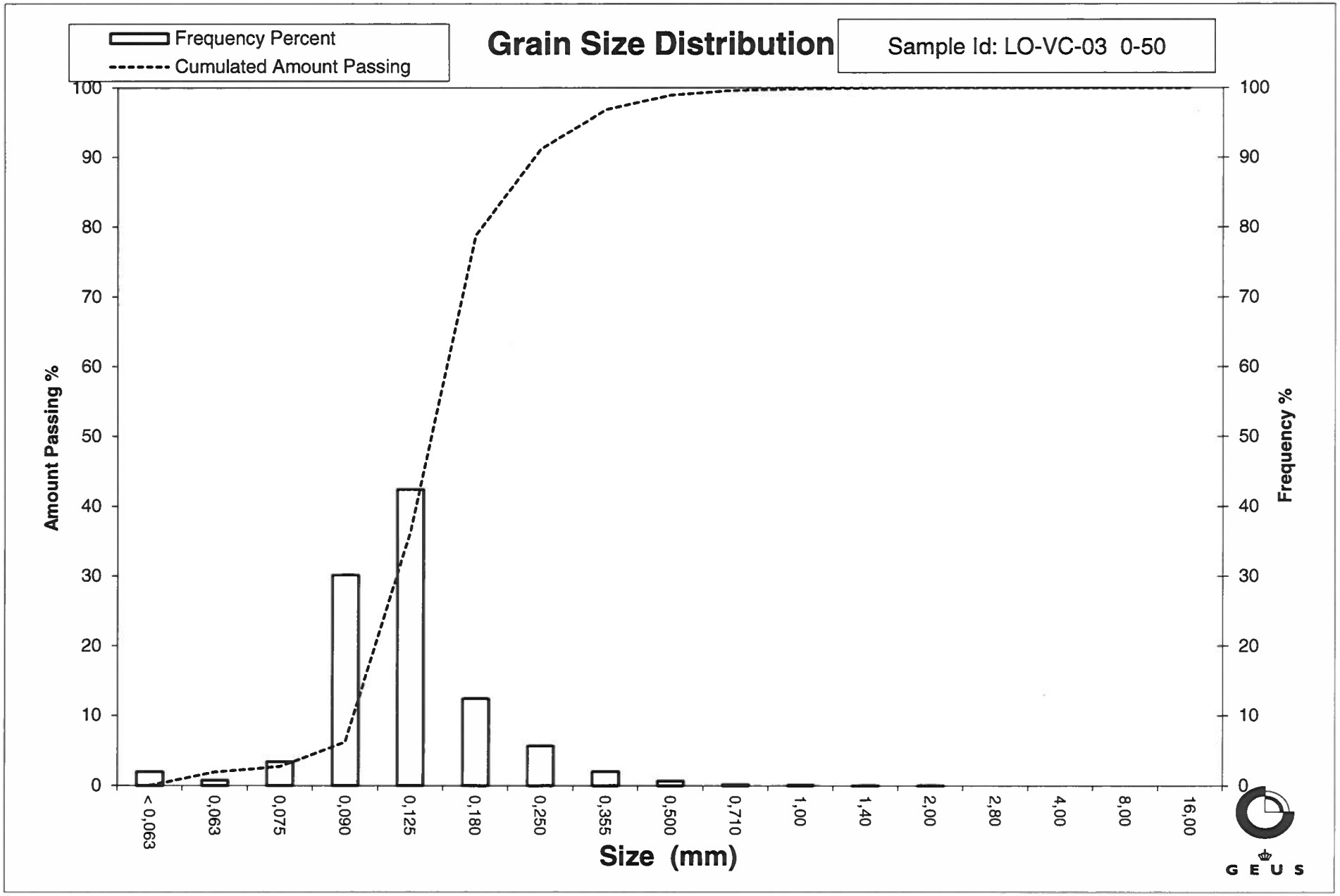
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-03 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-03 100-150
Lab. Id: 230500
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

Total Weight 93,892 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	0,06	0,06	99,94
	2,80	-1,49	0,00	0,00	99,94
	2,00	-1,00	0,02	0,02	99,92
Sand	1,40	-0,49	0,01	0,01	99,91
	1,00	0,00	0,05	0,05	99,86
	0,710	0,49	0,06	0,06	99,80
	0,500	1,00	0,16	0,17	99,62
	0,355	1,49	0,22	0,23	99,39
	0,250	2,00	0,62	0,66	98,73
	0,180	2,47	1,92	2,04	96,69
	0,125	3,00	26,13	27,83	68,86
	0,090	3,47	54,76	58,32	10,54
	0,075	3,74	6,72	7,15	3,39
	0,063	3,99	1,57	1,67	1,72
	< 0,063	> 3,99	1,61	1,72	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,72
Sand, fine	(0,063 mm - 0,200 mm):	95,56
Sand, medium	(0,2 mm - 0,6 mm):	2,43
Sand, coarse	(0,6 mm - 2 mm):	0,21
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%	0,18	2,50
16%	84%	0,15	2,69
25%	75%	0,14	2,87
40%	60%	0,12	3,06
Median 50%	50%	0,11	3,14
75%	25%	0,10	3,34
84%	16%	0,09	3,42
90%	10%	0,09	3,49
95%	5%	0,08	3,67

Moments Statistics

Mean	3,08
Sorting	0,36
Skewness	-0,15
Kurtosis	1,01
Uniformity Coefficient	1,35

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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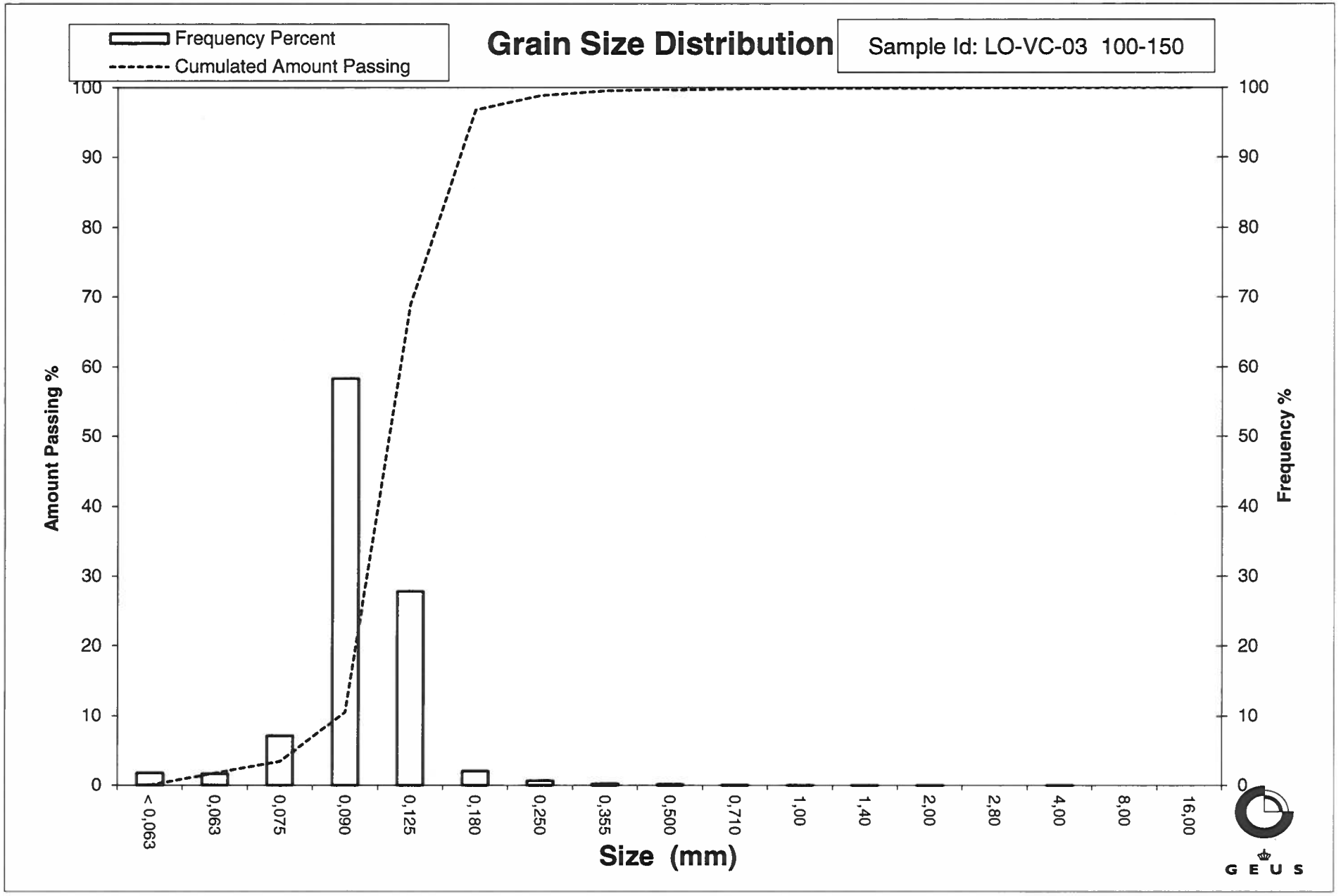
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-03 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-04 0-50
Lab. Id: 230501
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >8mm består af skaller

Total Weight 97,902 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	0,27	0,27	99,73
	4,00	-2,00	0,00	0,00	99,73
	2,80	-1,49	0,00	0,00	99,73
	2,00	-1,00	0,00	0,00	99,73
Sand	1,40	-0,49	0,03	0,03	99,69
	1,00	0,00	0,02	0,02	99,67
	0,710	0,49	0,05	0,05	99,62
	0,500	1,00	0,12	0,12	99,50
	0,355	1,49	0,52	0,53	98,96
	0,250	2,00	5,22	5,33	93,63
	0,180	2,47	53,47	54,62	39,01
	0,125	3,00	21,08	21,53	17,48
	0,090	3,47	12,93	13,20	4,27
	0,075	3,74	2,07	2,11	2,16
	0,063	3,99	0,77	0,78	1,38
	< 0,063	> 3,99	1,35	1,38	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,38
Sand, fine	(0,063 mm - 0,200 mm):	53,24
Sand, medium	(0,2 mm - 0,6 mm):	44,94
Sand, coarse	(0,6 mm - 2 mm):	0,17
Gravel	(> 2 mm):	0,27
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,28	1,85
16%	84%	0,24	2,07
25%	75%	0,23	2,14
40%	60%	0,21	2,27
Median 50%	50%	0,19	2,37
75%	25%	0,14	2,79
84%	16%	0,12	3,05
90%	10%	0,11	3,25
95%	5%	0,09	3,44

Moments Statistics

Mean	2,49
Sorting	0,48
Skewness	0,38
Kurtosis	1,00
Uniformity Coefficient	1,97

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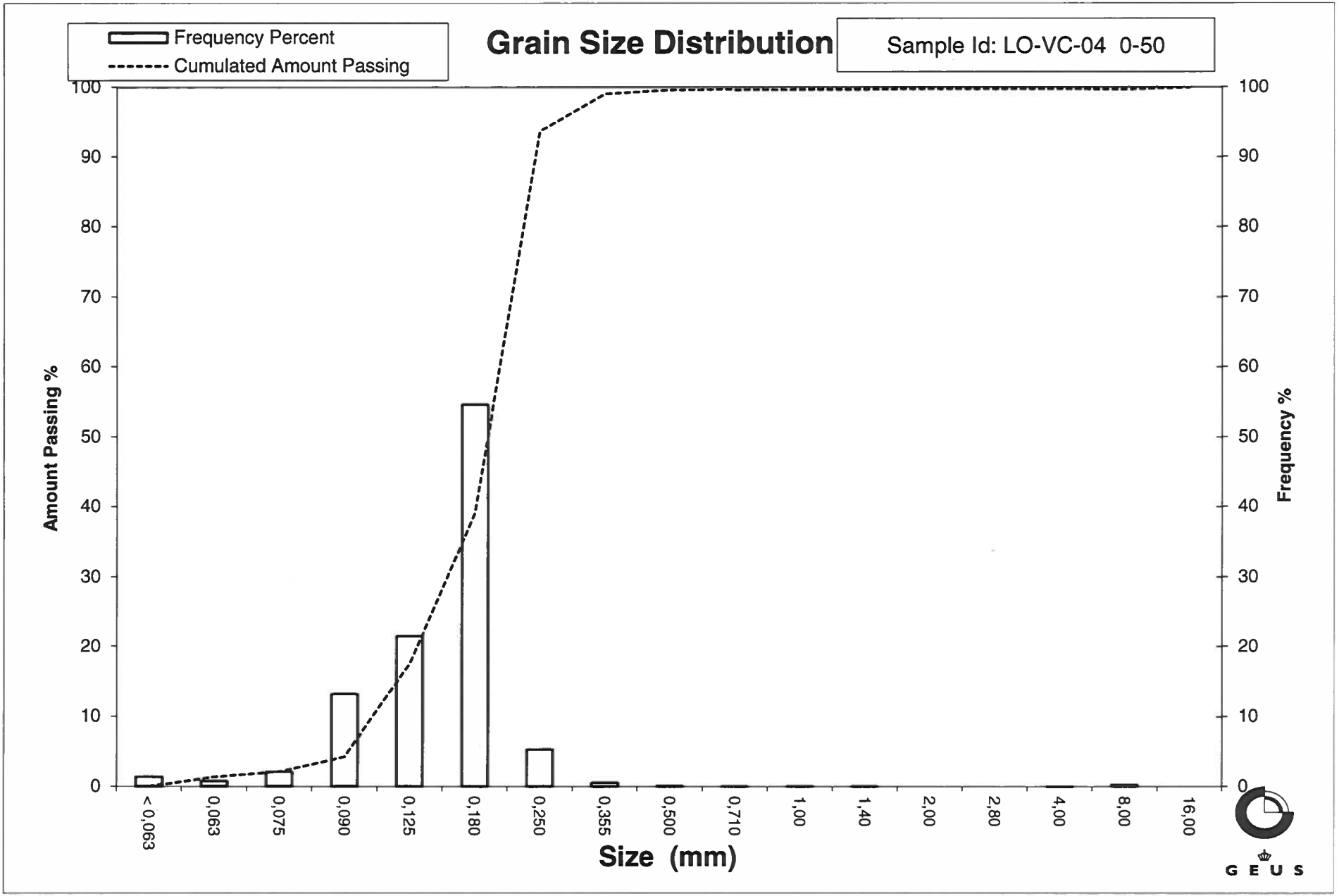
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-04 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-04 100-150
Lab. Id: 230502
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

Total Weight 94,234 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	0,01	0,01	99,98
	0,710	0,49	0,04	0,04	99,93
	0,500	1,00	0,10	0,10	99,83
	0,355	1,49	0,52	0,55	99,28
	0,250	2,00	5,90	6,26	93,02
	0,180	2,47	36,34	38,56	54,45
	0,125	3,00	29,68	31,49	22,96
	0,090	3,47	15,67	16,63	6,33
	0,075	3,74	2,92	3,10	3,23
	0,063	3,99	1,00	1,07	2,17
	< 0,063	> 3,99	2,04	2,17	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,17
Sand, fine	(0,063 mm - 0,200 mm):	63,31
Sand, medium	(0,2 mm - 0,6 mm):	34,41
Sand, coarse	(0,6 mm - 2 mm):	0,12
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%	0,28	1,82
16%	84%	0,23	2,10
25%	75%	0,22	2,20
40%	60%	0,19	2,40
Median 50%	50%	0,17	2,54
75%	25%	0,13	2,96
84%	16%	0,11	3,18
90%	10%	0,10	3,36
95%	5%	0,08	3,58

Moments Statistics

Mean	2,61
Sorting	0,54
Skewness	0,19
Kurtosis	0,95
Uniformity Coefficient	1,95

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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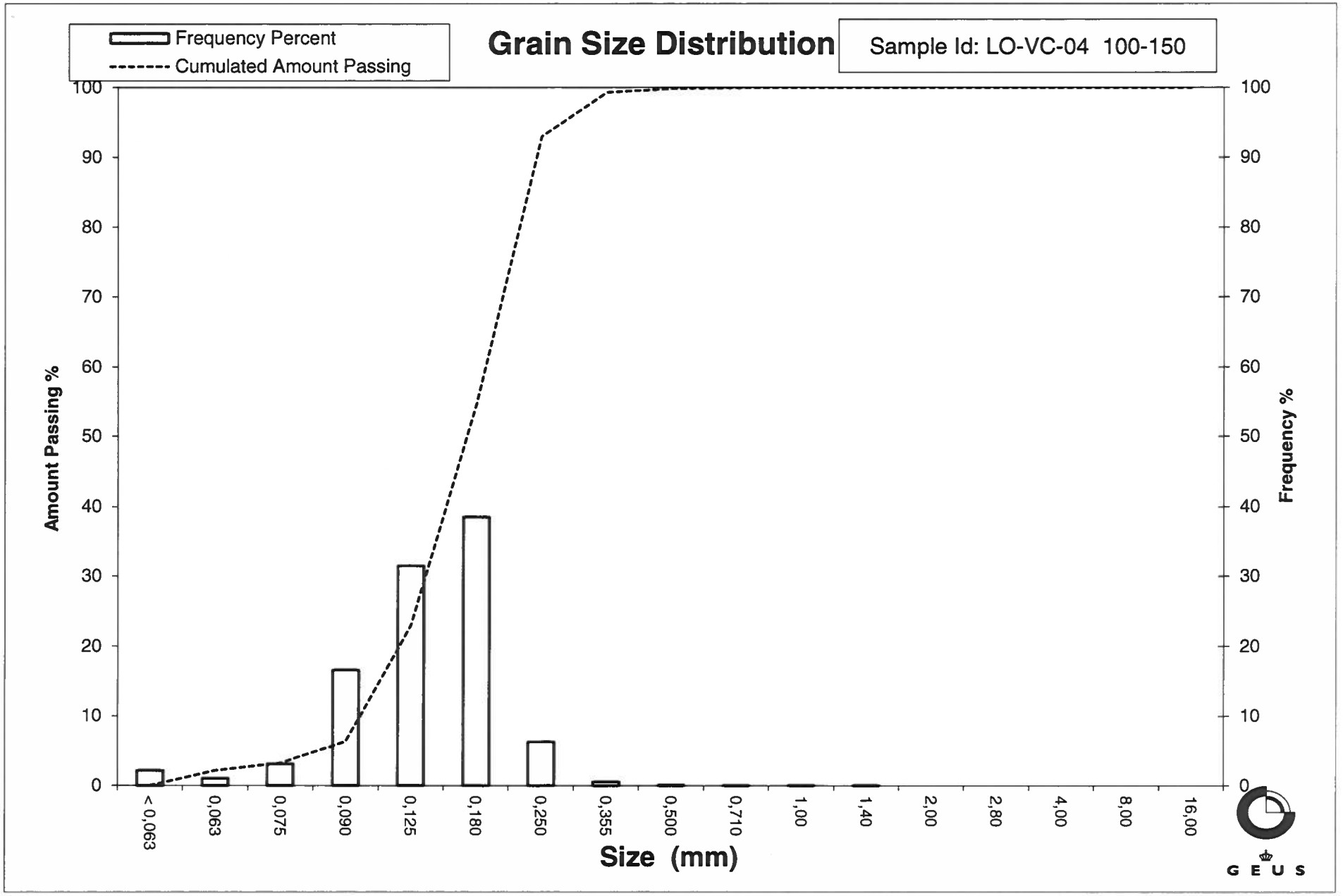
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-04 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-04 200-250
Lab. Id: 230503
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

GEUS

Total Weight 96,378 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	0,02	0,02	99,98
	2,00	-1,00	0,01	0,01	99,97
Sand	1,40	-0,49	0,01	0,01	99,96
	1,00	0,00	0,02	0,02	99,94
	0,710	0,49	0,08	0,09	99,86
	0,500	1,00	0,37	0,39	99,47
	0,355	1,49	1,79	1,86	97,61
	0,250	2,00	11,67	12,11	85,50
	0,180	2,47	29,53	30,63	54,87
	0,125	3,00	24,24	25,16	29,71
	0,090	3,47	21,87	22,69	7,02
	0,075	3,74	3,66	3,80	3,22
	0,063	3,99	1,33	1,37	1,85
	< 0,063	> 3,99	1,78	1,85	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,85
Sand, fine	(0,063 mm - 0,200 mm):	61,77
Sand, medium	(0,2 mm - 0,6 mm):	36,04
Sand, coarse	(0,6 mm - 2 mm):	0,32
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%	0,33	1,59
16%	84%	0,25	2,02
25%	75%	0,23	2,15
40%	60%	0,19	2,38
Median 50%	50%	0,17	2,56
75%	25%	0,12	3,09
84%	16%	0,10	3,27
90%	10%	0,09	3,40
95%	5%	0,08	3,61

Moments Statistics

Mean	2,62
Sorting	0,62
Skewness	0,08
Kurtosis	0,88
Uniformity Coefficient	2,03

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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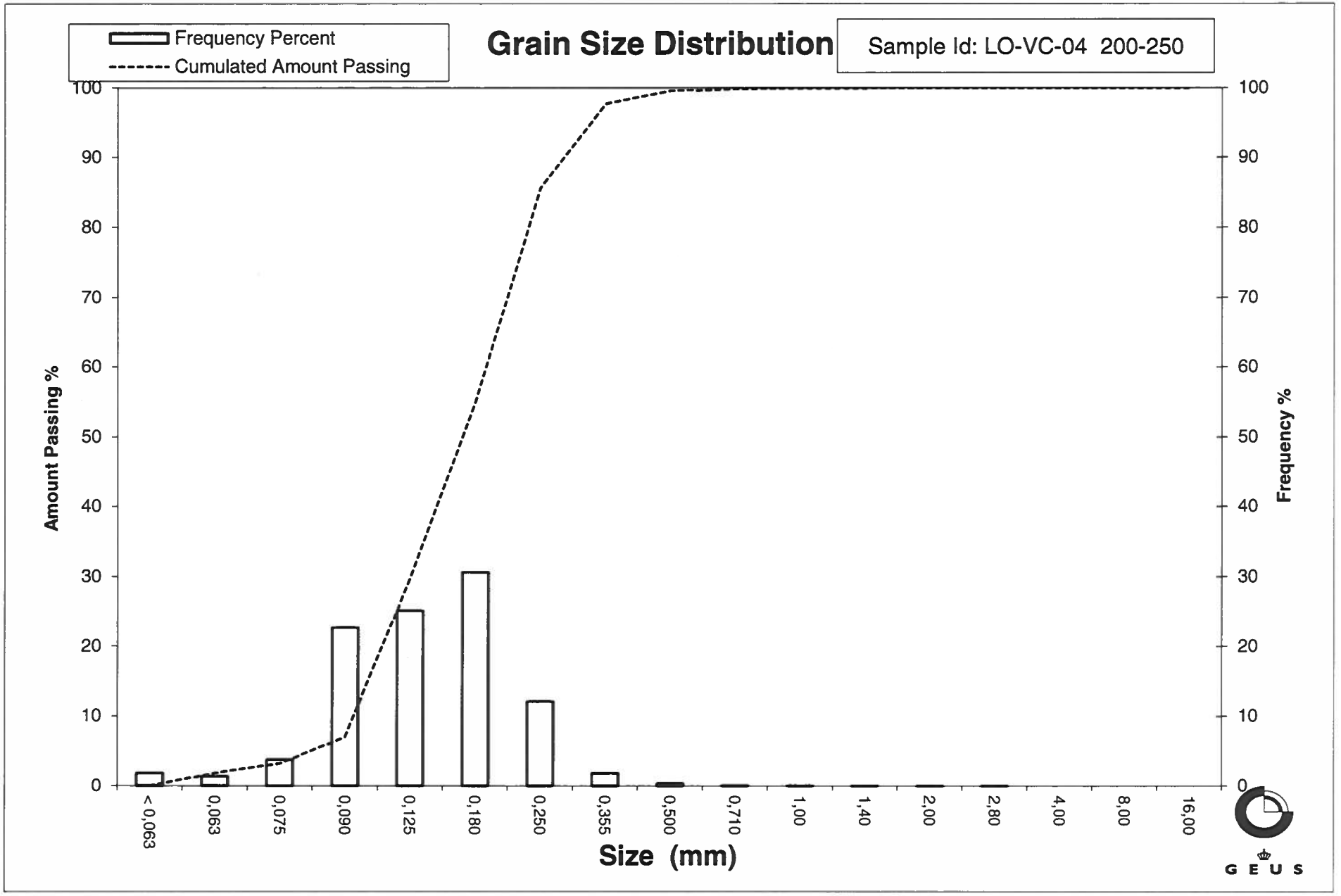
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-04 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-05 0-50
Lab. Id: 230504
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,2g skaller

GEUS

Total Weight 94,25 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	0,14	0,14	99,86
	2,00	-1,00	0,15	0,15	99,70
Sand	1,40	-0,49	0,17	0,18	99,52
	1,00	0,00	0,44	0,47	99,05
	0,710	0,49	0,55	0,59	98,46
	0,500	1,00	1,23	1,30	97,16
	0,355	1,49	3,16	3,35	93,81
	0,250	2,00	6,50	6,90	86,91
	0,180	2,47	18,25	19,36	67,55
	0,125	3,00	25,98	27,57	39,98
	0,090	3,47	33,18	35,20	4,78
	0,075	3,74	2,05	2,18	2,60
	0,063	3,99	0,62	0,66	1,94
	< 0,063	> 3,99	1,83	1,94	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,94
Sand, fine	(0,063 mm - 0,200 mm):	71,14
Sand, medium	(0,2 mm - 0,6 mm):	24,70
Sand, coarse	(0,6 mm - 2 mm):	1,92
Gravel	(> 2 mm):	0,30
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,41	1,30
16%	84%	0,24	2,06
25%	75%	0,21	2,27
40%	60%	0,16	2,60
Median 50%	50%	0,14	2,79
75%	25%	0,11	3,18
84%	16%	0,10	3,31
90%	10%	0,10	3,39
95%	5%	0,09	3,47

Moments Statistics

Mean	2,72
Sorting	0,64
Skewness	-0,27
Kurtosis	0,98
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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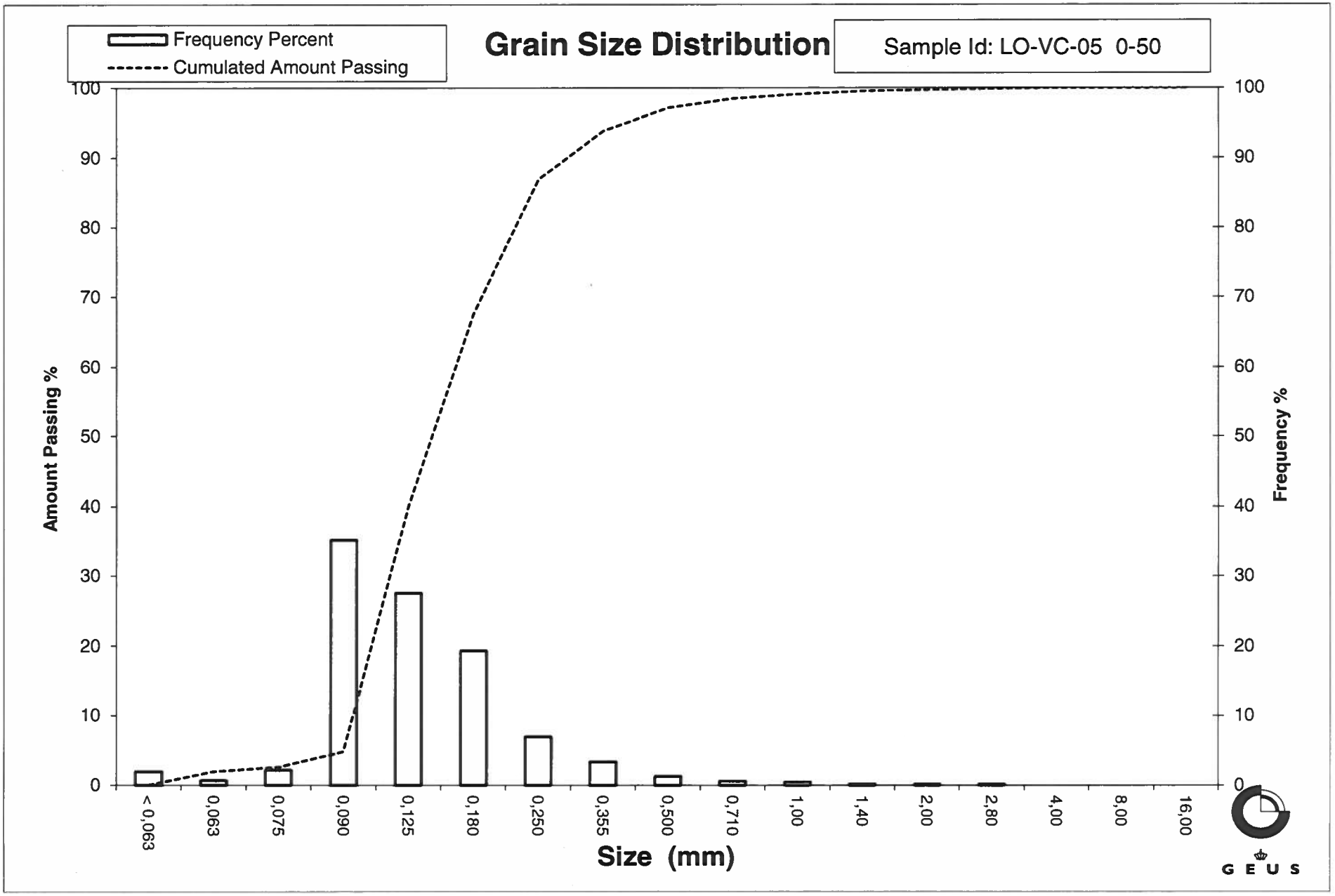
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-05 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-05 100-150
Lab. Id: 230505
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 95,022 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	0,04	0,05	99,95
	2,00	-1,00	0,05	0,05	99,90
Sand	1,40	-0,49	0,06	0,07	99,83
	1,00	0,00	0,15	0,16	99,68
	0,710	0,49	0,16	0,17	99,51
	0,500	1,00	0,26	0,27	99,24
	0,355	1,49	0,32	0,34	98,90
	0,250	2,00	0,82	0,87	98,03
	0,180	2,47	2,21	2,32	95,71
	0,125	3,00	23,80	25,04	70,66
	0,090	3,47	59,66	62,79	7,88
	0,075	3,74	3,76	3,96	3,92
	0,063	3,99	1,05	1,10	2,82
	< 0,063	> 3,99	2,68	2,82	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,82
Sand, fine	(0,063 mm - 0,200 mm):	93,55
Sand, medium	(0,2 mm - 0,6 mm):	3,00
Sand, coarse	(0,6 mm - 2 mm):	0,53
Gravel	(> 2 mm):	0,10
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%	0,15	2,70
25%	75%	0,13	2,89
40%	60%	0,12	3,07
Median 50%	50%	0,11	3,14
75%	25%	0,10	3,33
84%	16%	0,09	3,40
90%	10%	0,09	3,46
95%	5%	0,08	3,66

Moments Statistics

Mean	3,08
Sorting	0,35
Skewness	-0,18
Kurtosis	1,11
Uniformity Coefficient	1,31

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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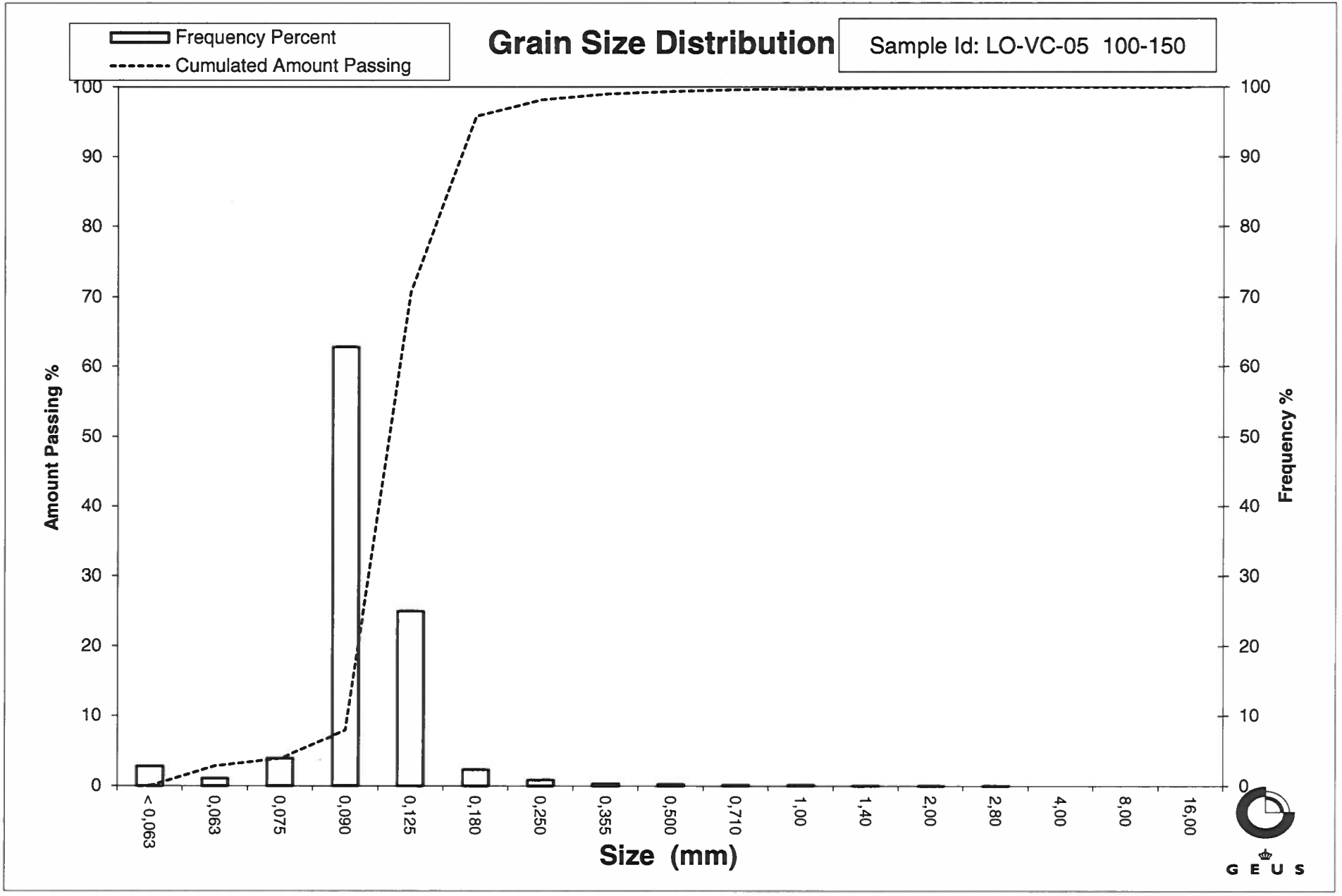
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-05 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-06 0-50
Lab. Id: 230506
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

Total Weight 93,702 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	0,03	0,04	99,96
	1,40	-0,49	0,03	0,03	99,94
	1,00	0,00	0,08	0,08	99,86
	0,710	0,49	0,18	0,19	99,66
	0,500	1,00	0,32	0,35	99,32
	0,355	1,49	0,83	0,89	98,43
	0,250	2,00	7,72	8,24	90,19
	0,180	2,47	22,13	23,62	66,58
	0,125	3,00	28,97	30,92	35,66
	0,090	3,47	27,28	29,11	6,54
	0,075	3,74	3,50	3,74	2,81
	0,063	3,99	1,15	1,23	1,58
	< 0,063	> 3,99	1,48	1,58	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,58
Sand, fine	(0,063 mm - 0,200 mm):	71,75
Sand, medium	(0,2 mm - 0,6 mm):	26,16
Sand, coarse	(0,6 mm - 2 mm):	0,48
Gravel	(> 2 mm):	0,04
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,31	1,68
16%	84%	0,23	2,11
25%	75%	0,20	2,29
40%	60%	0,17	2,57
Median 50%	50%	0,15	2,73
75%	25%	0,11	3,16
84%	16%	0,10	3,30
90%	10%	0,09	3,41
95%	5%	0,08	3,58

Moments Statistics

Mean	2,71
Sorting	0,58
Skewness	-0,08
Kurtosis	0,89
Uniformity Coefficient	1,79

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

Size Classes and Percentiles are found by linear interpolation

Formulas

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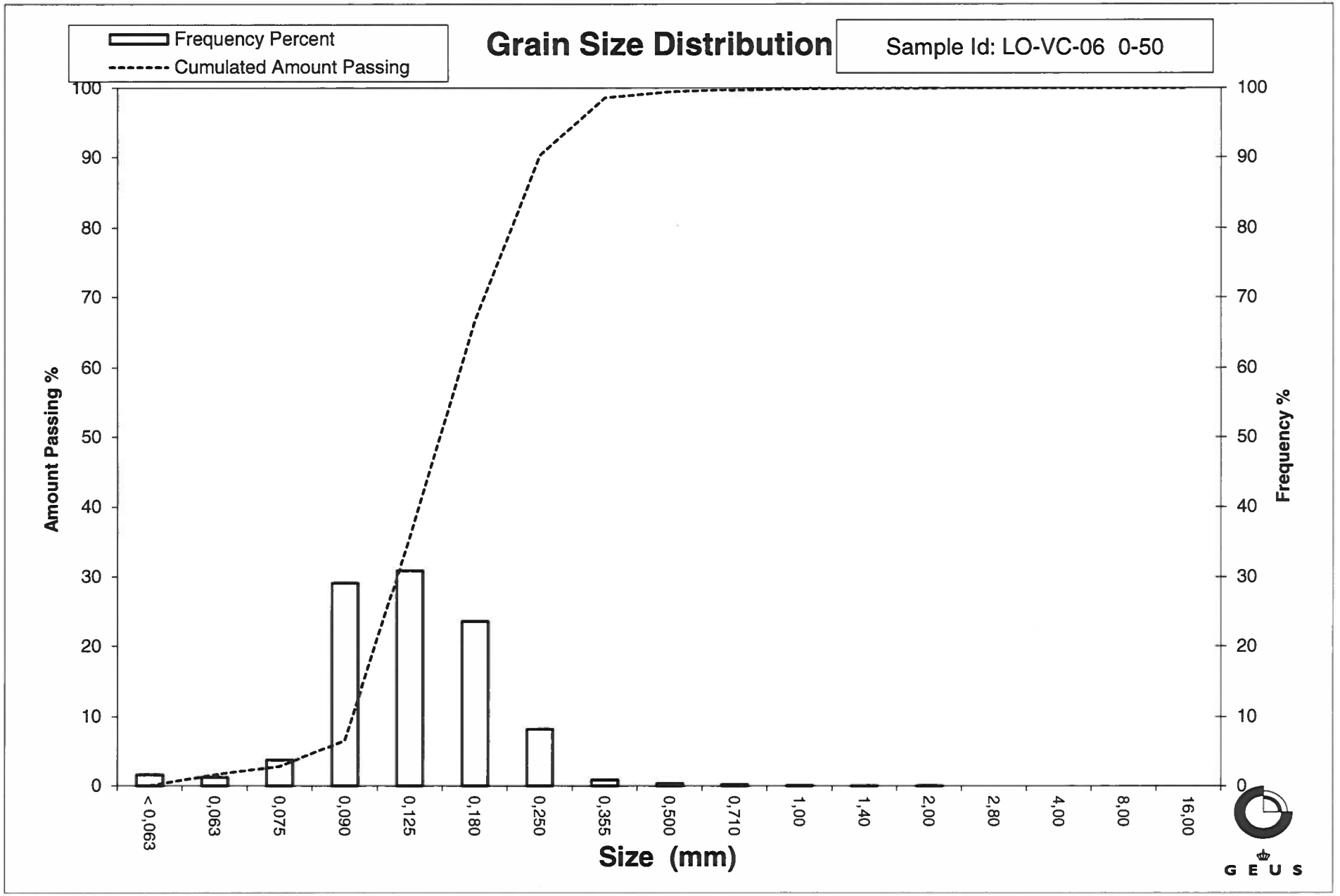
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-06 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-06 100-150
Lab. Id: 230507
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,688 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	0,11	0,12	99,88
	2,00	-1,00	0,12	0,13	99,75
Sand	1,40	-0,49	0,08	0,09	99,67
	1,00	0,00	0,17	0,18	99,49
	0,710	0,49	0,26	0,27	99,22
	0,500	1,00	0,44	0,46	98,76
	0,355	1,49	0,99	1,05	97,71
	0,250	2,00	5,59	5,91	91,80
	0,180	2,47	16,58	17,51	74,29
	0,125	3,00	28,64	30,25	44,05
	0,090	3,47	33,08	34,94	9,11
	0,075	3,74	4,98	5,26	3,85
	0,063	3,99	1,35	1,42	2,42
	< 0,063	> 3,99	2,30	2,42	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,42
Sand, fine	(0,063 mm - 0,200 mm):	76,87
Sand, medium	(0,2 mm - 0,6 mm):	19,68
Sand, coarse	(0,6 mm - 2 mm):	0,78
Gravel	(> 2 mm):	0,25
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,31	1,70
16%	84%	0,22	2,19
25%	75%	0,18	2,45
40%	60%	0,15	2,70
Median 50%	50%	0,14	2,88
75%	25%	0,11	3,24
84%	16%	0,10	3,37
90%	10%	0,09	3,46
95%	5%	0,08	3,68

Moments Statistics

Mean	2,81
Sorting	0,59
Skewness	-0,18
Kurtosis	1,03
Uniformity Coefficient	1,69

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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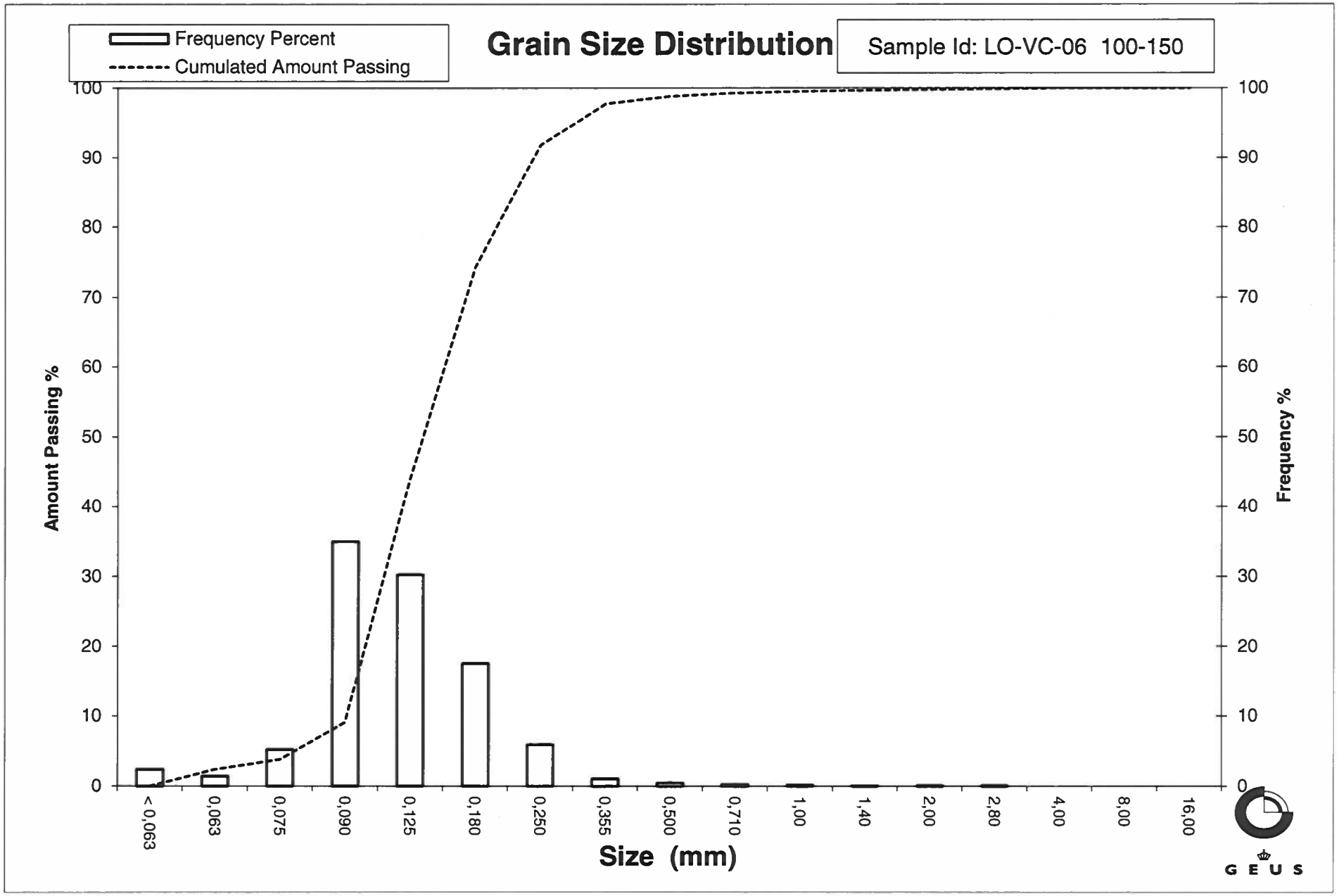
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-06 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-06 260-310
Lab. Id: 230508
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,333 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	0,03	0,03	99,97
	2,00	-1,00	0,00	0,00	99,97
Sand	1,40	-0,49	0,00	0,00	99,97
	1,00	0,00	0,00	0,00	99,97
	0,710	0,49	0,01	0,01	99,96
	0,500	1,00	0,01	0,01	99,95
	0,355	1,49	0,03	0,04	99,91
	0,250	2,00	0,30	0,31	99,60
	0,180	2,47	2,95	3,13	96,48
	0,125	3,00	19,82	21,01	75,47
	0,090	3,47	32,25	34,18	41,28
	0,075	3,74	10,93	11,58	29,70
	0,063	3,99	11,13	11,80	17,90
	< 0,063	> 3,99	16,88	17,90	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	17,90
Sand, fine	(0,063 mm - 0,200 mm):	79,47
Sand, medium	(0,2 mm - 0,6 mm):	2,59
Sand, coarse	(0,6 mm - 2 mm):	0,02
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%	0,18	2,51
16%	84%	0,15	2,76
25%	75%	0,12	3,01
40%	60%	0,11	3,20
Median 50%	50%	0,10	3,34
75%	25%	0,07	3,83
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,05
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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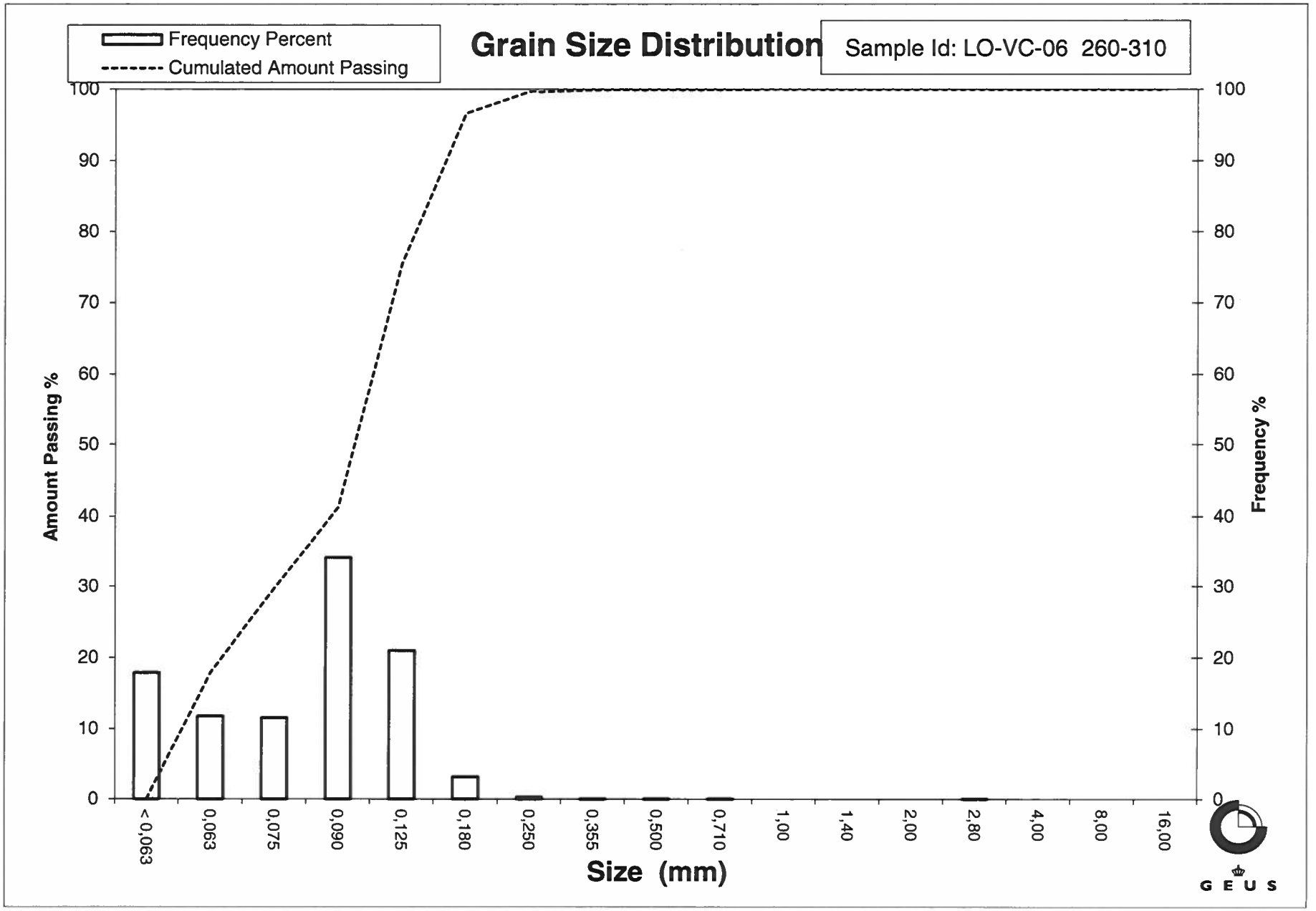
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-06 260-310
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-07 0-50
Lab. Id: 230509
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm heraf 0,2g skaller

GEUS

Total Weight 88,348 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	0,22	0,25	99,75
	2,80	-1,49	0,19	0,22	99,53
	2,00	-1,00	0,28	0,32	99,22
Sand	1,40	-0,49	0,27	0,30	98,91
	1,00	0,00	0,37	0,41	98,50
	0,710	0,49	0,60	0,68	97,82
	0,500	1,00	0,70	0,79	97,03
	0,355	1,49	0,77	0,87	96,16
	0,250	2,00	1,11	1,26	94,90
	0,180	2,47	5,17	5,85	89,05
	0,125	3,00	32,90	37,24	51,81
	0,090	3,47	35,84	40,57	11,25
	0,075	3,74	5,08	5,75	5,50
	0,063	3,99	1,39	1,57	3,93
	< 0,063	> 3,99	3,47	3,93	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,93
Sand, fine	(0,063 mm - 0,200 mm):	86,80
Sand, medium	(0,2 mm - 0,6 mm):	6,68
Sand, coarse	(0,6 mm - 2 mm):	1,81
Gravel	(> 2 mm):	0,78
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,26	1,95
16%	84%	0,17	2,54
25%	75%	0,16	2,65
40%	60%	0,14	2,87
Median 50%	50%	0,12	3,02
75%	25%	0,10	3,30
84%	16%	0,09	3,41
90%	10%	0,09	3,53
95%	5%	0,07	3,81

Moments Statistics

Mean	2,99
Sorting	0,50
Skewness	-0,13
Kurtosis	1,18
Uniformity Coefficient	1,58

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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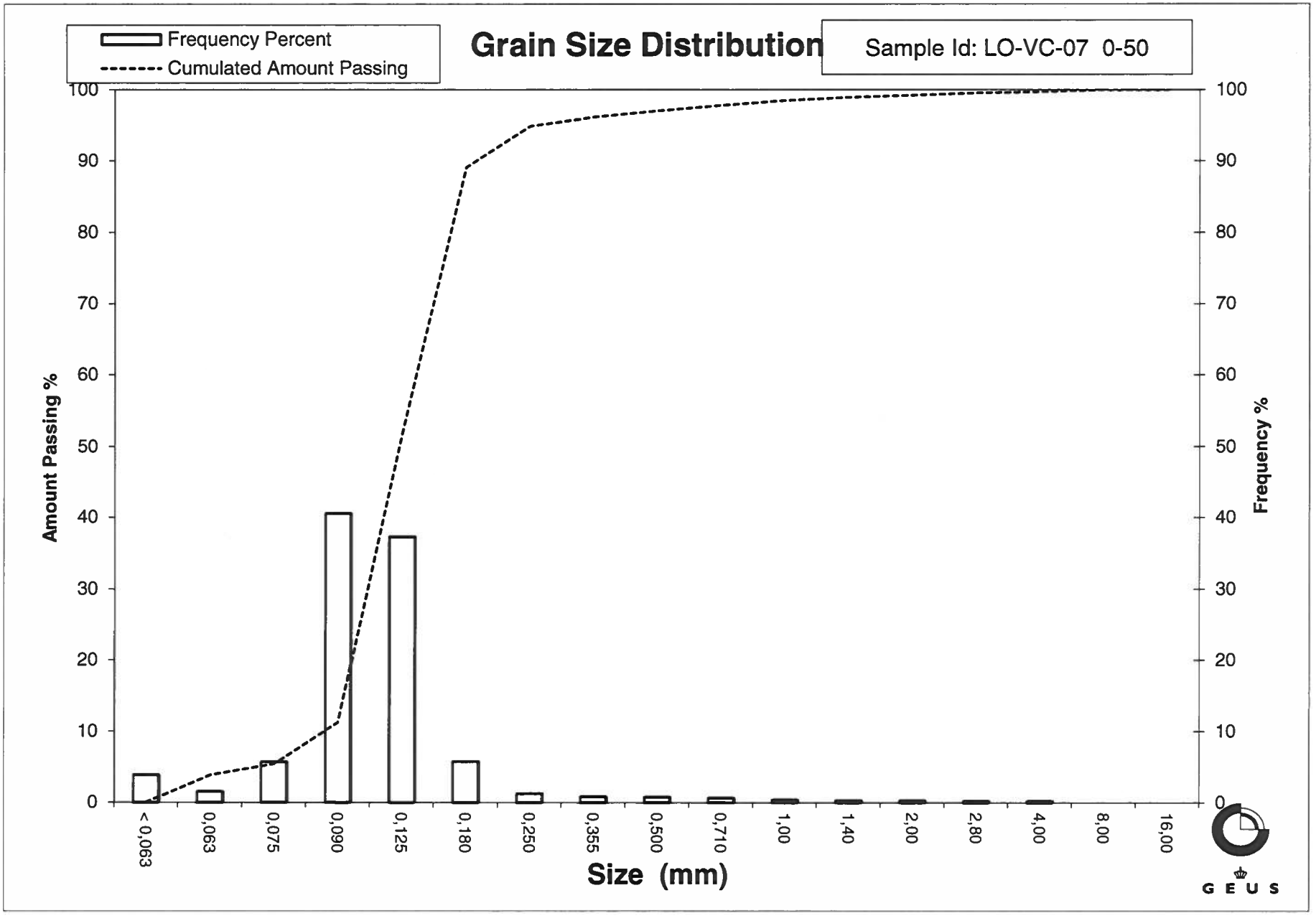
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-07 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-07 100-150
Lab. Id: 230510
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >0,5mm heraf 0,7g skaller

GEUS

Total Weight 90,985 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	0,06	0,06	99,94
	2,80	-1,49	0,24	0,26	99,67
	2,00	-1,00	0,21	0,23	99,45
Sand	1,40	-0,49	0,11	0,13	99,32
	1,00	0,00	0,23	0,26	99,06
	0,710	0,49	0,22	0,24	98,82
	0,500	1,00	0,27	0,30	98,52
	0,355	1,49	0,27	0,29	98,22
	0,250	2,00	0,46	0,51	97,72
	0,180	2,47	1,91	2,10	95,61
	0,125	3,00	28,52	31,34	64,27
	0,090	3,47	46,02	50,58	13,69
	0,075	3,74	6,63	7,28	6,41
	0,063	3,99	2,01	2,21	4,20
	< 0,063	> 3,99	3,82	4,20	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,20
Sand, fine	(0,063 mm - 0,200 mm):	92,01
Sand, medium	(0,2 mm - 0,6 mm):	2,45
Sand, coarse	(0,6 mm - 2 mm):	0,78
Gravel	(> 2 mm):	0,55
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,18	2,48
16%	84%	0,16	2,65
25%	75%	0,14	2,80
40%	60%	0,12	3,03
Median 50%	50%	0,12	3,12
75%	25%	0,10	3,35
84%	16%	0,09	3,45
90%	10%	0,08	3,60
95%	5%	0,07	3,89

Moments Statistics

Mean	3,07
Sorting	0,41
Skewness	-0,04
Kurtosis	1,04
Uniformity Coefficient	1,48

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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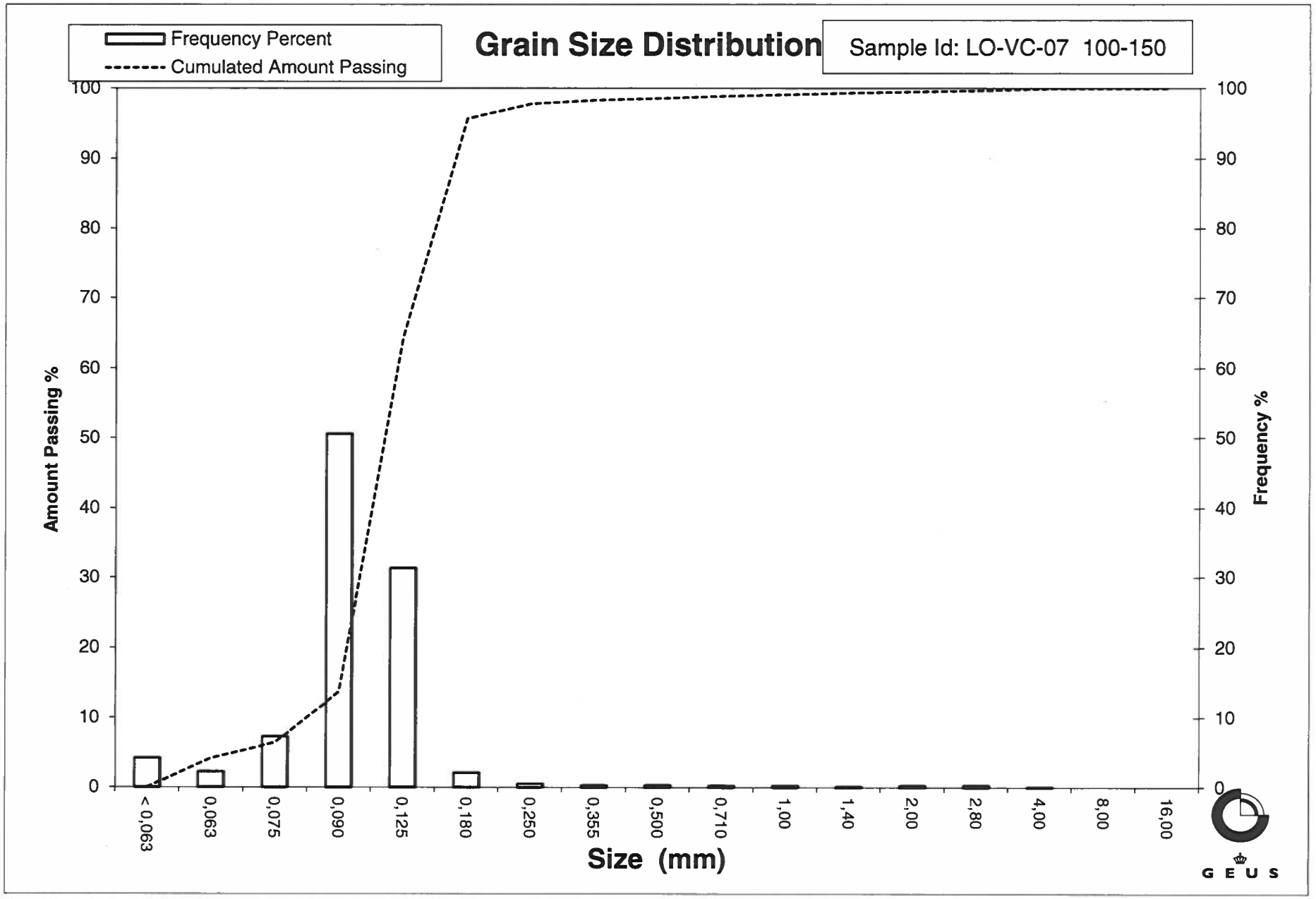
Email: GEUS@geus.dk
www.geus.dk


Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-07 100-150
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: LO-VC-07 280-320
Lab. Id: 230511
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 92,046 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	0,00	0,00	100,00
	0,710	0,49	0,01	0,01	99,99
	0,500	1,00	0,02	0,02	99,97
	0,355	1,49	0,02	0,02	99,95
	0,250	2,00	0,03	0,04	99,91
	0,180	2,47	1,81	1,96	97,95
	0,125	3,00	21,32	23,16	74,79
	0,090	3,47	40,57	44,08	30,71
	0,075	3,74	10,80	11,73	18,98
	0,063	3,99	7,15	7,77	11,22
	< 0,063	> 3,99	10,32	11,22	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	11,22
Sand, fine	(0,063 mm - 0,200 mm):	87,30
Sand, medium	(0,2 mm - 0,6 mm):	1,47
Sand, coarse	(0,6 mm - 2 mm):	0,02
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%	0,17	2,53
16%	84%	0,15	2,77
25%	75%	0,13	2,99
40%	60%	0,11	3,14
Median 50%	50%	0,11	3,25
75%	25%	0,08	3,60
84%	16%	0,07	3,83
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,28
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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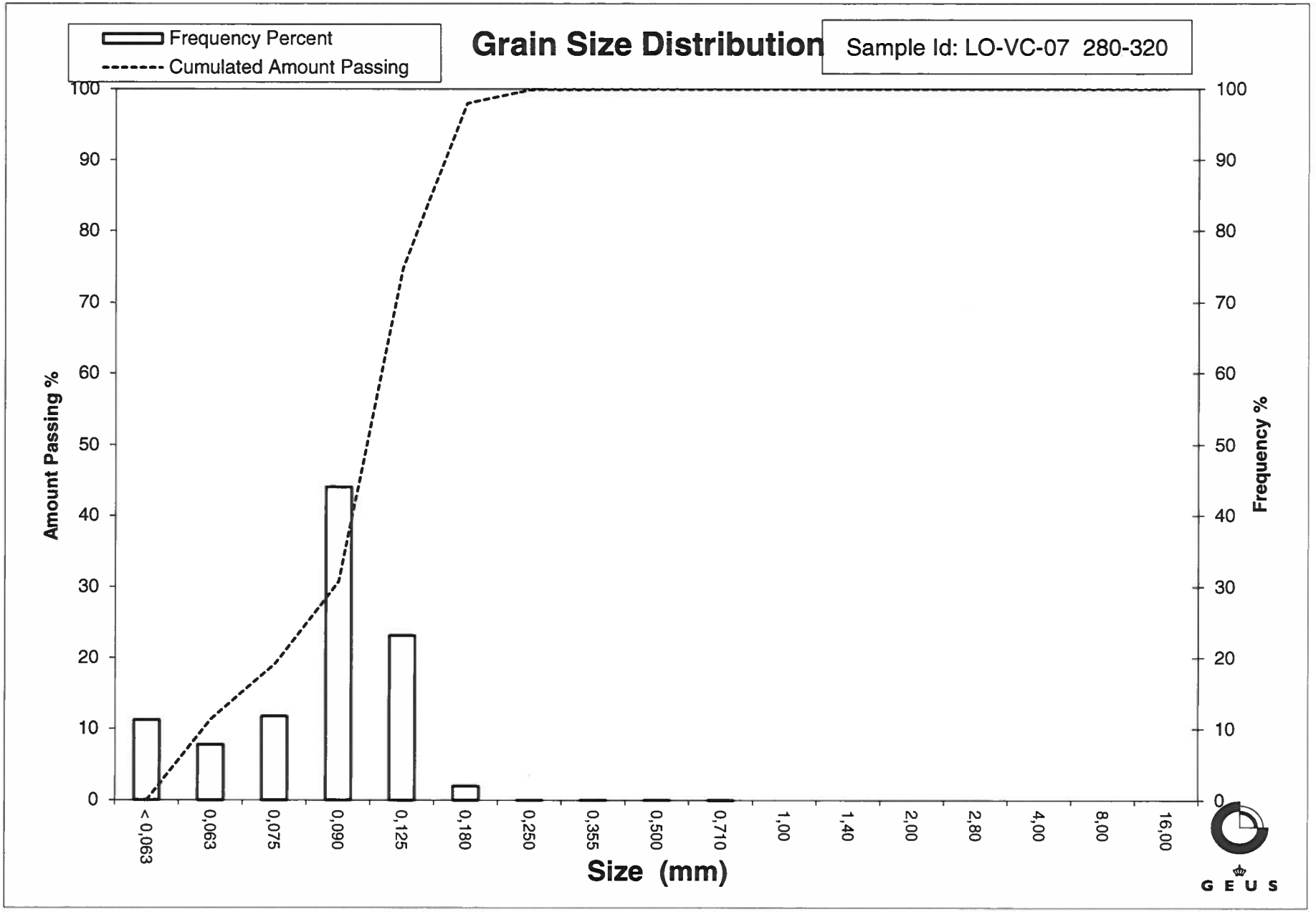
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-07 280-320
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-08 0-50
Lab. Id: 230512
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,989 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	0,08	0,08	99,89
	1,00	0,00	0,11	0,12	99,77
	0,710	0,49	0,38	0,40	99,37
	0,500	1,00	1,51	1,59	97,78
	0,355	1,49	4,16	4,38	93,40
	0,250	2,00	13,43	14,14	79,26
	0,180	2,47	32,87	34,60	44,65
	0,125	3,00	30,73	32,35	12,30
	0,090	3,47	9,16	9,64	2,66
	0,075	3,74	1,03	1,08	1,58
	0,063	3,99	0,32	0,34	1,24
	< 0,063	> 3,99	1,18	1,24	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,24
Sand, fine	(0,063 mm - 0,200 mm):	53,30
Sand, medium	(0,2 mm - 0,6 mm):	44,00
Sand, coarse	(0,6 mm - 2 mm):	1,43
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%	0,41	1,29
16%	84%	0,29	1,81
25%	75%	0,24	2,05
40%	60%	0,21	2,24
Median 50%	50%	0,19	2,39
75%	25%	0,15	2,77
84%	16%	0,13	2,93
90%	10%	0,12	3,10
95%	5%	0,10	3,34

Moments Statistics

Mean	2,38
Sorting	0,59
Skewness	-0,05
Kurtosis	1,17
Uniformity Coefficient	1,81

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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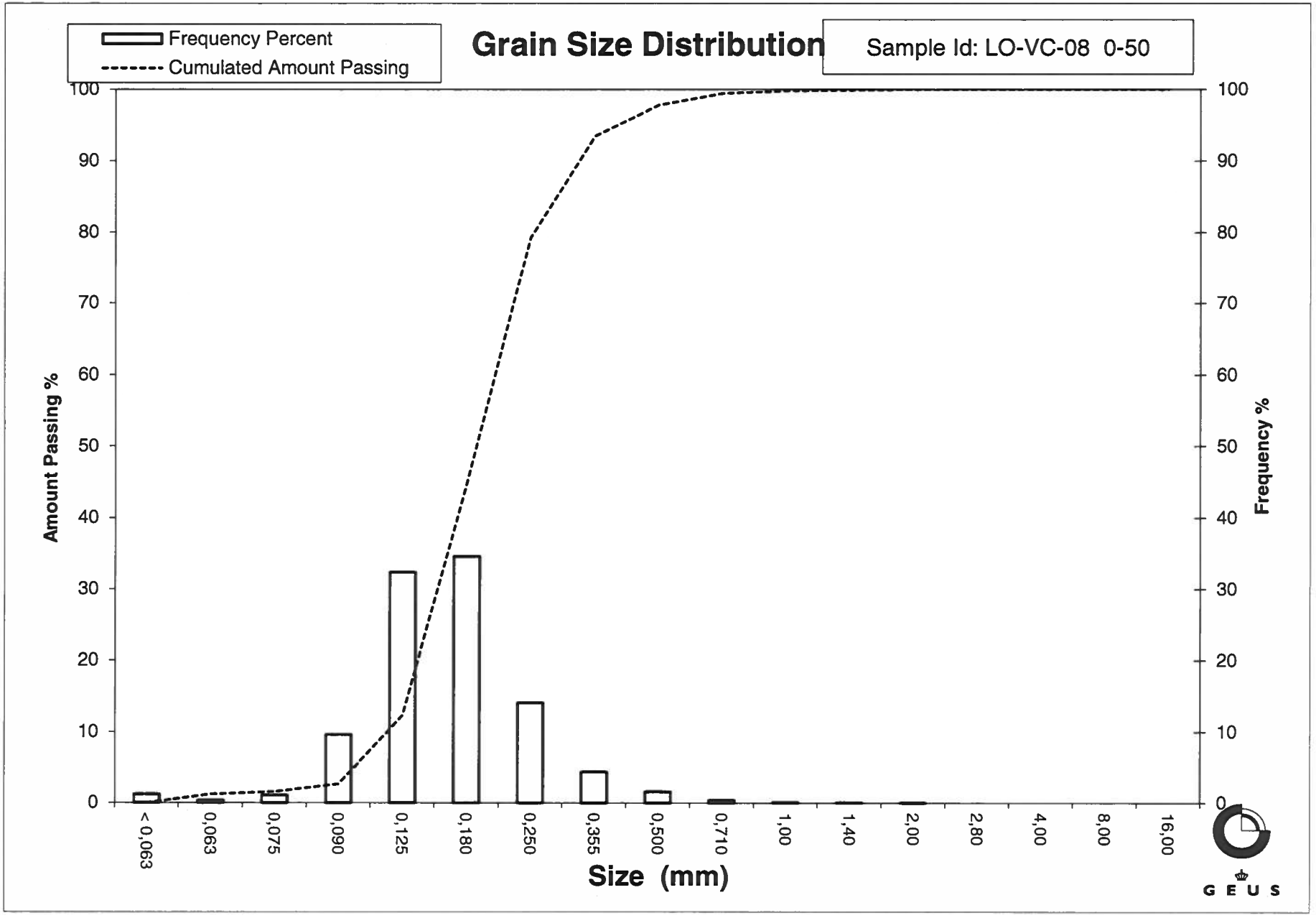
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-08 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-08 100-150
Lab. Id: 230513
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

G E U S

Total Weight 91,998 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	0,06	0,06	99,94
	2,00	-1,00	0,10	0,11	99,83
Sand	1,40	-0,49	0,06	0,06	99,77
	1,00	0,00	0,11	0,12	99,65
	0,710	0,49	0,37	0,40	99,25
	0,500	1,00	1,14	1,24	98,01
	0,355	1,49	2,82	3,06	94,95
	0,250	2,00	13,65	14,84	80,11
	0,180	2,47	34,59	37,60	42,51
	0,125	3,00	28,96	31,48	11,03
	0,090	3,47	8,09	8,80	2,23
	0,075	3,74	0,73	0,79	1,44
	0,063	3,99	0,31	0,33	1,11
	< 0,063	> 3,99	1,02	1,11	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,11
Sand, fine	(0,063 mm - 0,200 mm):	52,14
Sand, medium	(0,2 mm - 0,6 mm):	45,35
Sand, coarse	(0,6 mm - 2 mm):	1,23
Gravel	(> 2 mm):	0,17
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,36	1,48
16%	84%	0,28	1,85
25%	75%	0,24	2,06
40%	60%	0,21	2,23
Median 50%	50%	0,19	2,37
75%	25%	0,15	2,74
84%	16%	0,13	2,90
90%	10%	0,12	3,05
95%	5%	0,10	3,31

Moments Statistics

Mean	2,37
Sorting	0,54
Skewness	0,03
Kurtosis	1,09
Uniformity Coefficient	1,76

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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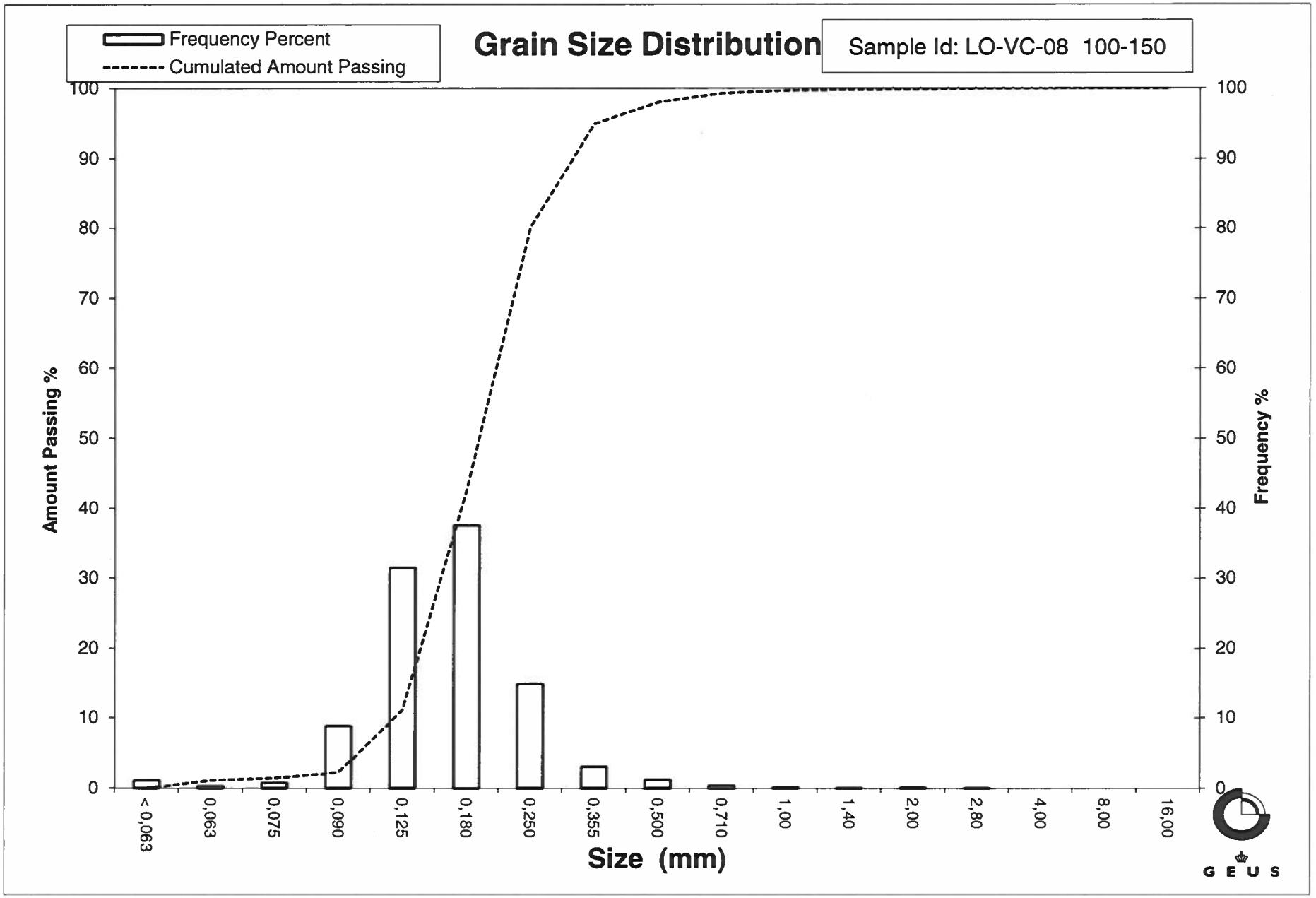
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-08 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-08 200-250
Lab. Id: 230514
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 93,498 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	0,02	0,02	99,98
Sand	1,40	-0,49	0,01	0,01	99,97
	1,00	0,00	0,02	0,02	99,94
	0,710	0,49	0,06	0,07	99,87
	0,500	1,00	0,31	0,33	99,55
	0,355	1,49	1,25	1,34	98,21
	0,250	2,00	6,53	6,98	91,23
	0,180	2,47	35,58	38,06	53,17
	0,125	3,00	30,88	33,03	20,15
	0,090	3,47	15,53	16,61	3,54
	0,075	3,74	1,51	1,61	1,93
	0,063	3,99	0,54	0,58	1,35
	< 0,063	> 3,99	1,26	1,35	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,35
Sand, fine	(0,063 mm - 0,200 mm):	62,70
Sand, medium	(0,2 mm - 0,6 mm):	35,66
Sand, coarse	(0,6 mm - 2 mm):	0,27
Gravel	(> 2 mm):	0,02
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,31	1,71
16%	84%	0,24	2,08
25%	75%	0,22	2,18
40%	60%	0,19	2,38
Median 50%	50%	0,17	2,52
75%	25%	0,13	2,91
84%	16%	0,12	3,10
90%	10%	0,10	3,27
95%	5%	0,09	3,43

Moments Statistics

Mean	2,57
Sorting	0,52
Skewness	0,10
Kurtosis	0,97
Uniformity Coefficient	1,86

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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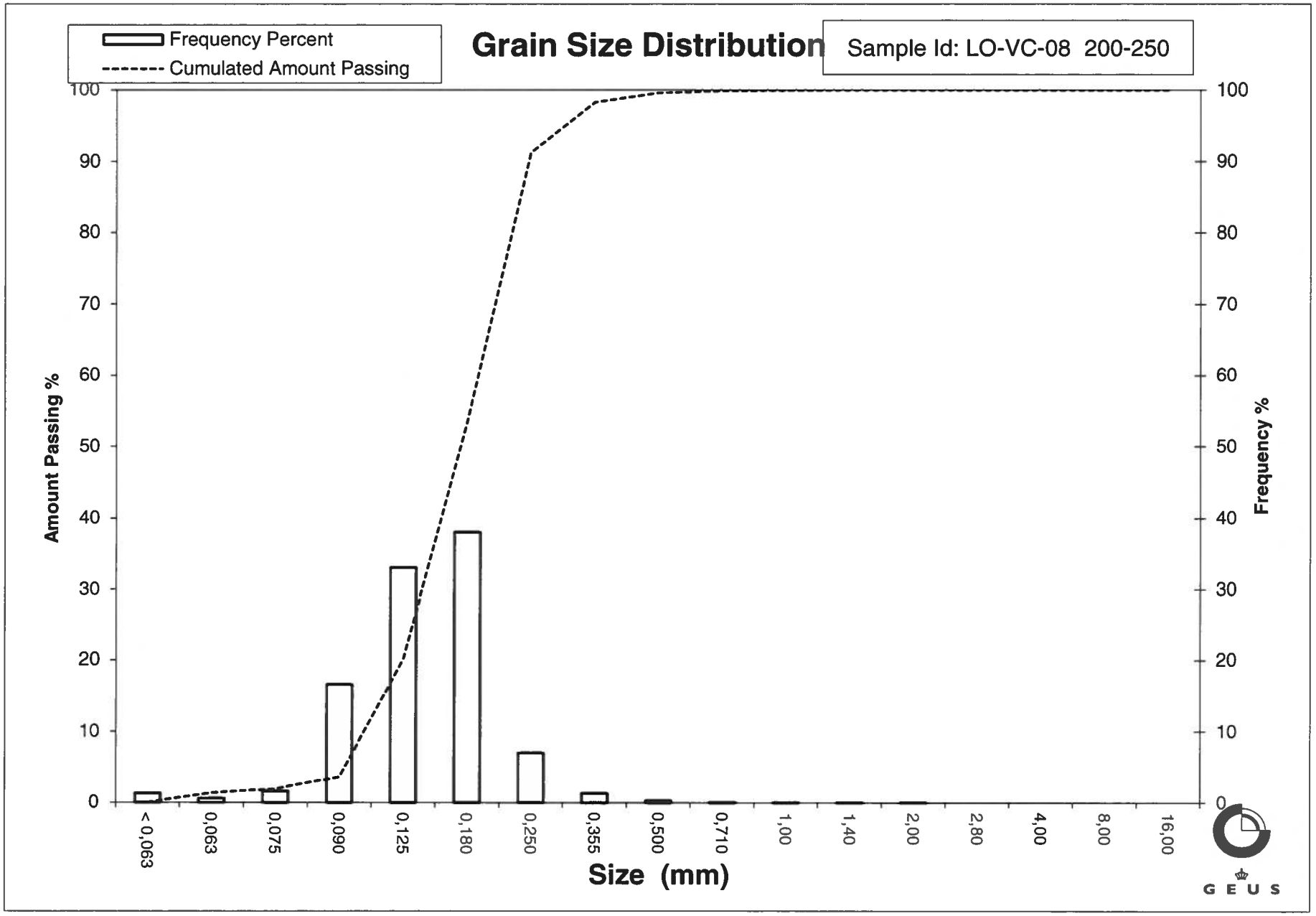
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-08 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-08 300-330
Lab. Id: 230515
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,632 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	0,01	0,01	99,99
Sand	1,40	-0,49	0,01	0,01	99,98
	1,00	0,00	0,00	0,00	99,98
	0,710	0,49	0,03	0,03	99,95
	0,500	1,00	0,14	0,14	99,80
	0,355	1,49	0,55	0,58	99,22
	0,250	2,00	7,06	7,46	91,77
	0,180	2,47	21,08	22,27	69,49
	0,125	3,00	32,76	34,62	34,88
	0,090	3,47	27,49	29,04	5,83
	0,075	3,74	3,26	3,44	2,39
	0,063	3,99	0,90	0,95	1,44
	< 0,063	> 3,99	1,36	1,44	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,44
Sand, fine	(0,063 mm - 0,200 mm):	74,42
Sand, medium	(0,2 mm - 0,6 mm):	24,02
Sand, coarse	(0,6 mm - 2 mm):	0,11
Gravel	(> 2 mm):	0,01
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,30	1,76
16%	84%	0,23	2,15
25%	75%	0,20	2,34
40%	60%	0,16	2,60
Median 50%	50%	0,15	2,75
75%	25%	0,11	3,14
84%	16%	0,10	3,29
90%	10%	0,10	3,40
95%	5%	0,09	3,53

Moments Statistics

Mean	2,73
Sorting	0,55
Skewness	-0,08
Kurtosis	0,91
Uniformity Coefficient	1,74

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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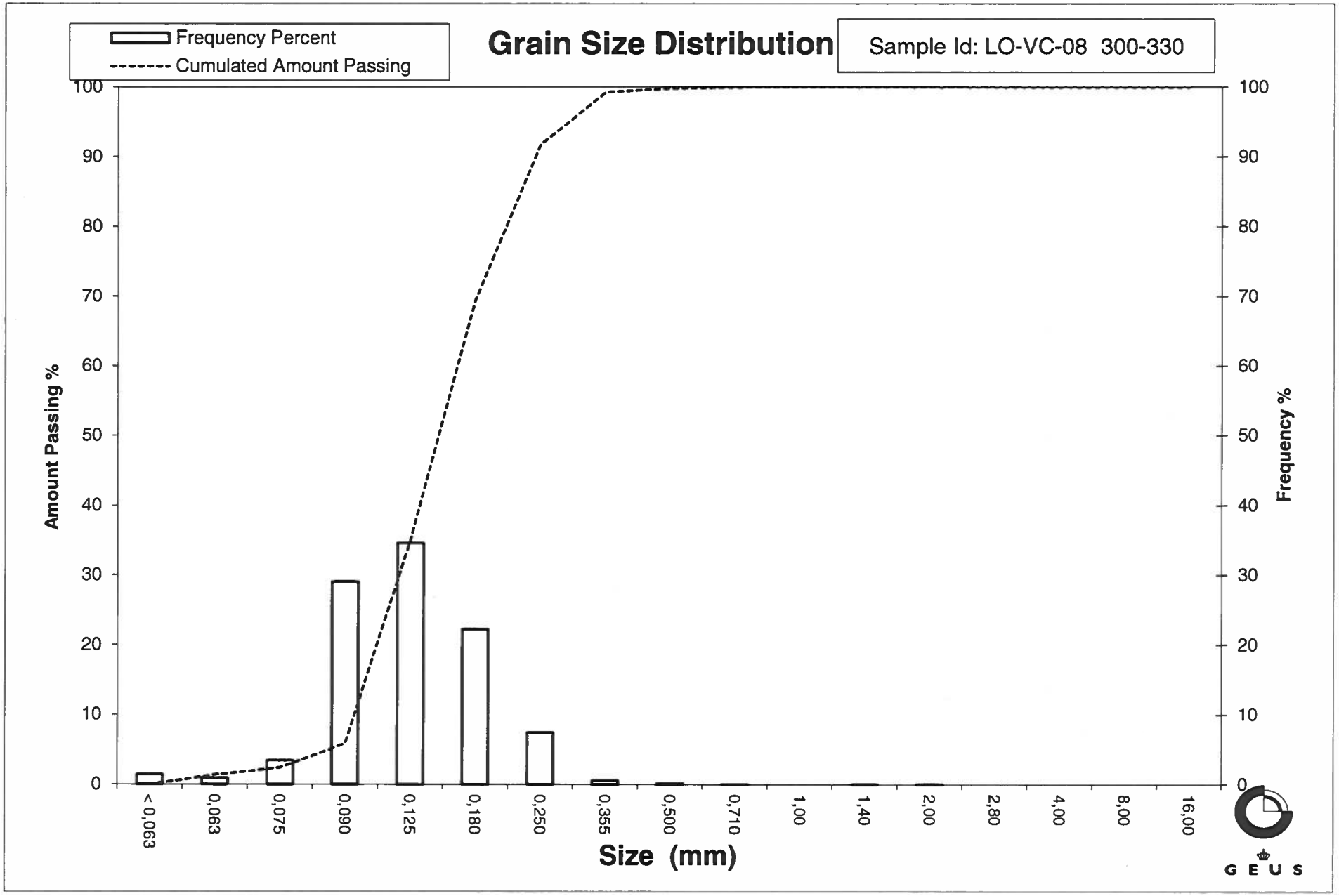
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-08 300-330
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-08 350-400
Lab. Id: 230516
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 95,942 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	0,14	0,14	99,86
	2,00	-1,00	0,04	0,04	99,81
Sand	1,40	-0,49	0,06	0,06	99,75
	1,00	0,00	0,17	0,18	99,58
	0,710	0,49	0,54	0,56	99,01
	0,500	1,00	1,76	1,83	97,18
	0,355	1,49	3,81	3,97	93,21
	0,250	2,00	8,51	8,87	84,34
	0,180	2,47	12,76	13,30	71,04
	0,125	3,00	20,10	20,95	50,09
	0,090	3,47	32,27	33,64	16,46
	0,075	3,74	7,69	8,02	8,44
	0,063	3,99	4,23	4,41	4,03
	< 0,063	> 3,99	3,87	4,03	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,03
Sand, fine	(0,063 mm - 0,200 mm):	70,81
Sand, medium	(0,2 mm - 0,6 mm):	23,21
Sand, coarse	(0,6 mm - 2 mm):	1,76
Gravel	(> 2 mm):	0,19
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,42	1,25
16%	84%	0,25	2,01
25%	75%	0,20	2,32
40%	60%	0,15	2,73
Median 50%	50%	0,12	3,00
75%	25%	0,10	3,34
84%	16%	0,09	3,49
90%	10%	0,08	3,68
95%	5%	0,07	3,93

Moments Statistics

Mean	2,83
Sorting	0,78
Skewness	-0,32
Kurtosis	1,07
Uniformity Coefficient	1,94

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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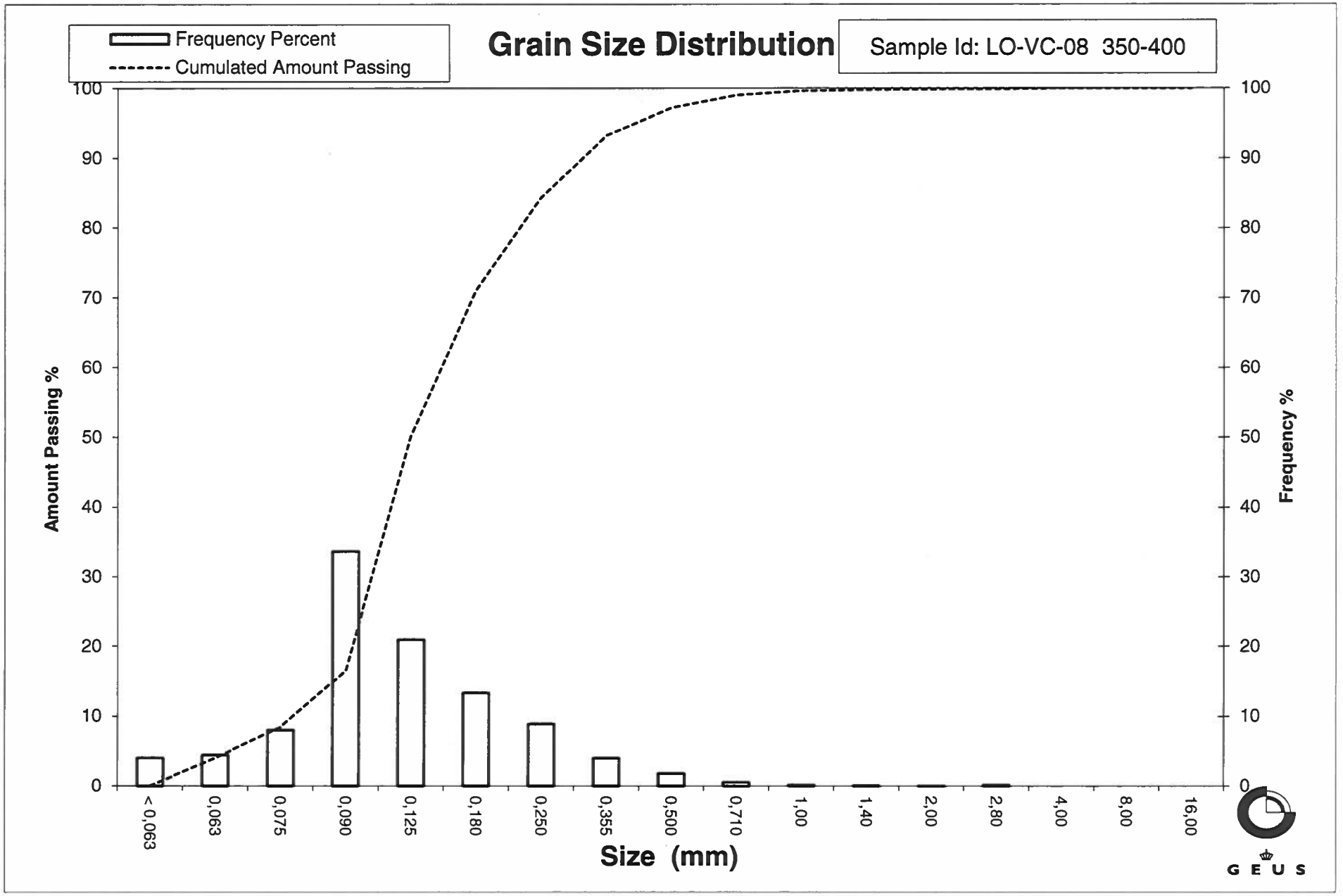
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-08 350-400
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-09 0-50
Lab. Id: 230517
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1mm består af skaller

GEUS

Total Weight 93,842 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	0,03	0,03	99,97
	2,00	-1,00	0,10	0,11	99,87
Sand	1,40	-0,49	0,07	0,07	99,80
	1,00	0,00	0,07	0,07	99,73
	0,710	0,49	0,12	0,13	99,60
	0,500	1,00	0,34	0,36	99,23
	0,355	1,49	1,25	1,33	97,90
	0,250	2,00	6,39	6,81	91,09
	0,180	2,47	28,32	30,18	60,91
	0,125	3,00	32,18	34,29	26,62
	0,090	3,47	18,84	20,07	6,55
	0,075	3,74	2,61	2,78	3,77
	0,063	3,99	0,83	0,88	2,89
	< 0,063	> 3,99	2,71	2,89	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,89
Sand, fine	(0,063 mm - 0,200 mm):	66,64
Sand, medium	(0,2 mm - 0,6 mm):	29,87
Sand, coarse	(0,6 mm - 2 mm):	0,46
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%	0,31	1,69
16%	84%	0,23	2,10
25%	75%	0,21	2,23
40%	60%	0,18	2,49
Median 50%	50%	0,16	2,62
75%	25%	0,12	3,03
84%	16%	0,11	3,23
90%	10%	0,10	3,38
95%	5%	0,08	3,61

Moments Statistics

Mean	2,65
Sorting	0,58
Skewness	0,05
Kurtosis	0,99
Uniformity Coefficient	1,86

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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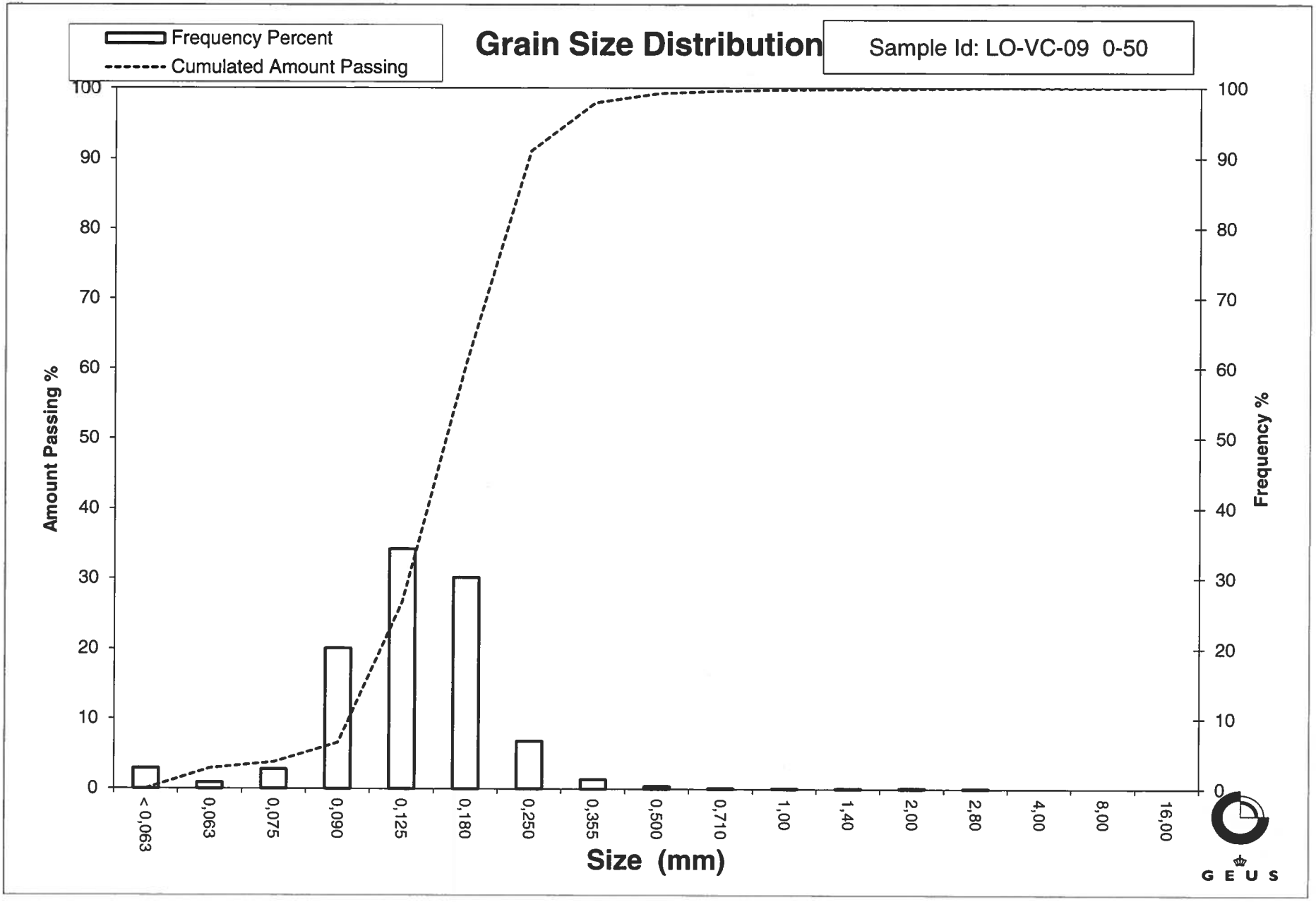
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-09 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-09 100-125
Lab. Id: 230518
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm består af skaller

GEUS

Total Weight 92,925 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	0,41	0,44	99,56
Gravel	4,00	-2,00	0,02	0,02	99,54
Gravel	2,80	-1,49	0,09	0,10	99,44
Gravel	2,00	-1,00	0,03	0,03	99,42
Sand	1,40	-0,49	0,05	0,05	99,36
Sand	1,00	0,00	0,07	0,07	99,29
Sand	0,710	0,49	0,11	0,12	99,18
Sand	0,500	1,00	0,39	0,42	98,75
Sand	0,355	1,49	1,38	1,49	97,27
Sand	0,250	2,00	7,65	8,23	89,04
Sand	0,180	2,47	26,96	29,01	60,03
Sand	0,125	3,00	30,38	32,69	27,33
Sand	0,090	3,47	19,65	21,15	6,18
Sand	0,075	3,74	3,05	3,29	2,90
Sand	0,063	3,99	1,08	1,16	1,74
	< 0,063	> 3,99	1,61	1,74	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,74
Sand, fine	(0,063 mm - 0,200 mm):	66,58
Sand, medium	(0,2 mm - 0,6 mm):	30,64
Sand, coarse	(0,6 mm - 2 mm):	0,46
Gravel	(> 2 mm):	0,58
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,33	1,62
16%	84%	0,24	2,07
25%	75%	0,22	2,21
40%	60%	0,18	2,47
Median 50%	50%	0,16	2,62
75%	25%	0,12	3,05
84%	16%	0,11	3,23
90%	10%	0,10	3,38
95%	5%	0,08	3,56

Moments Statistics

Mean	2,64
Sorting	0,59
Skewness	0,02
Kurtosis	0,96
Uniformity Coefficient	1,87

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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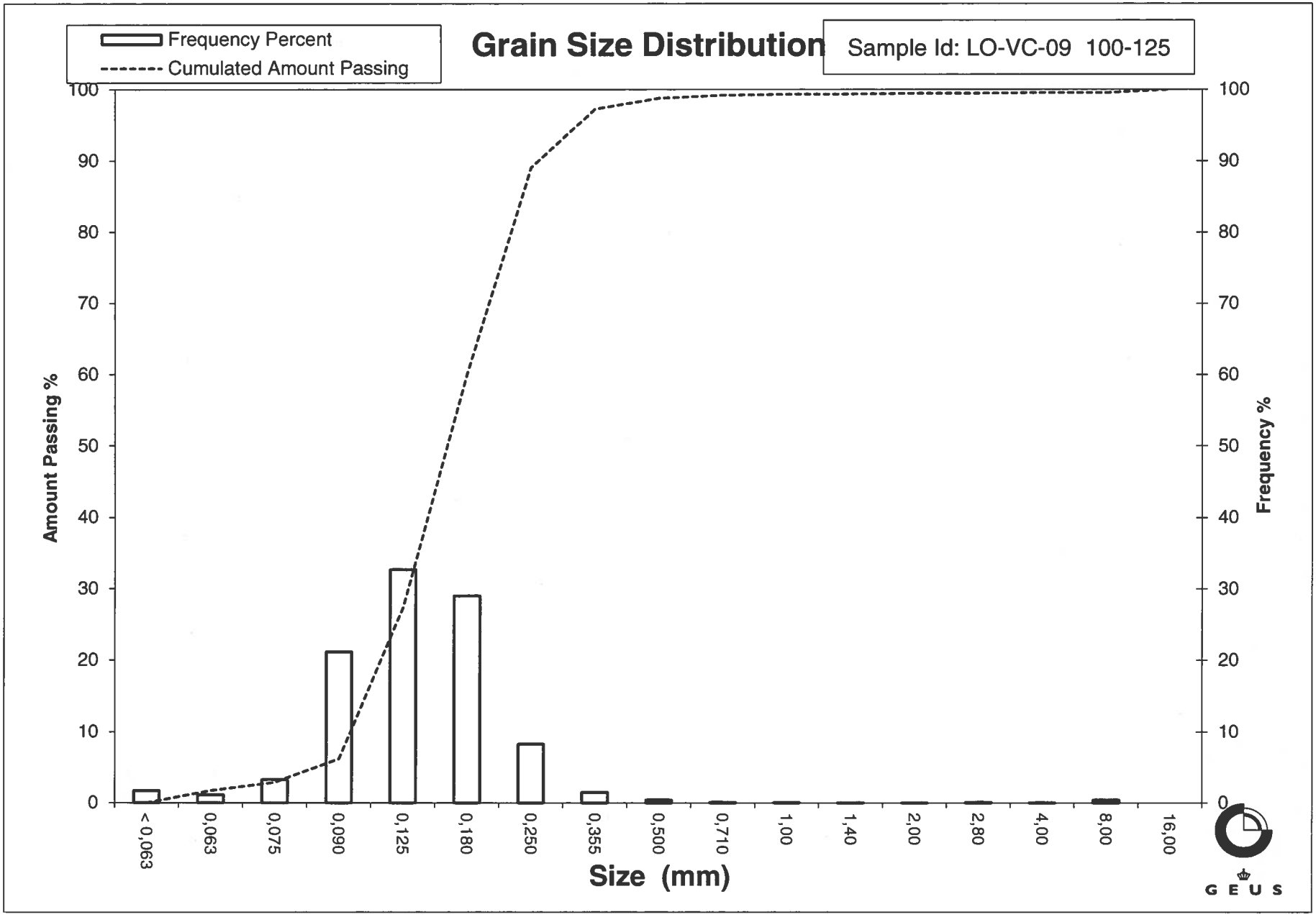
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-09 100-125
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-09 150-200
Lab. Id: 230519
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,9g skaller

GEUS

Total Weight 88,892 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	0,63	0,71	99,29
Gravel	4,00	-2,00	0,24	0,27	99,02
Gravel	2,80	-1,49	0,10	0,11	98,91
Gravel	2,00	-1,00	0,11	0,12	98,79
Sand	1,40	-0,49	0,06	0,07	98,73
Sand	1,00	0,00	0,16	0,18	98,55
Sand	0,710	0,49	0,31	0,35	98,20
Sand	0,500	1,00	0,99	1,12	97,08
Sand	0,355	1,49	2,83	3,19	93,90
Sand	0,250	2,00	7,42	8,35	85,55
Sand	0,180	2,47	15,86	17,84	67,70
Sand	0,125	3,00	17,84	20,06	47,64
Sand	0,090	3,47	29,96	33,70	13,94
Sand	0,075	3,74	3,99	4,48	9,46
Sand	0,063	3,99	1,74	1,96	7,50
	< 0,063	> 3,99	6,66	7,50	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	7,50
Sand, fine	(0,063 mm - 0,200 mm):	65,30
Sand, medium	(0,2 mm - 0,6 mm):	24,81
Sand, coarse	(0,6 mm - 2 mm):	1,18
Gravel	(> 2 mm):	1,21
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,41	1,30
16%	84%	0,24	2,04
25%	75%	0,21	2,26
40%	60%	0,16	2,65
Median 50%	50%	0,13	2,93
75%	25%	0,10	3,30
84%	16%	0,09	3,44
90%	10%	0,08	3,70
95%	5%	-------	-------

Moments Statistics

Mean	2,80
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	2,07

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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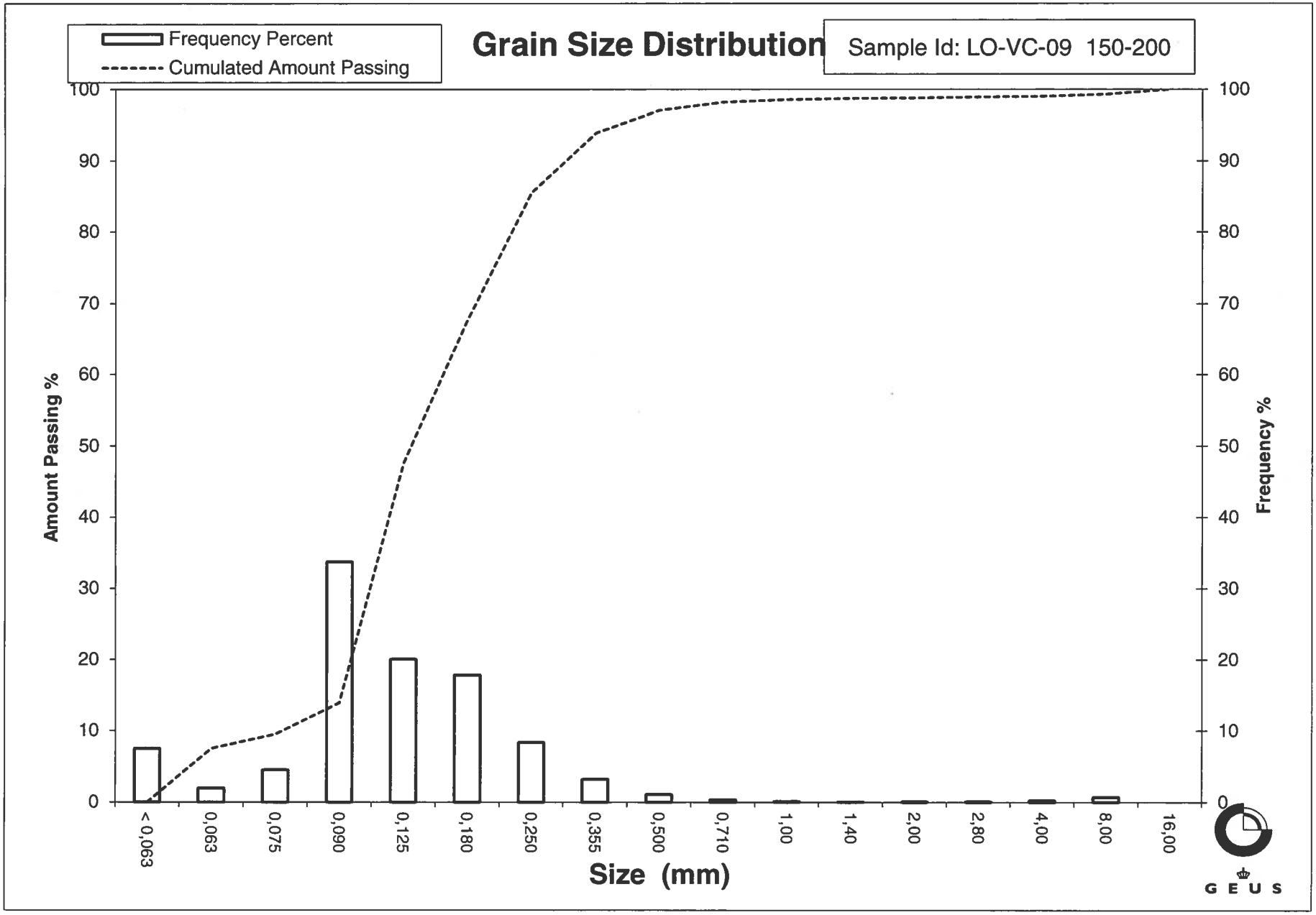
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-09 150-200
Amount Passing %
Frequency %
Size (mm)
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-09 280-330
Lab. Id: 230520
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 95,266 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	0,00	0,00	100,00
	0,710	0,49	0,01	0,01	99,99
	0,500	1,00	0,02	0,02	99,97
	0,355	1,49	0,01	0,01	99,96
	0,250	2,00	0,06	0,06	99,90
	0,180	2,47	0,19	0,20	99,70
	0,125	3,00	4,32	4,53	95,17
	0,090	3,47	14,96	15,70	79,46
	0,075	3,74	15,59	16,37	63,09
	0,063	3,99	24,01	25,20	37,89
	< 0,063	> 3,99	36,10	37,89	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	37,89
Sand, fine	(0,063 mm - 0,200 mm):	61,86
Sand, medium	(0,2 mm - 0,6 mm):	0,23
Sand, coarse	(0,6 mm - 2 mm):	0,02
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%	0,12	3,00
16%	84%	0,10	3,32
25%	75%	0,09	3,54
40%	60%	0,07	3,77
Median 50%	50%	0,07	3,86
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,59
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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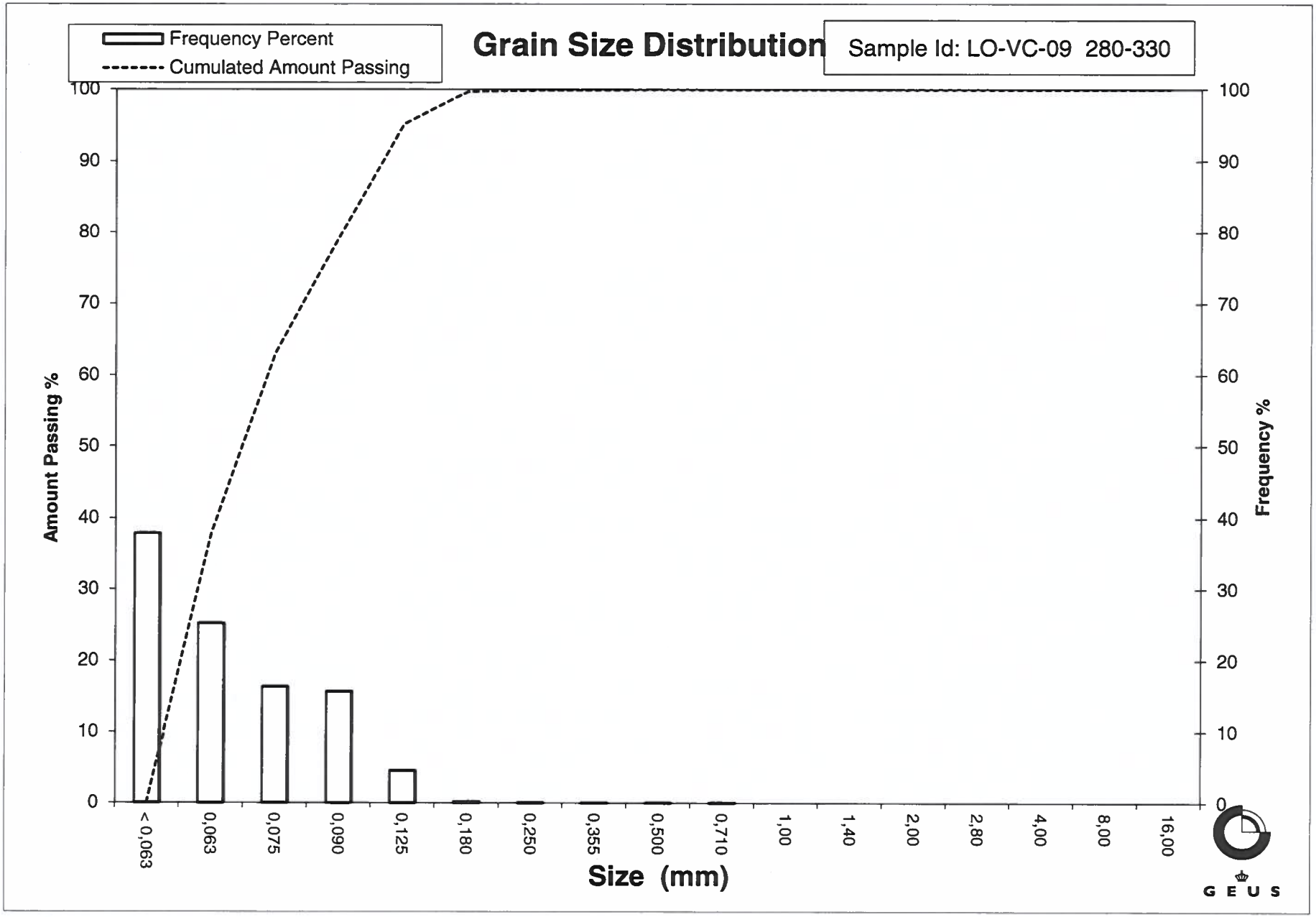
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-09 280-330
Amount Passing %
Frequency %
Size (mm)
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-09 400-450
Lab. Id: 230521
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 95,752 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	0,00	0,00	100,00
	0,710	0,49	0,01	0,01	99,99
	0,500	1,00	0,01	0,01	99,98
	0,355	1,49	0,02	0,02	99,96
	0,250	2,00	0,08	0,08	99,88
	0,180	2,47	0,62	0,65	99,23
	0,125	3,00	17,54	18,32	80,91
	0,090	3,47	42,17	44,04	36,87
	0,075	3,74	14,41	15,05	21,81
	0,063	3,99	10,51	10,98	10,83
	< 0,063	> 3,99	10,37	10,83	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	10,83
Sand, fine	(0,063 mm - 0,200 mm):	88,58
Sand, medium	(0,2 mm - 0,6 mm):	0,57
Sand, coarse	(0,6 mm - 2 mm):	0,02
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	2,58
16%	84%	0,13	2,90
25%	75%	0,12	3,06
40%	60%	0,11	3,21
Median 50%	50%	0,10	3,32
75%	25%	0,08	3,68
84%	16%	0,07	3,86
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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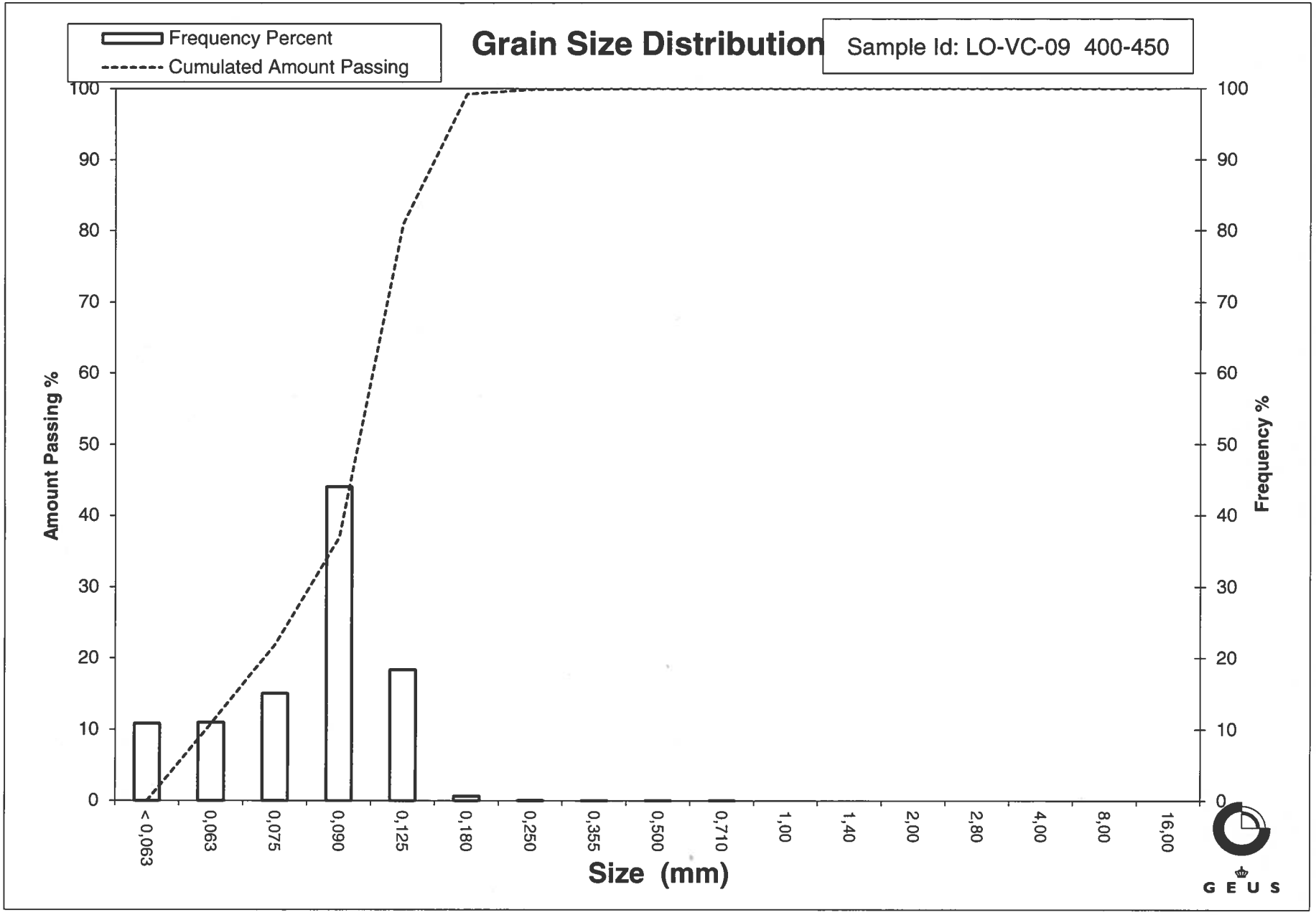
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-09 400-450
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-10 0-50
Lab. Id: 230522
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >4mm består af skaller

GEUS

Total Weight 91,246 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	0,11	0,12	99,88
	2,80	-1,49	0,06	0,06	99,81
	2,00	-1,00	0,05	0,05	99,76
Sand	1,40	-0,49	0,11	0,12	99,64
	1,00	0,00	0,15	0,16	99,47
	0,710	0,49	0,44	0,48	99,00
	0,500	1,00	1,60	1,75	97,25
	0,355	1,49	2,28	2,50	94,75
	0,250	2,00	3,05	3,34	91,41
	0,180	2,47	11,53	12,64	78,77
	0,125	3,00	33,91	37,16	41,61
	0,090	3,47	30,80	33,75	7,86
	0,075	3,74	3,07	3,36	4,49
	0,063	3,99	1,10	1,20	3,29
	< 0,063	> 3,99	3,00	3,29	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,29
Sand, fine	(0,063 mm - 0,200 mm):	79,09
Sand, medium	(0,2 mm - 0,6 mm):	15,70
Sand, coarse	(0,6 mm - 2 mm):	1,68
Gravel	(> 2 mm):	0,24
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,37	1,44
16%	84%	0,21	2,26
25%	75%	0,17	2,52
40%	60%	0,15	2,72
Median 50%	50%	0,14	2,86
75%	25%	0,11	3,21
84%	16%	0,10	3,34
90%	10%	0,09	3,44
95%	5%	0,08	3,69

Moments Statistics

Mean	2,82
Sorting	0,61
Skewness	-0,19
Kurtosis	1,33
Uniformity Coefficient	1,65

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

Size Classes and Percentiles are found by linear interpolation

Formulas

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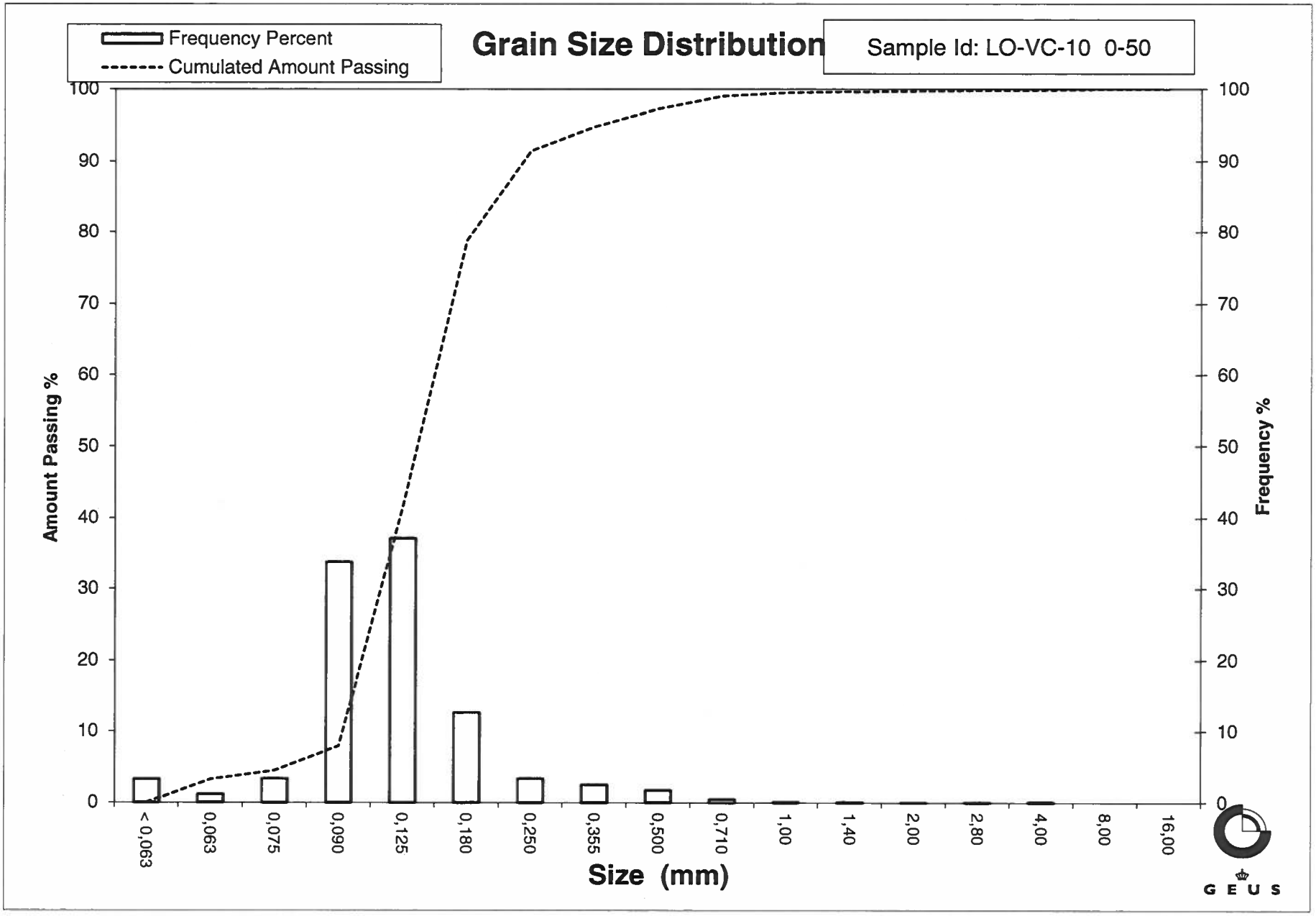
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-10 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-10 100-150
Lab. Id: 230523
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1mm består af skaller

GEUS

Total Weight 93,095 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	0,02	0,02	99,98
	2,80	-1,49	0,02	0,02	99,96
	2,00	-1,00	0,02	0,02	99,93
Sand	1,40	-0,49	0,02	0,02	99,92
	1,00	0,00	0,07	0,07	99,84
	0,710	0,49	0,08	0,08	99,76
	0,500	1,00	0,24	0,26	99,50
	0,355	1,49	0,38	0,41	99,09
	0,250	2,00	0,85	0,91	98,17
	0,180	2,47	3,42	3,67	94,51
	0,125	3,00	36,32	39,02	55,49
	0,090	3,47	44,12	47,39	8,10
	0,075	3,74	4,12	4,42	3,68
	0,063	3,99	1,20	1,29	2,39
	< 0,063	> 3,99	2,23	2,39	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,39
Sand, fine	(0,063 mm - 0,200 mm):	93,16
Sand, medium	(0,2 mm - 0,6 mm):	4,07
Sand, coarse	(0,6 mm - 2 mm):	0,31
Gravel	(> 2 mm):	0,07
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,19	2,40
16%	84%	0,17	2,60
25%	75%	0,15	2,71
40%	60%	0,13	2,93
Median 50%	50%	0,12	3,05
75%	25%	0,10	3,29
84%	16%	0,10	3,38
90%	10%	0,09	3,45
95%	5%	0,08	3,65

Moments Statistics

Mean	3,01
Sorting	0,39
Skewness	-0,09
Kurtosis	0,90
Uniformity Coefficient	1,44

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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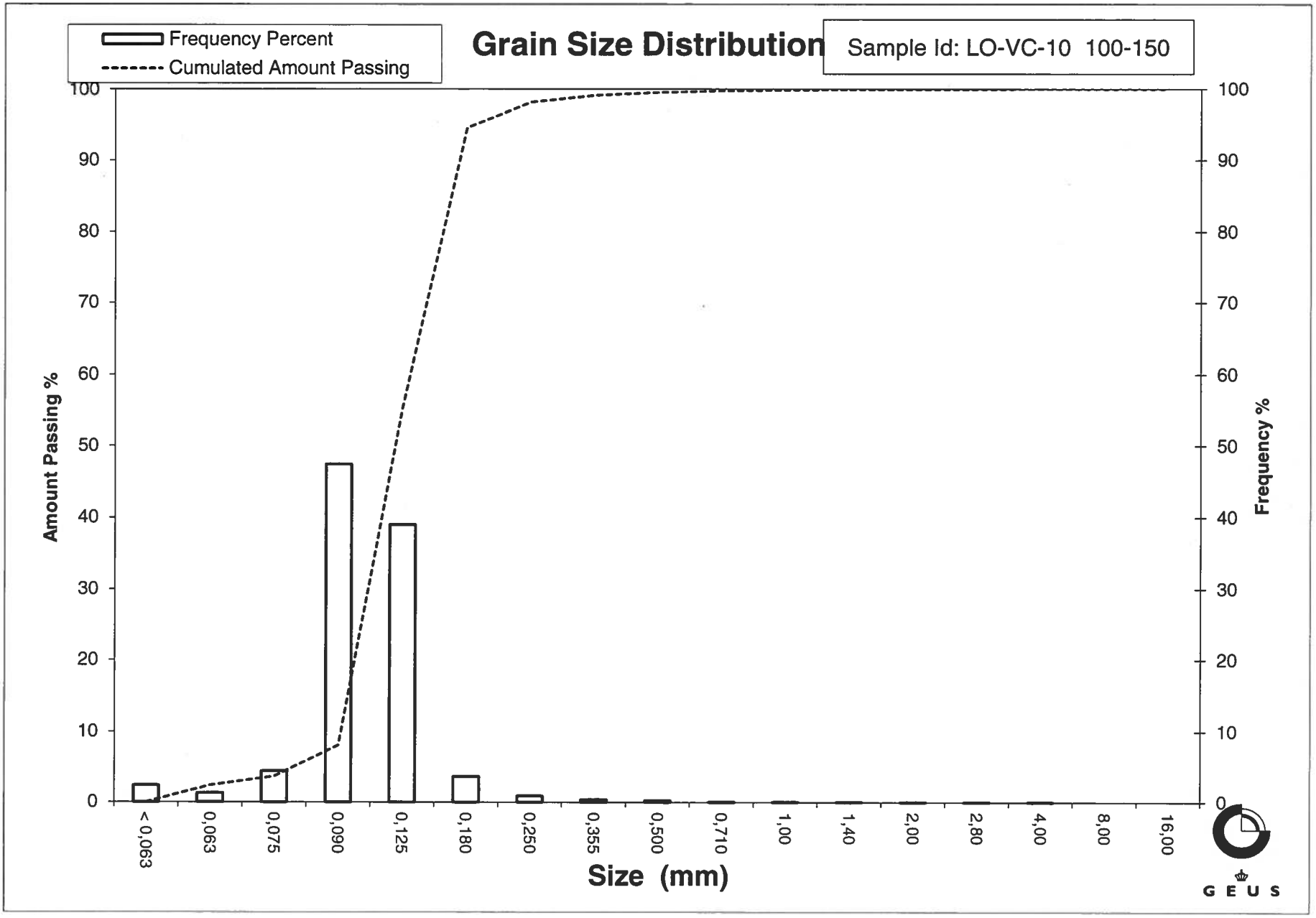
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-10 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-10 200-250
Lab. Id: 230524
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,3g skaller

GEUS

Total Weight 92,703 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	0,08	0,09	99,91
	2,80	-1,49	0,22	0,24	99,67
	2,00	-1,00	0,07	0,07	99,60
Sand	1,40	-0,49	0,04	0,04	99,56
	1,00	0,00	0,06	0,07	99,49
	0,710	0,49	0,23	0,25	99,24
	0,500	1,00	0,86	0,93	98,32
	0,355	1,49	1,61	1,73	96,58
	0,250	2,00	3,25	3,50	93,08
	0,180	2,47	6,46	6,96	86,11
	0,125	3,00	31,50	33,98	52,14
	0,090	3,47	37,50	40,45	11,69
	0,075	3,74	4,95	5,34	6,34
	0,063	3,99	2,03	2,18	4,16
	< 0,063	> 3,99	3,86	4,16	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,16
Sand, fine	(0,063 mm - 0,200 mm):	83,94
Sand, medium	(0,2 mm - 0,6 mm):	10,65
Sand, coarse	(0,6 mm - 2 mm):	0,84
Gravel	(> 2 mm):	0,40
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,31	1,70
16%	84%	0,18	2,50
25%	75%	0,16	2,63
40%	60%	0,14	2,86
Median 50%	50%	0,12	3,02
75%	25%	0,10	3,30
84%	16%	0,09	3,42
90%	10%	0,09	3,55
95%	5%	0,07	3,89

Moments Statistics

Mean	2,98
Sorting	0,56
Skewness	-0,17
Kurtosis	1,33
Uniformity Coefficient	1,62

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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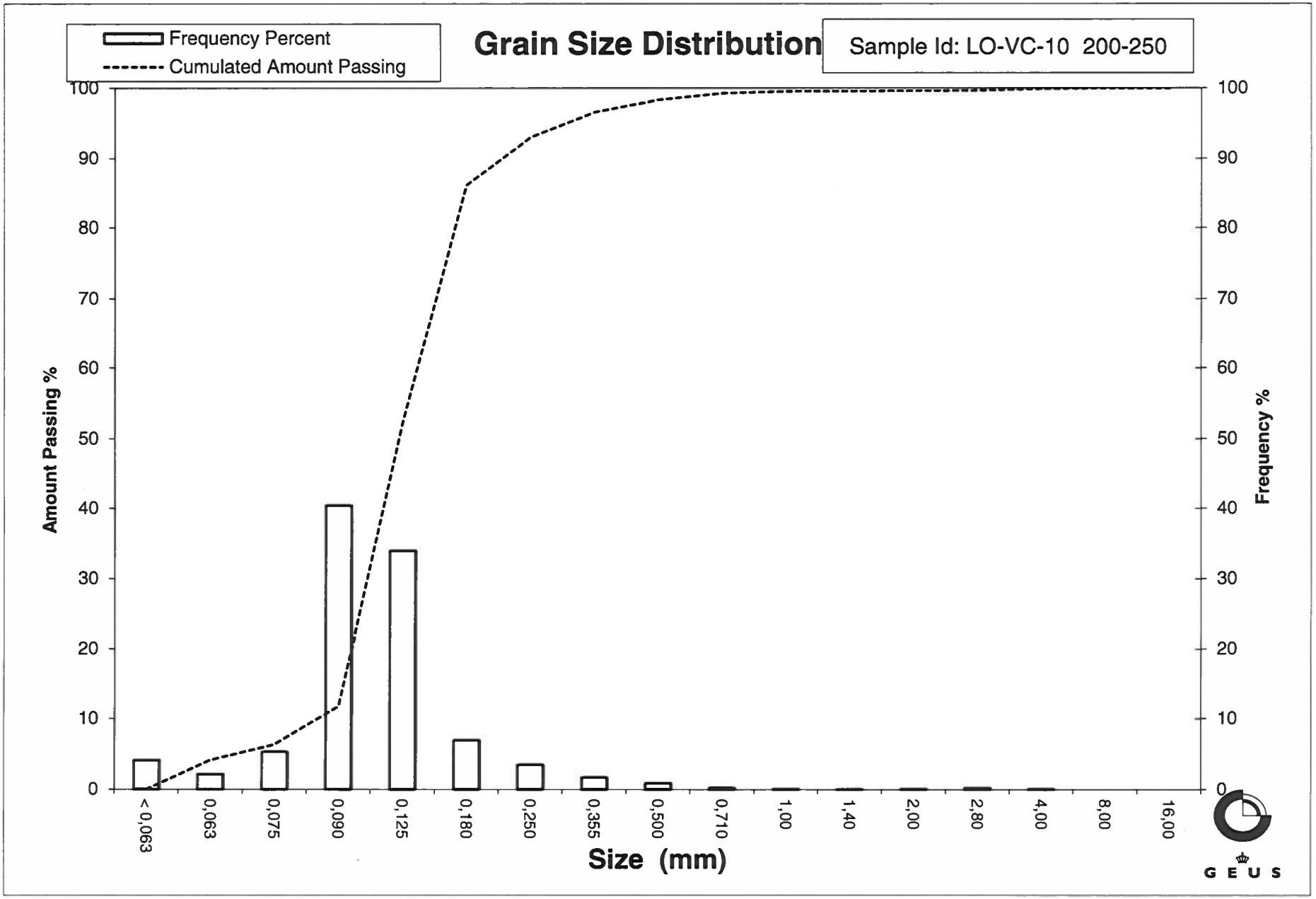
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-10 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-10 300-350
Lab. Id: 230525
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >0,710mm består af skaller

GEUS

Total Weight 91,117 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	0,05	0,05	99,95
	2,80	-1,49	0,02	0,02	99,93
	2,00	-1,00	0,04	0,04	99,89
Sand	1,40	-0,49	0,04	0,04	99,85
	1,00	0,00	0,07	0,08	99,77
	0,710	0,49	0,06	0,07	99,71
	0,500	1,00	0,08	0,09	99,61
	0,355	1,49	0,22	0,25	99,37
	0,250	2,00	1,23	1,35	98,02
	0,180	2,47	3,46	3,79	94,23
	0,125	3,00	30,22	33,16	61,06
	0,090	3,47	43,26	47,48	13,58
	0,075	3,74	5,98	6,56	7,02
	0,063	3,99	1,43	1,57	5,45
	< 0,063	> 3,99	4,97	5,45	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,45
Sand, fine	(0,063 mm - 0,200 mm):	89,86
Sand, medium	(0,2 mm - 0,6 mm):	4,35
Sand, coarse	(0,6 mm - 2 mm):	0,23
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%	0,19	2,36
16%	84%	0,16	2,62
25%	75%	0,15	2,76
40%	60%	0,12	3,01
Median 50%	50%	0,12	3,10
75%	25%	0,10	3,34
84%	16%	0,09	3,45
90%	10%	0,08	3,61
95%	5%	-------	-------

Moments Statistics

Mean	3,05
Sorting	-------
Skewness	-------
Kurtosis	-------
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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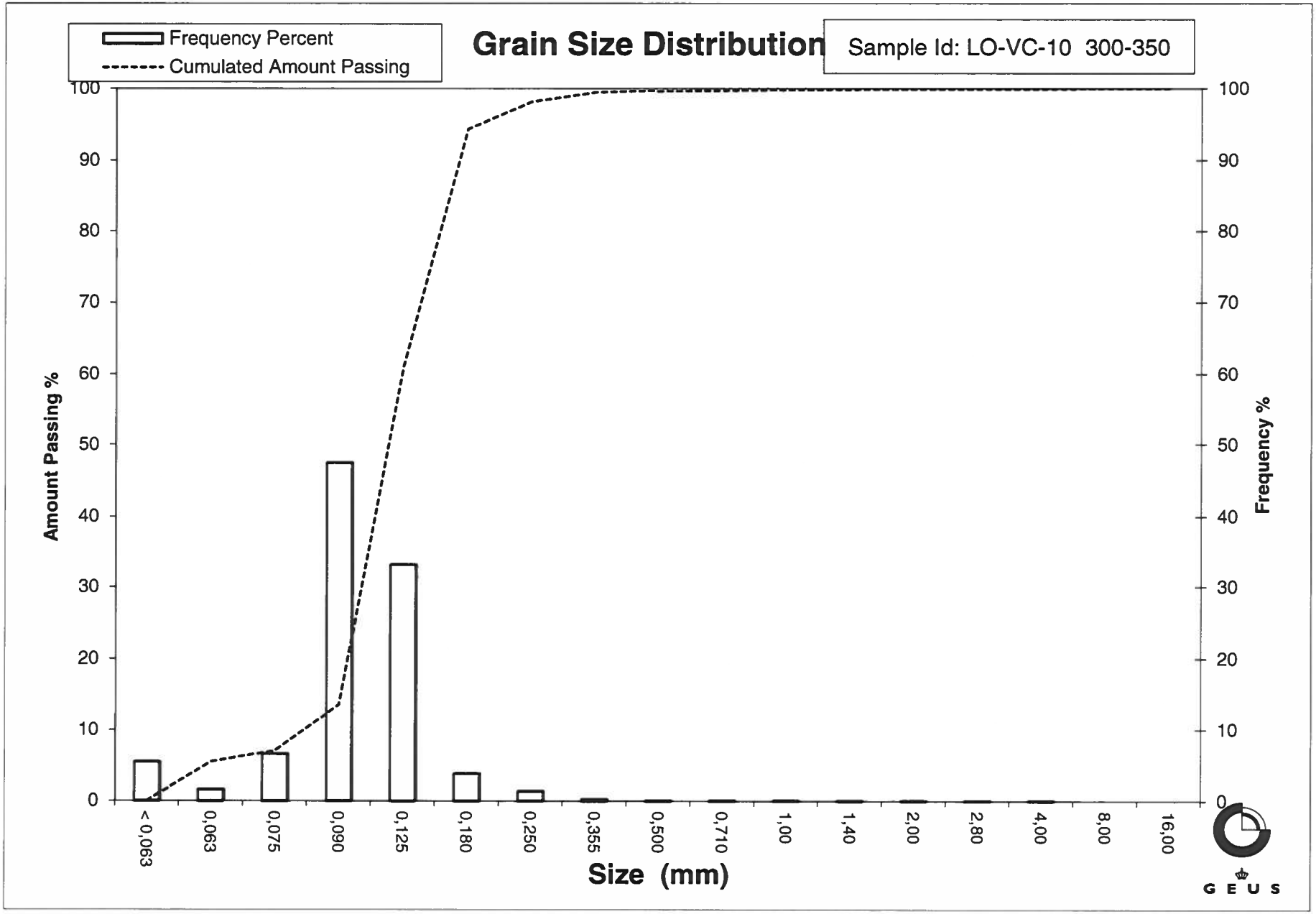
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-10 300-350
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-10 400-450
Lab. Id: 230526
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >0,710mm heraf 0,7g skaller

GEUS

Total Weight 93,861 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	0,07	0,07	99,86
	2,00	-1,00	0,16	0,17	99,69
Sand	1,40	-0,49	0,07	0,08	99,61
	1,00	0,00	0,19	0,20	99,42
	0,710	0,49	0,19	0,20	99,22
	0,500	1,00	0,22	0,24	98,98
	0,355	1,49	0,49	0,52	98,46
	0,250	2,00	2,56	2,72	95,73
	0,180	2,47	4,68	4,98	90,75
	0,125	3,00	12,97	13,82	76,94
	0,090	3,47	47,77	50,89	26,04
	0,075	3,74	14,59	15,55	10,50
	0,063	3,99	4,75	5,06	5,43
	< 0,063	> 3,99	5,10	5,43	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,43
Sand, fine	(0,063 mm - 0,200 mm):	86,74
Sand, medium	(0,2 mm - 0,6 mm):	6,92
Sand, coarse	(0,6 mm - 2 mm):	0,60
Gravel	(> 2 mm):	0,31
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,24	2,06
16%	84%	0,15	2,71
25%	75%	0,12	3,02
40%	60%	0,11	3,14
Median 50%	50%	0,11	3,23
75%	25%	0,09	3,49
84%	16%	0,08	3,64
90%	10%	0,07	3,76
95%	5%	-------	-------

Moments Statistics

Mean	3,19
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,54

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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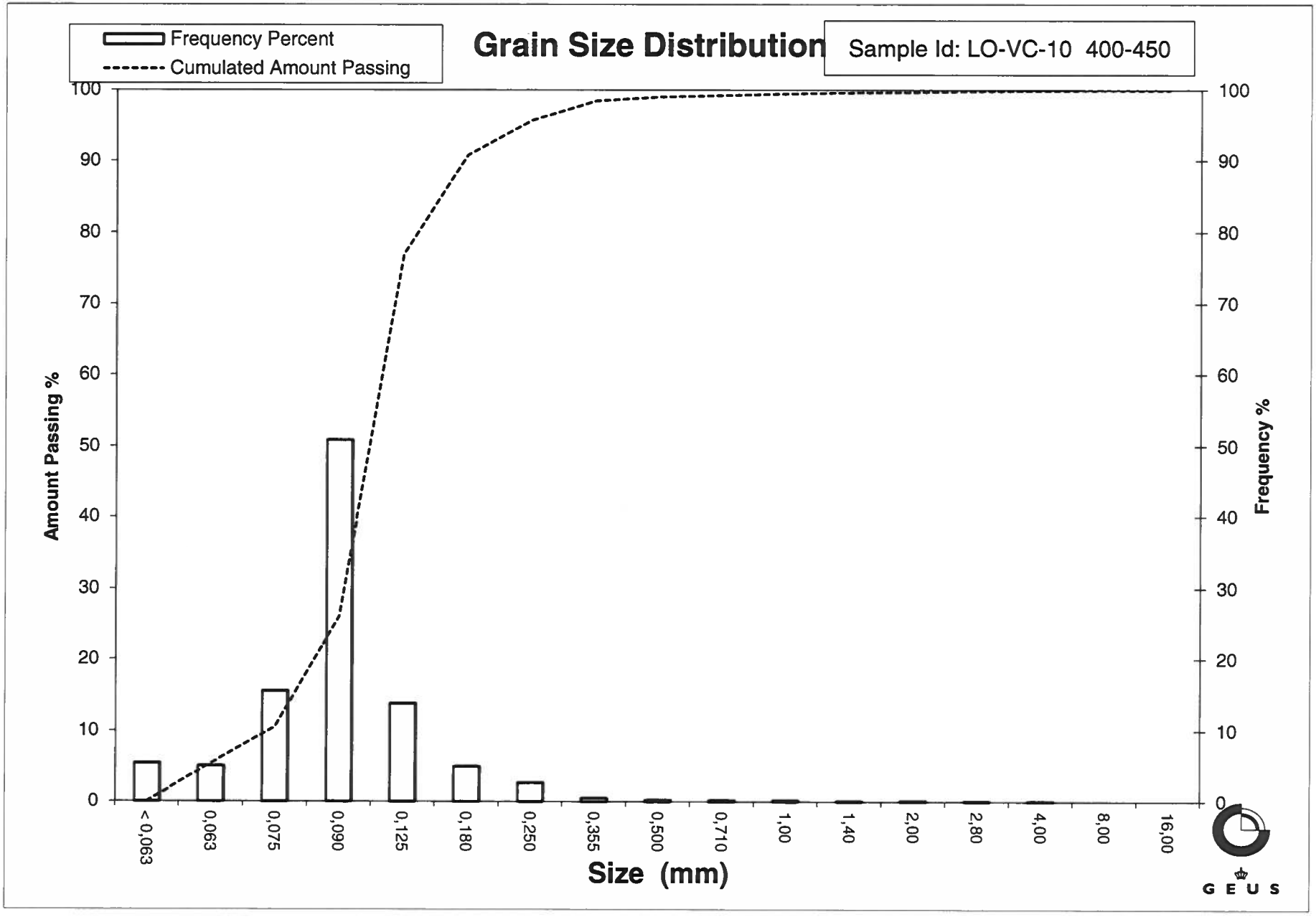
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-10 400-450
Amount Passing %
Frequency %
Size (mm)
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-11 0-50
Lab. Id: 230527
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,1g skaller

GEUS

Total Weight 98,46 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	0,08	99,92
	2,00	-1,00	0,10	0,10	99,82
Sand	1,40	-0,49	0,13	0,13	99,69
	1,00	0,00	0,22	0,22	99,47
	0,710	0,49	0,60	0,61	98,86
	0,500	1,00	1,97	2,00	96,86
	0,355	1,49	3,13	3,17	93,68
	0,250	2,00	5,15	5,23	88,45
	0,180	2,47	12,99	13,19	75,26
	0,125	3,00	38,59	39,20	36,07
	0,090	3,47	28,69	29,14	6,92
	0,075	3,74	3,02	3,07	3,86
	0,063	3,99	1,11	1,13	2,73
	< 0,063	> 3,99	2,69	2,73	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,73
Sand, fine	(0,063 mm - 0,200 mm):	76,30
Sand, medium	(0,2 mm - 0,6 mm):	18,78
Sand, coarse	(0,6 mm - 2 mm):	2,01
Gravel	(> 2 mm):	0,18
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,42	1,27
16%	84%	0,23	2,14
25%	75%	0,18	2,48
40%	60%	0,16	2,66
Median 50%	50%	0,14	2,79
75%	25%	0,11	3,16
84%	16%	0,10	3,31
90%	10%	0,09	3,42
95%	5%	0,08	3,63

Moments Statistics

Mean	2,75
Sorting	0,65
Skewness	-0,20
Kurtosis	1,41
Uniformity Coefficient	1,69

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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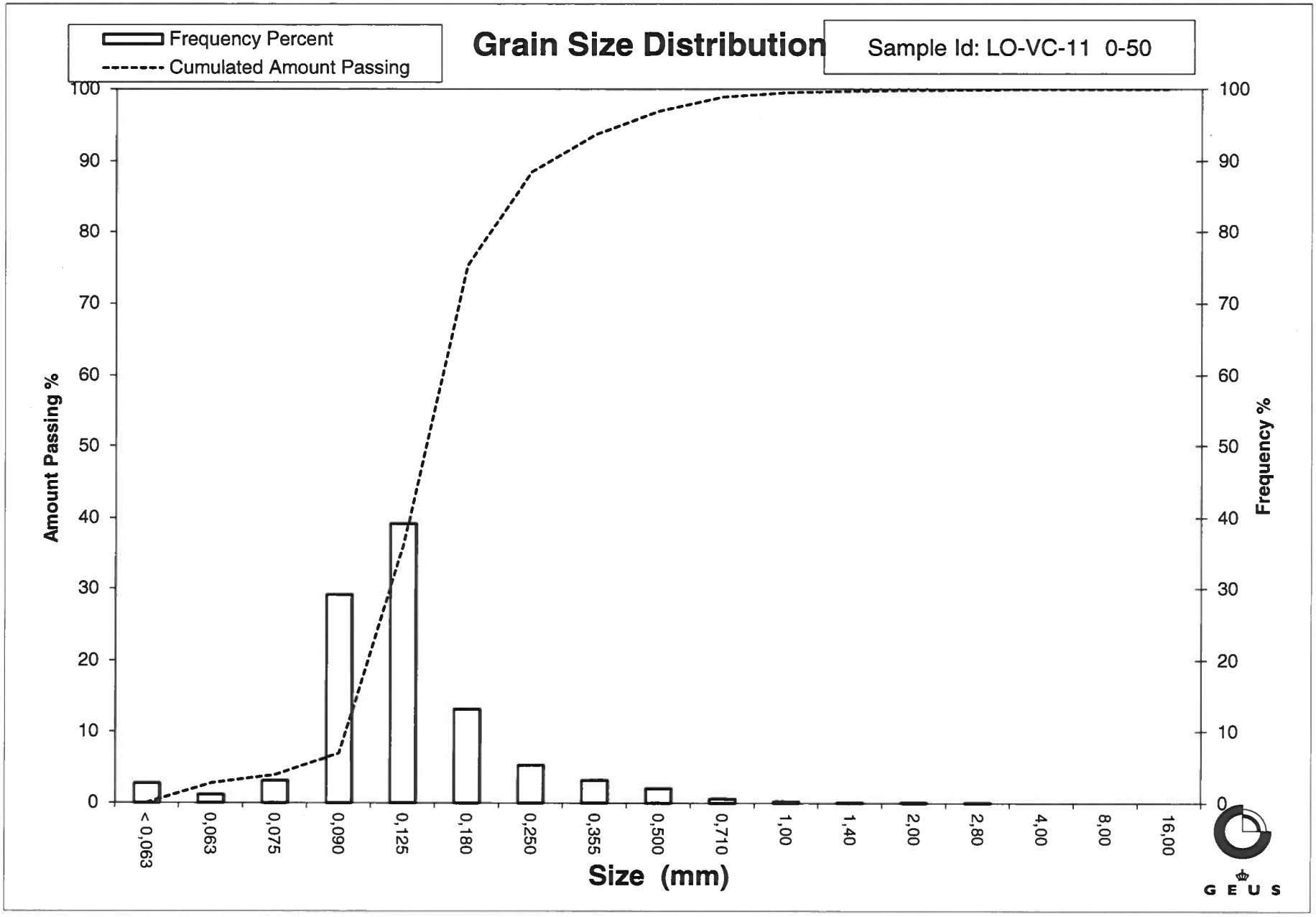
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-11 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-11 100-150
Lab. Id: 230528
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,2g skaller

GEUS

Total Weight 91,054 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	0,06	0,06	99,94
	2,00	-1,00	0,10	0,10	99,83
Sand	1,40	-0,49	0,10	0,10	99,73
	1,00	0,00	0,10	0,11	99,62
	0,710	0,49	0,23	0,26	99,36
	0,500	1,00	0,77	0,84	98,52
	0,355	1,49	1,35	1,48	97,04
	0,250	2,00	2,94	3,23	93,81
	0,180	2,47	7,19	7,90	85,91
	0,125	3,00	34,28	37,65	48,27
	0,090	3,47	35,66	39,16	9,11
	0,075	3,74	4,17	4,58	4,53
	0,063	3,99	1,23	1,35	3,19
	< 0,063	> 3,99	2,90	3,19	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,19
Sand, fine	(0,063 mm - 0,200 mm):	84,98
Sand, medium	(0,2 mm - 0,6 mm):	10,75
Sand, coarse	(0,6 mm - 2 mm):	0,92
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%	0,29	1,79
16%	84%	0,18	2,50
25%	75%	0,16	2,61
40%	60%	0,14	2,81
Median 50%	50%	0,13	2,97
75%	25%	0,10	3,26
84%	16%	0,10	3,38
90%	10%	0,09	3,46
95%	5%	0,08	3,71

Moments Statistics

Mean	2,95
Sorting	0,51
Skewness	-0,15
Kurtosis	1,20
Uniformity Coefficient	1,57

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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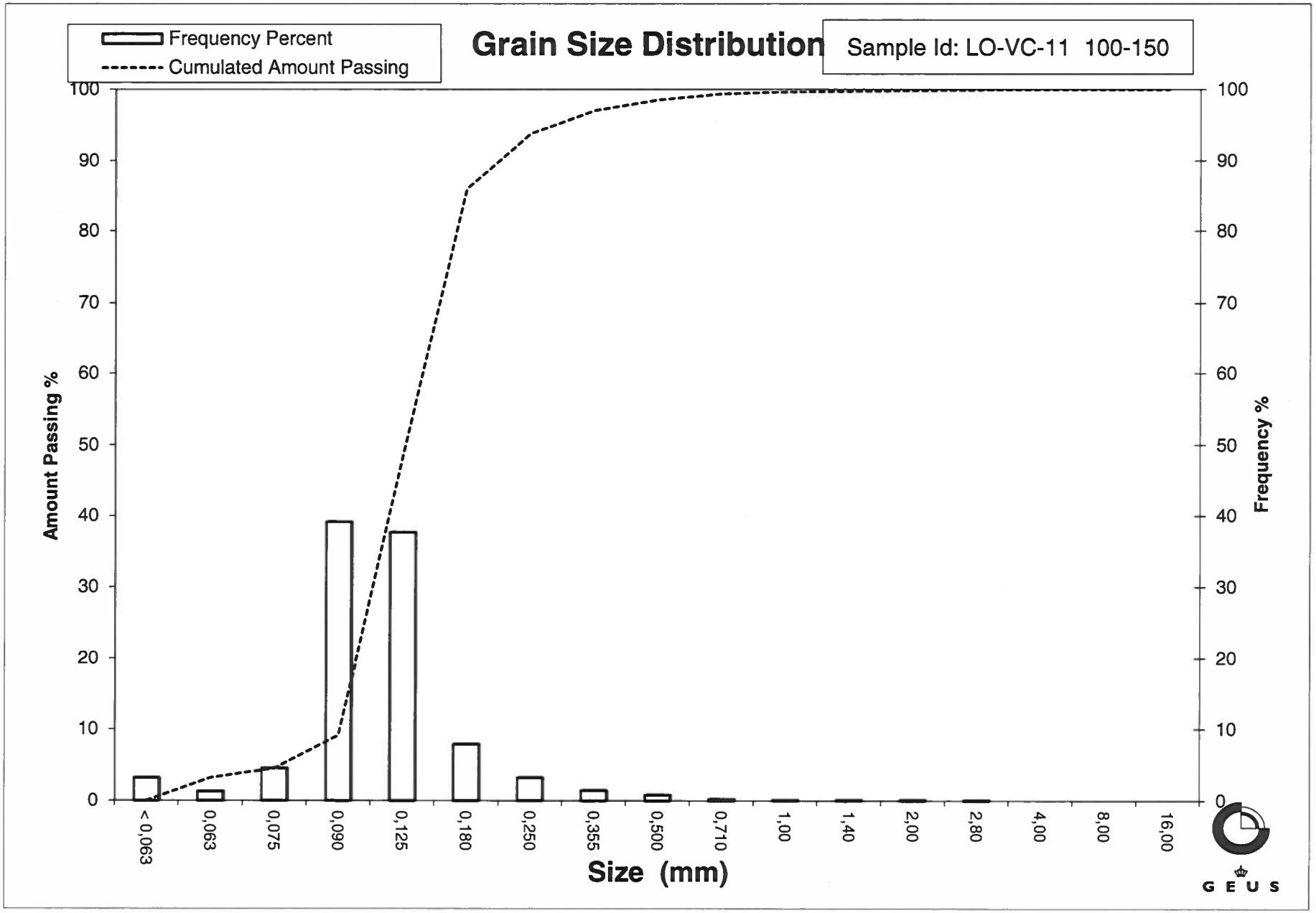
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-11 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-11 300-350
Lab. Id: 230529
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,2g skaller

GEUS

Total Weight 93,186 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	0,06	0,07	99,93
	2,80	-1,49	0,11	0,11	99,82
	2,00	-1,00	0,11	0,12	99,70
Sand	1,40	-0,49	0,07	0,08	99,62
	1,00	0,00	0,13	0,14	99,48
	0,710	0,49	0,18	0,20	99,28
	0,500	1,00	0,35	0,37	98,91
	0,355	1,49	0,48	0,51	98,40
	0,250	2,00	2,03	2,17	96,23
	0,180	2,47	4,06	4,36	91,86
	0,125	3,00	28,15	30,20	61,66
	0,090	3,47	46,48	49,88	11,78
	0,075	3,74	5,29	5,68	6,10
	0,063	3,99	1,79	1,92	4,18
	< 0,063	> 3,99	3,89	4,18	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,18
Sand, fine	(0,063 mm - 0,200 mm):	88,93
Sand, medium	(0,2 mm - 0,6 mm):	5,98
Sand, coarse	(0,6 mm - 2 mm):	0,61
Gravel	(> 2 mm):	0,30
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	2,59
25%	75%	0,15	2,74
40%	60%	0,12	3,01
Median 50%	50%	0,12	3,10
75%	25%	0,10	3,33
84%	16%	0,09	3,43
90%	10%	0,09	3,55
95%	5%	0,07	3,88

Moments Statistics

Mean	3,04
Sorting	0,47
Skewness	-0,16
Kurtosis	1,22
Uniformity Coefficient	1,45

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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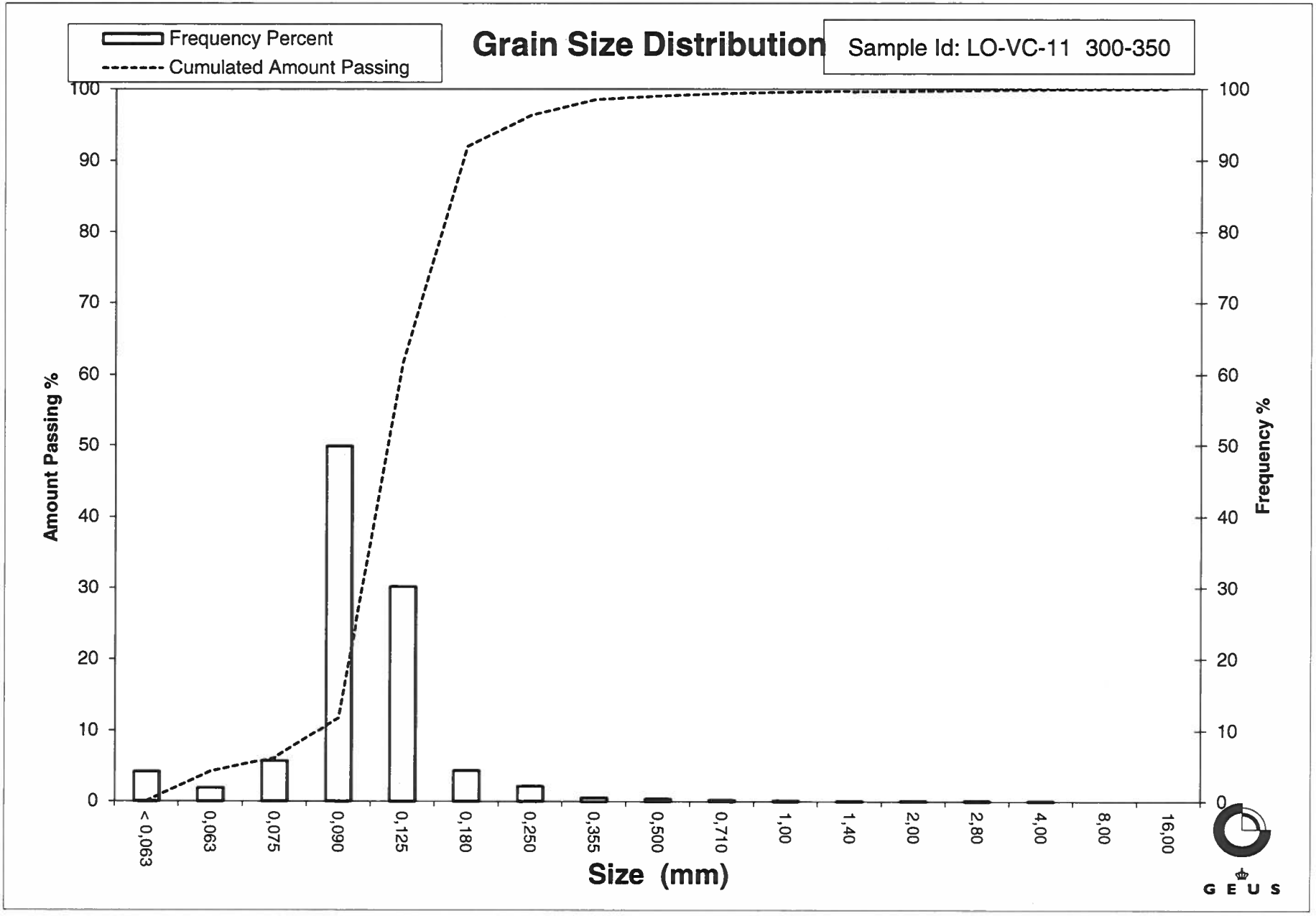
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-11 300-350
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-12 0-50
Lab. Id: 230530
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,3g skaller

GEUS

Total Weight 95,736 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	0,15	0,16	99,84
	2,80	-1,49	0,11	0,11	99,73
	2,00	-1,00	0,11	0,12	99,61
Sand	1,40	-0,49	0,07	0,08	99,54
	1,00	0,00	0,09	0,09	99,45
	0,710	0,49	0,17	0,18	99,27
	0,500	1,00	0,69	0,72	98,54
	0,355	1,49	1,40	1,46	97,08
	0,250	2,00	2,58	2,69	94,39
	0,180	2,47	8,66	9,05	85,34
	0,125	3,00	37,28	38,94	46,40
	0,090	3,47	36,25	37,86	8,54
	0,075	3,74	4,77	4,98	3,56
	0,063	3,99	1,26	1,31	2,24
	< 0,063	> 3,99	2,15	2,24	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,24
Sand, fine	(0,063 mm - 0,200 mm):	85,68
Sand, medium	(0,2 mm - 0,6 mm):	10,96
Sand, coarse	(0,6 mm - 2 mm):	0,72
Gravel	(> 2 mm):	0,39
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,27	1,87
16%	84%	0,18	2,49
25%	75%	0,17	2,60
40%	60%	0,14	2,79
Median 50%	50%	0,13	2,94
75%	25%	0,11	3,25
84%	16%	0,10	3,37
90%	10%	0,09	3,45
95%	5%	0,08	3,66

Moments Statistics

Mean	2,93
Sorting	0,49
Skewness	-0,12
Kurtosis	1,12
Uniformity Coefficient	1,58

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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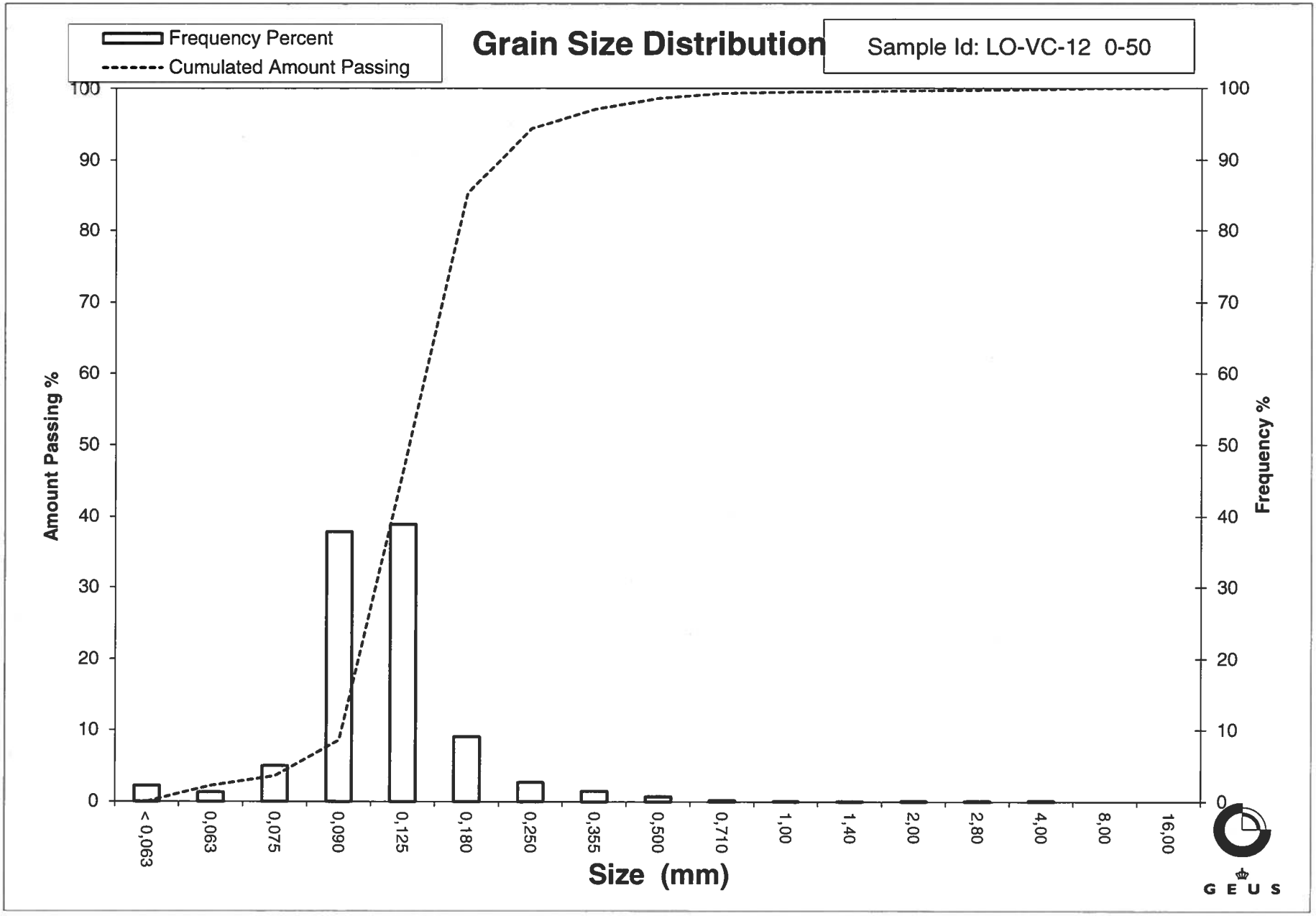
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-12 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-12 100-150
Lab. Id: 230531
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,3g skaller

GEUS

Total Weight 96,729 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	0,17	0,17	99,83
	2,80	-1,49	0,17	0,17	99,66
	2,00	-1,00	0,14	0,14	99,52
Sand	1,40	-0,49	0,10	0,10	99,41
	1,00	0,00	0,16	0,17	99,25
	0,710	0,49	0,09	0,09	99,15
	0,500	1,00	0,15	0,15	99,00
	0,355	1,49	0,23	0,23	98,77
	0,250	2,00	0,61	0,63	98,14
	0,180	2,47	1,88	1,95	96,19
	0,125	3,00	38,32	39,62	56,57
	0,090	3,47	41,89	43,31	13,26
	0,075	3,74	5,78	5,98	7,28
	0,063	3,99	1,74	1,80	5,49
	< 0,063	> 3,99	5,31	5,49	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,49
Sand, fine	(0,063 mm - 0,200 mm):	91,26
Sand, medium	(0,2 mm - 0,6 mm):	2,33
Sand, coarse	(0,6 mm - 2 mm):	0,44
Gravel	(> 2 mm):	0,48
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	2,62
25%	75%	0,15	2,73
40%	60%	0,13	2,95
Median 50%	50%	0,12	3,06
75%	25%	0,10	3,33
84%	16%	0,09	3,44
90%	10%	0,08	3,61
95%	5%	-------	-------

Moments Statistics

Mean	3,04
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,59

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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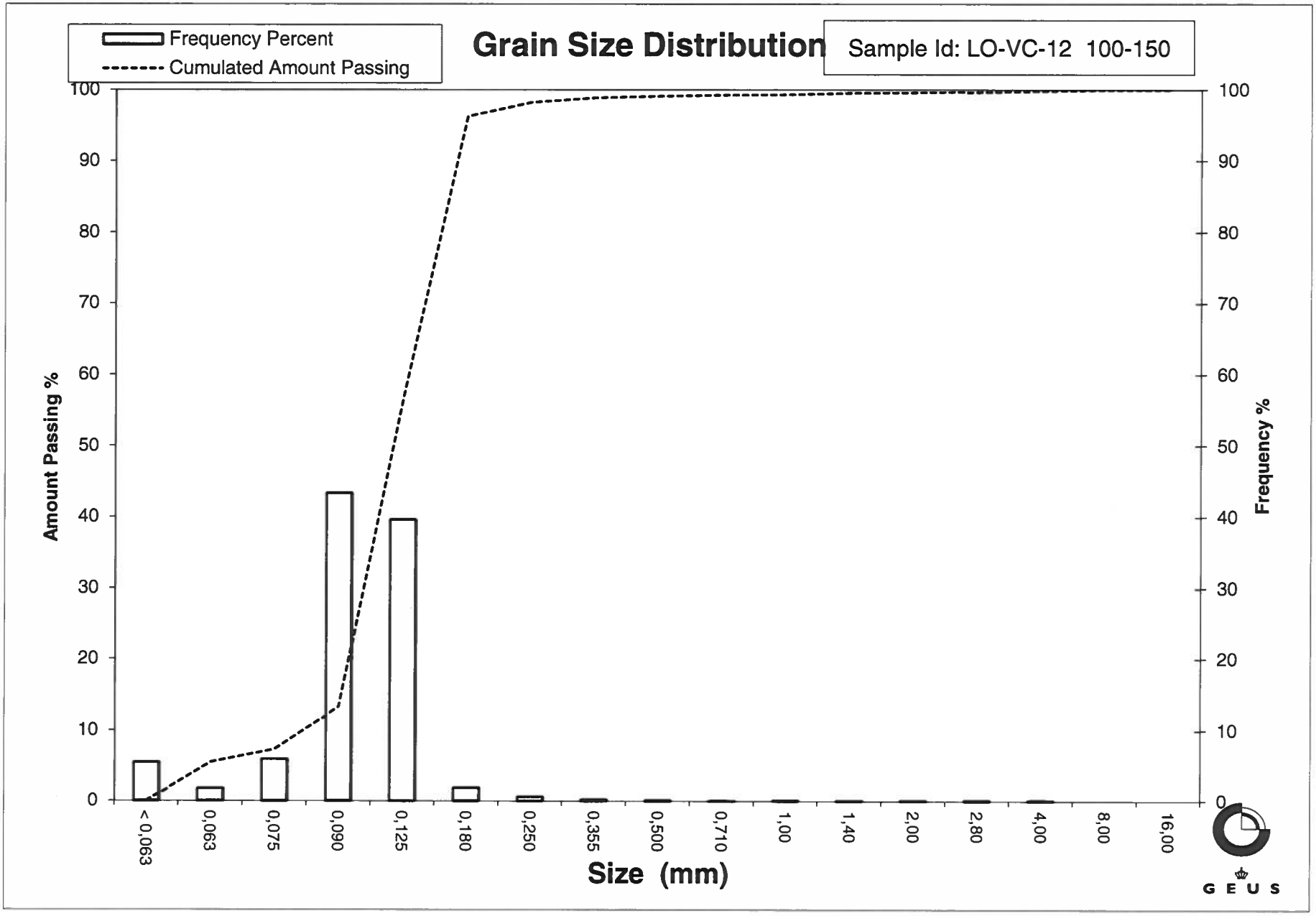
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-12 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-12 190-225
Lab. Id: 230532
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,928 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	0,01	0,01	99,99
	0,710	0,49	0,01	0,01	99,98
	0,500	1,00	0,03	0,03	99,95
	0,355	1,49	0,82	0,86	99,08
	0,250	2,00	16,33	17,20	81,88
	0,180	2,47	34,56	36,41	45,48
	0,125	3,00	19,08	20,10	25,38
	0,090	3,47	16,16	17,03	8,35
	0,075	3,74	4,42	4,66	3,69
	0,063	3,99	1,01	1,07	2,62
	< 0,063	> 3,99	2,49	2,62	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,62
Sand, fine	(0,063 mm - 0,200 mm):	53,26
Sand, medium	(0,2 mm - 0,6 mm):	44,08
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%	0,33	1,60
16%	84%	0,26	1,93
25%	75%	0,24	2,08
40%	60%	0,21	2,27
Median 50%	50%	0,19	2,41
75%	25%	0,12	3,01
84%	16%	0,11	3,24
90%	10%	0,09	3,42
95%	5%	0,08	3,66

Moments Statistics

Mean	2,52
Sorting	0,64
Skewness	0,24
Kurtosis	0,91
Uniformity Coefficient	2,23

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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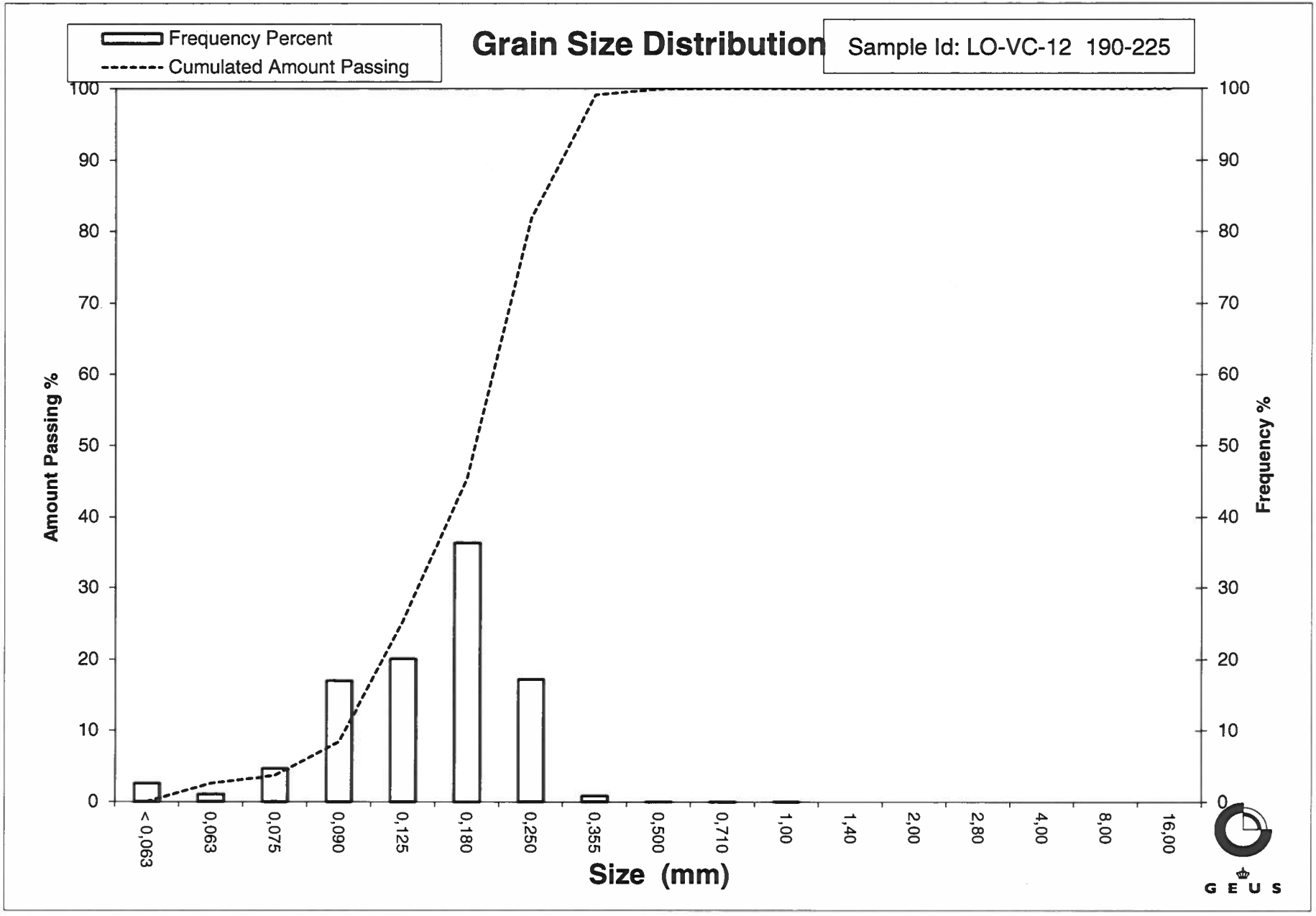
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-12 190-225
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-13 0-50
Lab. Id: 230533
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 106,711 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	0,43	0,40	99,60
	2,80	-1,49	0,32	0,30	99,30
	2,00	-1,00	0,16	0,15	99,15
Sand	1,40	-0,49	0,17	0,16	98,99
	1,00	0,00	0,24	0,23	98,76
	0,710	0,49	0,70	0,66	98,10
	0,500	1,00	3,12	2,93	95,18
	0,355	1,49	15,51	14,54	80,64
	0,250	2,00	39,41	36,93	43,70
	0,180	2,47	31,90	29,90	13,81
	0,125	3,00	11,42	10,70	3,10
	0,090	3,47	1,96	1,83	1,27
	0,075	3,74	0,29	0,27	1,00
	0,063	3,99	0,10	0,09	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):	21,44
Sand, medium	(0,2 mm - 0,6 mm):	74,22
Sand, coarse	(0,6 mm - 2 mm):	2,58
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%	0,50	1,01
16%	84%	0,39	1,36
25%	75%	0,34	1,56
40%	60%	0,30	1,75
Median 50%	50%	0,27	1,90
75%	25%	0,21	2,28
84%	16%	0,19	2,43
90%	10%	0,16	2,64
95%	5%	0,13	2,89

Moments Statistics

Mean	1,90
Sorting	0,55
Skewness	0,02
Kurtosis	1,08
Uniformity Coefficient	1,85

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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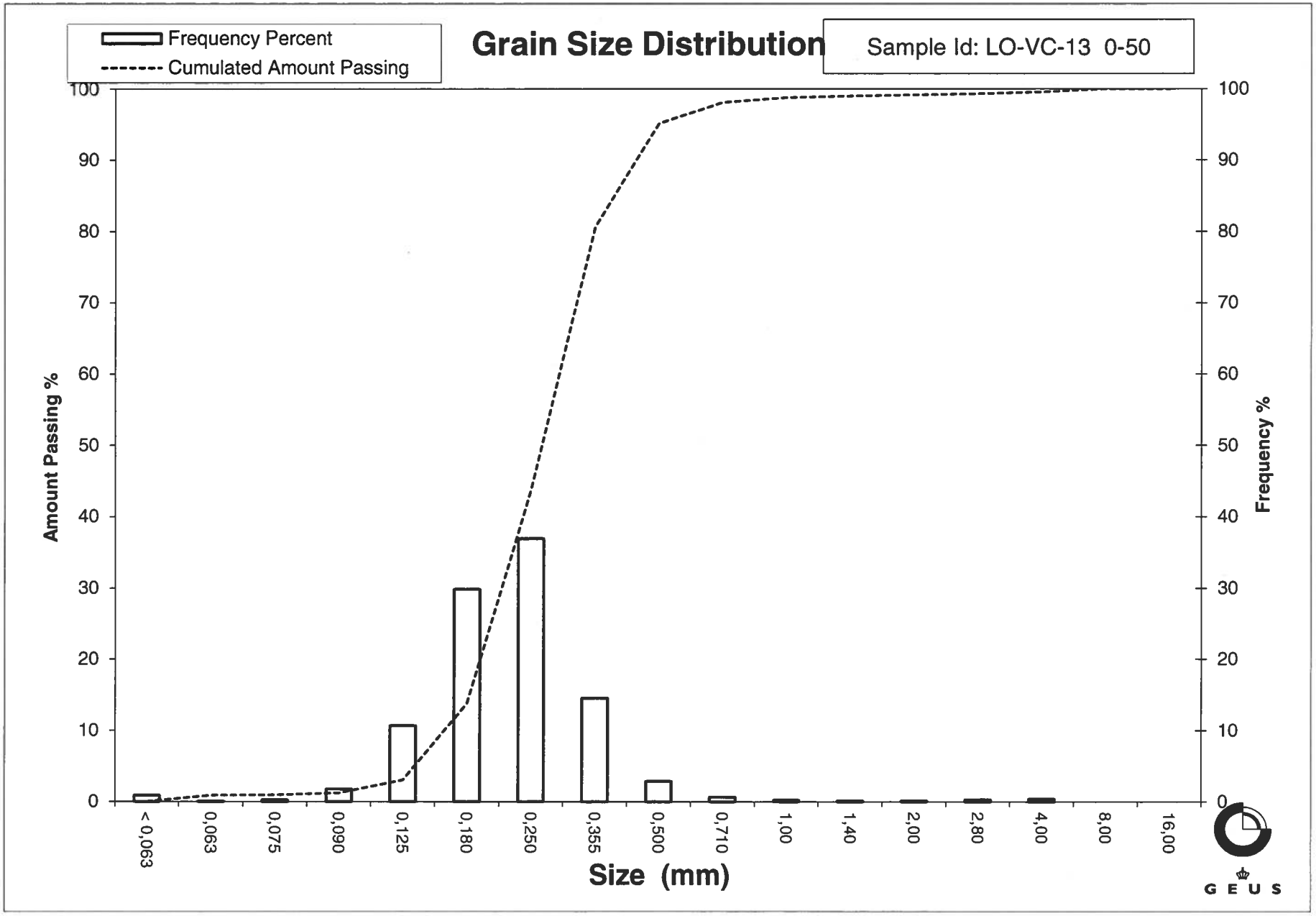
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-13 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-13 100-150
Lab. Id: 230534
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

Total Weight 101,942 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	0,00	0,00	100,00
Gravel	4,00	-2,00	0,00	0,00	100,00
Gravel	2,80	-1,49	0,02	0,02	99,98
Gravel	2,00	-1,00	0,00	0,00	99,98
Sand	1,40	-0,49	0,13	0,13	99,85
Sand	1,00	0,00	0,20	0,20	99,65
Sand	0,710	0,49	0,38	0,37	99,28
Sand	0,500	1,00	1,95	1,91	97,36
Sand	0,355	1,49	10,17	9,98	87,39
Sand	0,250	2,00	25,52	25,04	62,35
Sand	0,180	2,47	47,45	46,55	15,81
Sand	0,125	3,00	10,24	10,04	5,76
Sand	0,090	3,47	3,77	3,70	2,06
Sand	0,075	3,74	0,70	0,68	1,37
Sand	0,063	3,99	0,17	0,17	1,21
	< 0,063	> 3,99	1,23	1,21	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,21
Sand, fine	(0,063 mm - 0,200 mm):	27,90
Sand, medium	(0,2 mm - 0,6 mm):	69,17
Sand, coarse	(0,6 mm - 2 mm):	1,70
Gravel	(> 2 mm):	0,02
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,47	1,10
16%	84%	0,34	1,55
25%	75%	0,30	1,72
40%	60%	0,25	2,02
Median 50%	50%	0,23	2,11
75%	25%	0,19	2,37
84%	16%	0,18	2,47
90%	10%	0,15	2,75
95%	5%	0,12	3,09

Moments Statistics

Mean	2,05
Sorting	0,53
Skewness	-0,12
Kurtosis	1,26
Uniformity Coefficient	1,66

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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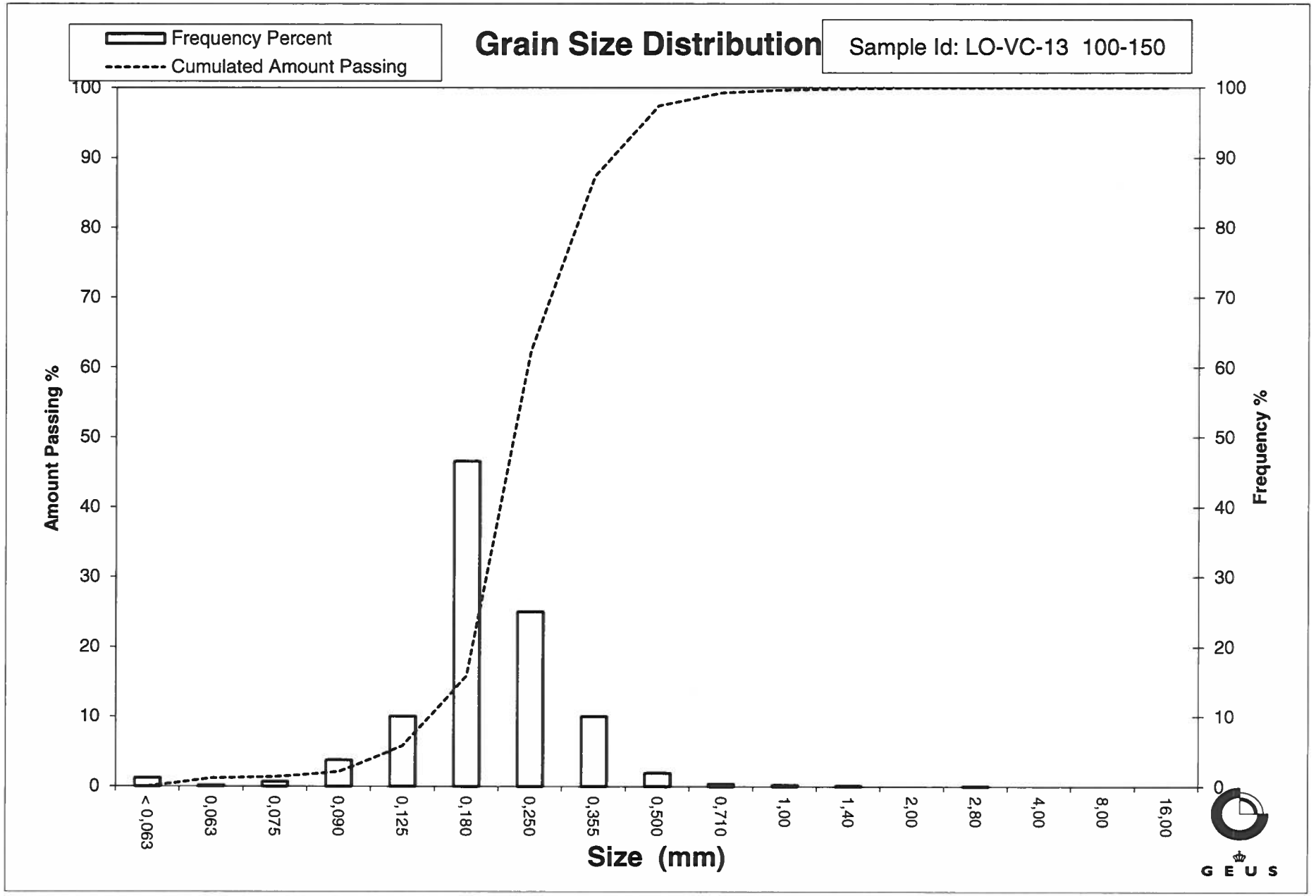
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-13 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-14 0-50
Lab. Id: 230535
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,2g skaller

GEUS

Total Weight 98,212 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	0,15	99,81
	2,00	-1,00	0,04	0,04	99,78
Sand	1,40	-0,49	0,09	0,09	99,68
	1,00	0,00	0,21	0,21	99,48
	0,710	0,49	0,49	0,50	98,98
	0,500	1,00	4,02	4,09	94,89
	0,355	1,49	16,85	17,15	77,73
	0,250	2,00	38,61	39,32	38,42
	0,180	2,47	25,23	25,69	12,73
	0,125	3,00	8,35	8,50	4,22
	0,090	3,47	2,30	2,34	1,88
	0,075	3,74	0,54	0,55	1,33
	0,063	3,99	0,16	0,16	1,16
	< 0,063	> 3,99	1,14	1,16	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,16
Sand, fine	(0,063 mm - 0,200 mm):	18,90
Sand, medium	(0,2 mm - 0,6 mm):	76,77
Sand, coarse	(0,6 mm - 2 mm):	2,94
Gravel	(> 2 mm):	0,22
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,51	0,98
16%	84%	0,41	1,29
25%	75%	0,35	1,52
40%	60%	0,31	1,70
Median 50%	50%	0,28	1,83
75%	25%	0,21	2,23
84%	16%	0,19	2,40
90%	10%	0,16	2,62
95%	5%	0,13	2,94

Moments Statistics

Mean	1,84
Sorting	0,57
Skewness	0,08
Kurtosis	1,14
Uniformity Coefficient	1,89

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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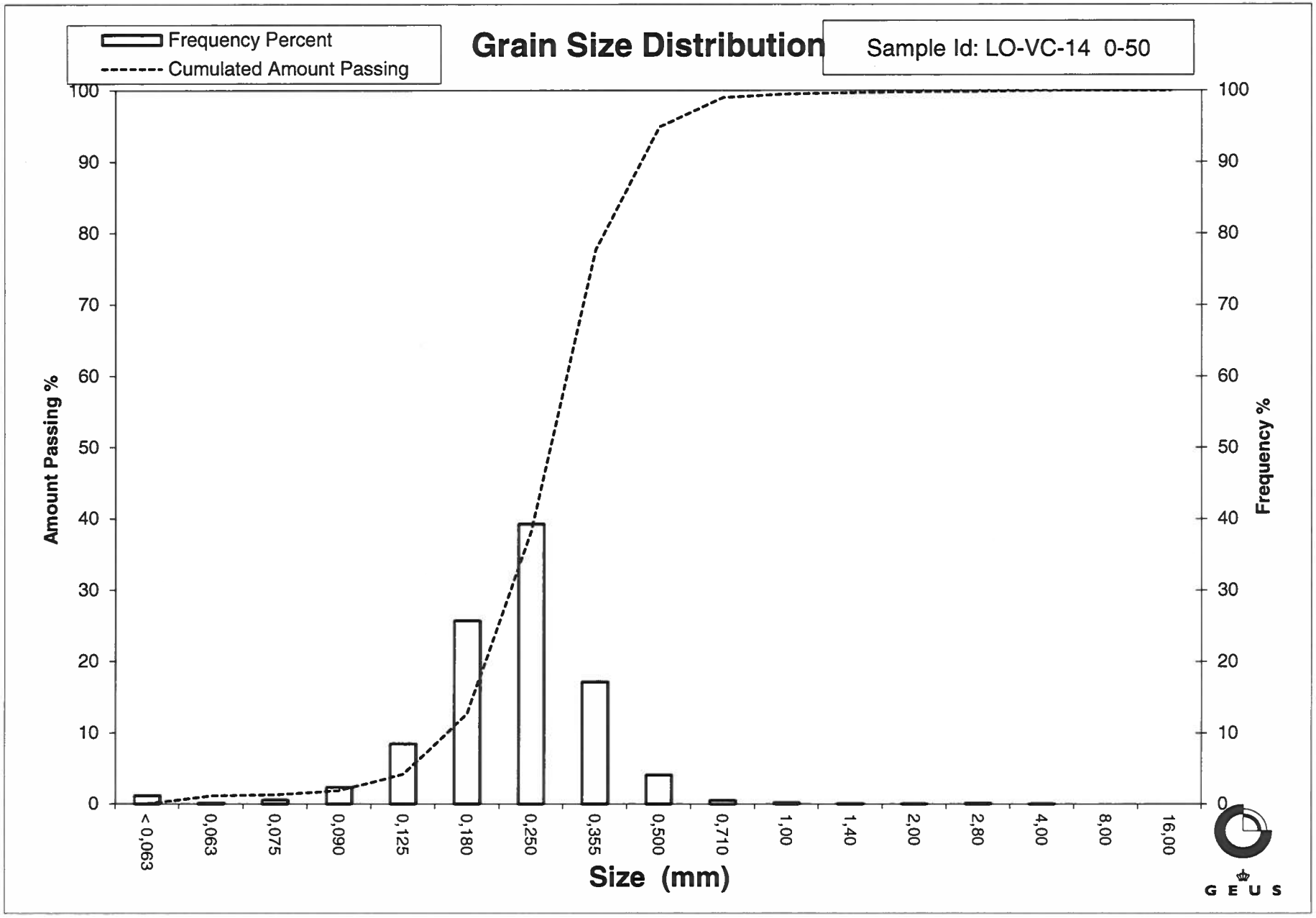
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-14 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-14 100-150
Lab. Id: 230536
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 93,999 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	0,04	0,05	99,94
	0,710	0,49	0,12	0,13	99,81
	0,500	1,00	0,71	0,76	99,06
	0,355	1,49	5,22	5,55	93,50
	0,250	2,00	23,94	25,47	68,03
	0,180	2,47	34,47	36,67	31,36
	0,125	3,00	19,38	20,62	10,74
	0,090	3,47	7,25	7,72	3,03
	0,075	3,74	1,04	1,10	1,93
	0,063	3,99	0,42	0,45	1,48
	< 0,063	> 3,99	1,39	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):	40,36
Sand, medium	(0,2 mm - 0,6 mm):	57,58
Sand, coarse	(0,6 mm - 2 mm):	0,58
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%	0,39	1,34
16%	84%	0,32	1,66
25%	75%	0,28	1,84
40%	60%	0,23	2,09
Median 50%	50%	0,22	2,21
75%	25%	0,16	2,62
84%	16%	0,14	2,85
90%	10%	0,12	3,04
95%	5%	0,10	3,34

Moments Statistics

Mean	2,24
Sorting	0,60
Skewness	0,10
Kurtosis	1,06
Uniformity Coefficient	1,93

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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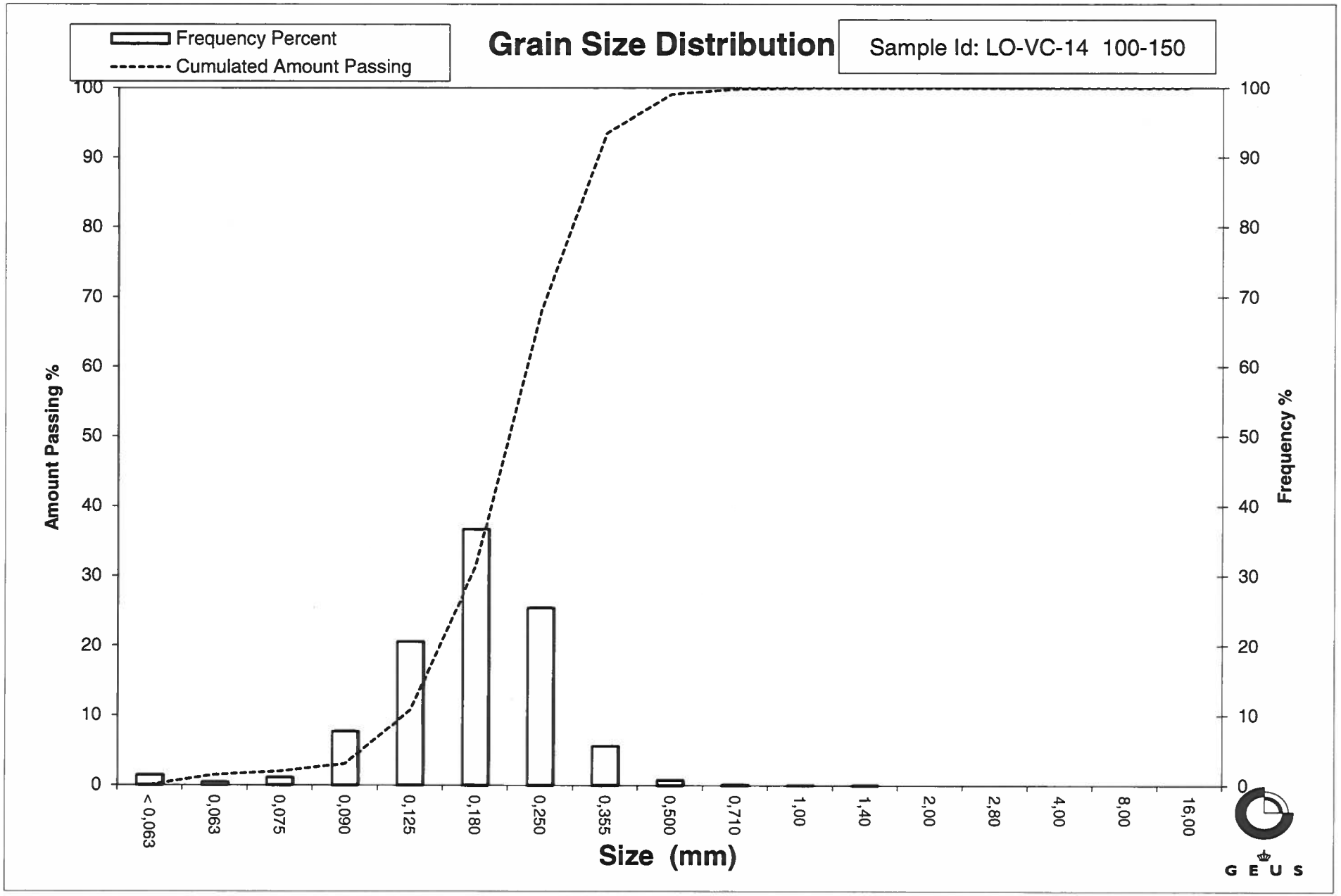
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-14 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-CV-14 180-220
Lab. Id: 230537
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

GEUS

Total Weight 95,996 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	0,04	0,04	99,96
	2,80	-1,49	0,04	0,04	99,93
	2,00	-1,00	0,06	0,06	99,86
Sand	1,40	-0,49	0,08	0,09	99,78
	1,00	0,00	0,12	0,13	99,65
	0,710	0,49	0,19	0,19	99,46
	0,500	1,00	0,65	0,67	98,79
	0,355	1,49	4,08	4,25	94,53
	0,250	2,00	11,89	12,38	82,15
	0,180	2,47	23,08	24,04	58,11
	0,125	3,00	27,96	29,13	28,98
	0,090	3,47	20,20	21,04	7,94
	0,075	3,74	3,56	3,71	4,23
	0,063	3,99	1,00	1,04	3,19
	< 0,063	> 3,99	3,06	3,19	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,19
Sand, fine	(0,063 mm - 0,200 mm):	61,78
Sand, medium	(0,2 mm - 0,6 mm):	34,13
Sand, coarse	(0,6 mm - 2 mm):	0,76
Gravel	(> 2 mm):	0,14
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,37	1,43
16%	84%	0,27	1,91
25%	75%	0,23	2,13
40%	60%	0,19	2,43
Median 50%	50%	0,16	2,60
75%	25%	0,12	3,08
84%	16%	0,10	3,27
90%	10%	0,09	3,42
95%	5%	0,08	3,68

Moments Statistics

Mean	2,60
Sorting	0,68
Skewness	-0,03
Kurtosis	0,97
Uniformity Coefficient	1,99

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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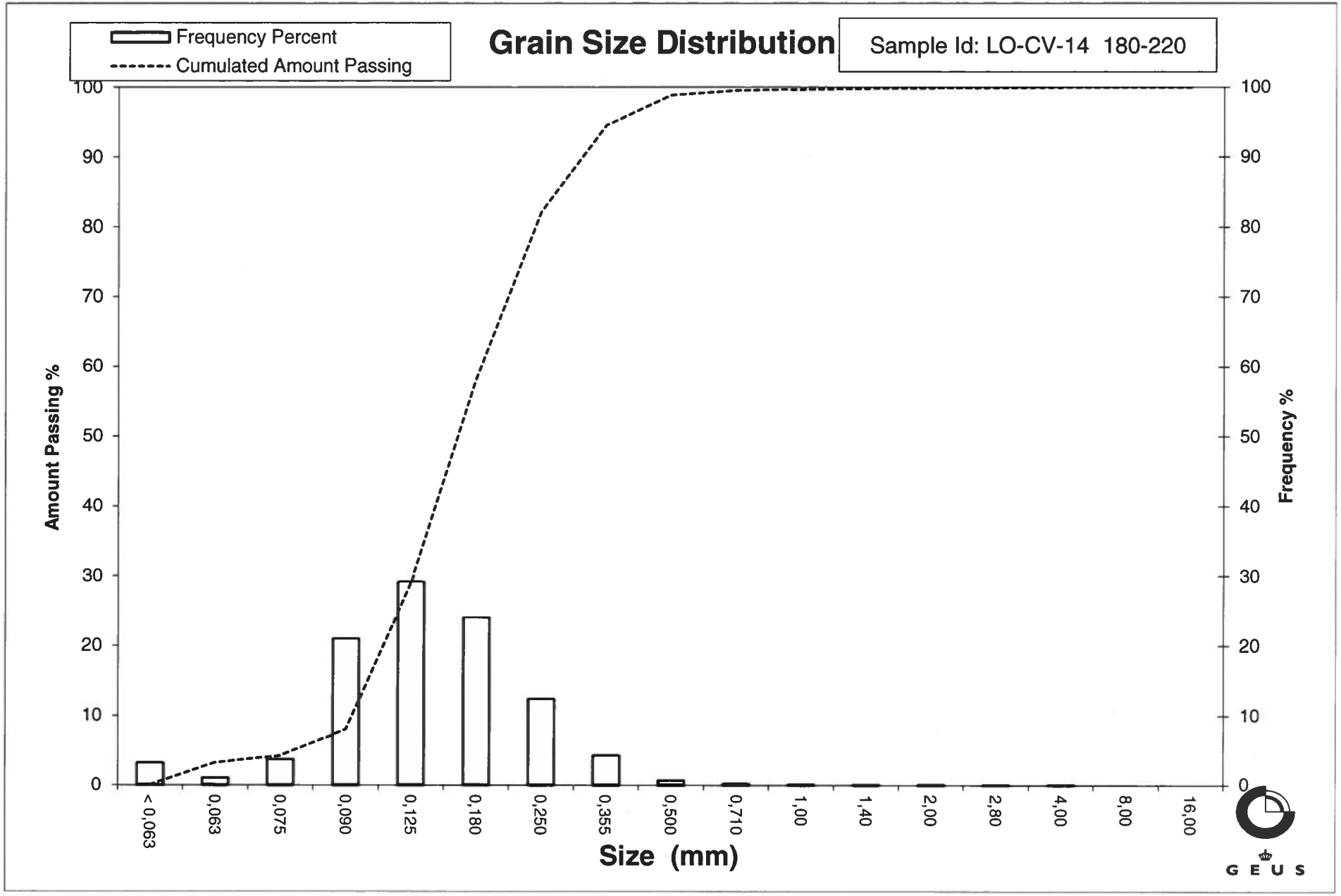
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-CV-14 180-220
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-15 0-50
Lab. Id: 230538
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

GEUS

Total Weight 98,73 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	0,02	0,02	99,98
	2,00	-1,00	0,00	0,00	99,98
Sand	1,40	-0,49	0,02	0,02	99,96
	1,00	0,00	0,07	0,07	99,89
	0,710	0,49	0,13	0,13	99,76
	0,500	1,00	0,45	0,46	99,30
	0,355	1,49	2,32	2,35	96,95
	0,250	2,00	10,63	10,76	86,19
	0,180	2,47	35,24	35,69	50,50
	0,125	3,00	31,29	31,69	18,80
	0,090	3,47	14,86	15,05	3,75
	0,075	3,74	1,91	1,93	1,82
	0,063	3,99	0,46	0,46	1,36
	< 0,063	> 3,99	1,34	1,36	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,36
Sand, fine	(0,063 mm - 0,200 mm):	59,34
Sand, medium	(0,2 mm - 0,6 mm):	38,83
Sand, coarse	(0,6 mm - 2 mm):	0,46
Gravel	(> 2 mm):	0,02
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,34	1,57
16%	84%	0,25	2,02
25%	75%	0,23	2,13
40%	60%	0,20	2,33
Median 50%	50%	0,18	2,48
75%	25%	0,14	2,88
84%	16%	0,12	3,08
90%	10%	0,10	3,26
95%	5%	0,09	3,43

Moments Statistics

Mean	2,53
Sorting	0,54
Skewness	0,08
Kurtosis	1,02
Uniformity Coefficient	1,90

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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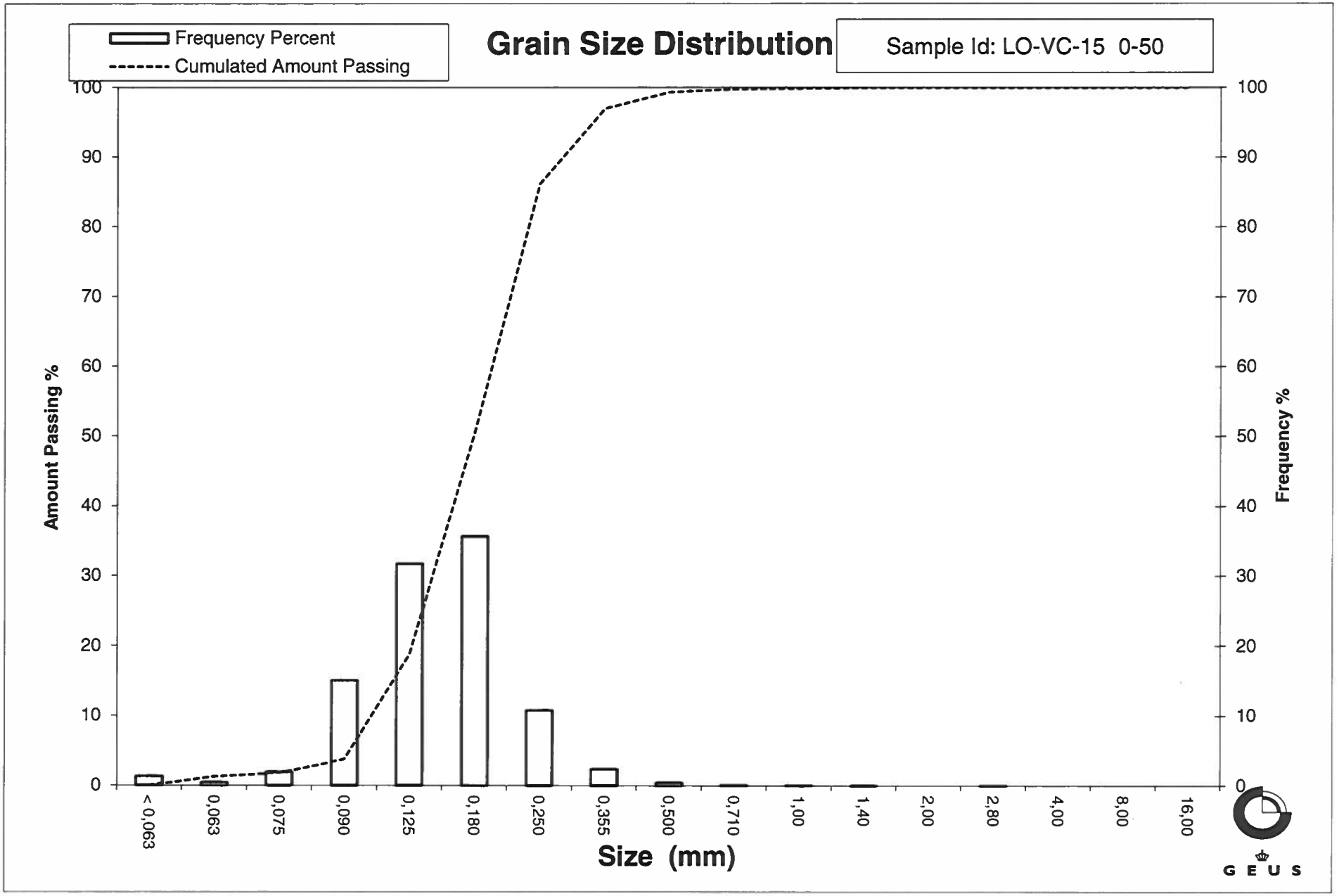
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-15 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-15 100-150
Lab. Id: 230539
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

GEUS

Total Weight 96,481 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	0,02	0,02	99,98
	2,00	-1,00	0,00	0,00	99,98
Sand	1,40	-0,49	0,02	0,02	99,96
	1,00	0,00	0,03	0,03	99,93
	0,710	0,49	0,07	0,07	99,86
	0,500	1,00	0,21	0,22	99,64
	0,355	1,49	1,20	1,24	98,40
	0,250	2,00	9,19	9,53	88,87
	0,180	2,47	20,49	21,23	67,64
	0,125	3,00	42,67	44,22	23,42
	0,090	3,47	17,82	18,47	4,95
	0,075	3,74	2,30	2,38	2,57
	0,063	3,99	0,60	0,62	1,94
	< 0,063	> 3,99	1,88	1,94	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,94
Sand, fine	(0,063 mm - 0,200 mm):	71,76
Sand, medium	(0,2 mm - 0,6 mm):	26,04
Sand, coarse	(0,6 mm - 2 mm):	0,24
Gravel	(> 2 mm):	0,02
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%	0,23	2,10
25%	75%	0,20	2,29
40%	60%	0,17	2,55
Median 50%	50%	0,16	2,66
75%	25%	0,13	2,98
84%	16%	0,11	3,17
90%	10%	0,10	3,33
95%	5%	0,09	3,47

Moments Statistics

Mean	2,64
Sorting	0,54
Skewness	-0,08
Kurtosis	1,09
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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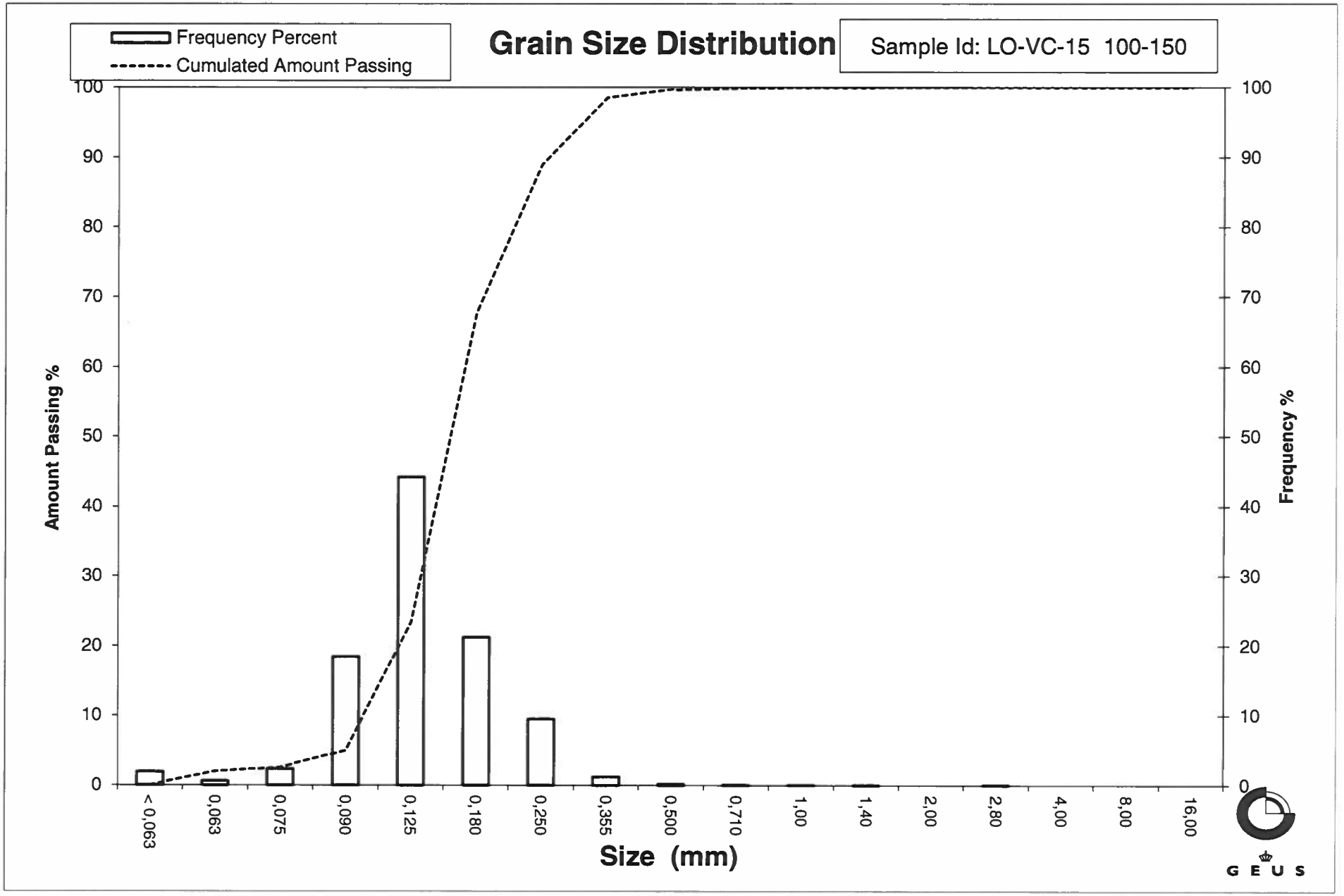
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-15 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-15 200-236
Lab. Id: 230540
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,1g skaller

GEUS

Total Weight 93,374 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	0,11	0,12	99,88
	2,00	-1,00	0,07	0,08	99,81
Sand	1,40	-0,49	0,09	0,09	99,71
	1,00	0,00	0,05	0,06	99,65
	0,710	0,49	0,09	0,10	99,55
	0,500	1,00	0,29	0,31	99,24
	0,355	1,49	2,41	2,58	96,66
	0,250	2,00	10,54	11,29	85,37
	0,180	2,47	17,38	18,62	66,76
	0,125	3,00	36,99	39,62	27,14
	0,090	3,47	19,51	20,89	6,25
	0,075	3,74	3,11	3,33	2,91
	0,063	3,99	0,68	0,73	2,18
	< 0,063	> 3,99	2,04	2,18	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	2,18
Sand, fine	(0,063 mm - 0,200 mm):	69,89
Sand, medium	(0,2 mm - 0,6 mm):	27,32
Sand, coarse	(0,6 mm - 2 mm):	0,42
Gravel	(> 2 mm):	0,19
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,34	1,56
16%	84%	0,24	2,03
25%	75%	0,21	2,24
40%	60%	0,17	2,55
Median 50%	50%	0,16	2,67
75%	25%	0,12	3,04
84%	16%	0,11	3,23
90%	10%	0,10	3,38
95%	5%	0,08	3,57

Moments Statistics

Mean	2,65
Sorting	0,61
Skewness	-0,09
Kurtosis	1,03
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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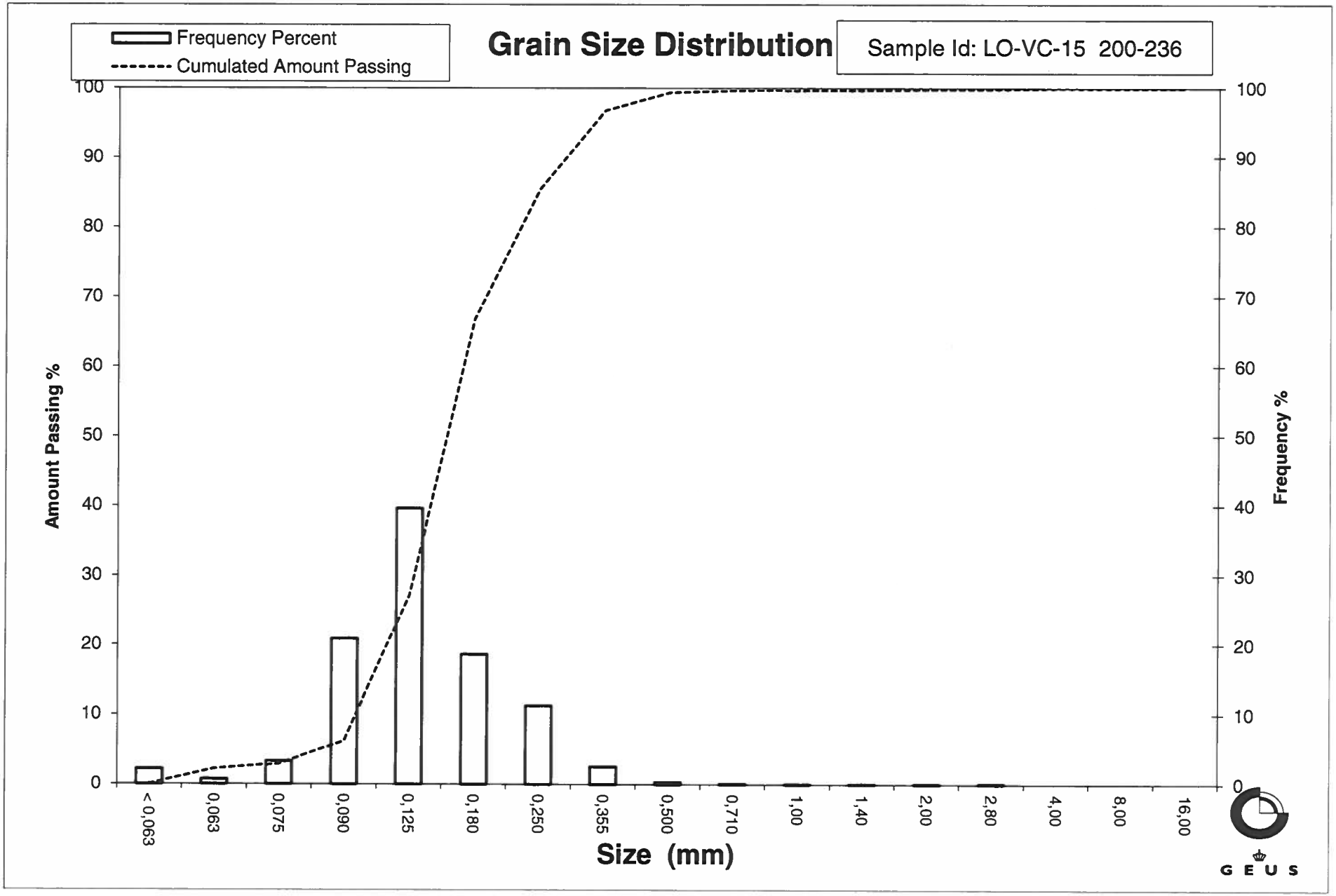
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-15 200-236
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-16 0-50
Lab. Id: 230541
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,2g skaller

GEUS

Total Weight 98,455 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	0,11	0,11	99,89
	2,00	-1,00	0,07	0,07	99,82
Sand	1,40	-0,49	0,07	0,07	99,75
	1,00	0,00	0,14	0,14	99,60
	0,710	0,49	0,49	0,50	99,11
	0,500	1,00	2,53	2,57	96,54
	0,355	1,49	11,45	11,63	84,91
	0,250	2,00	34,86	35,41	49,50
	0,180	2,47	32,45	32,96	16,54
	0,125	3,00	11,16	11,34	5,21
	0,090	3,47	3,35	3,41	1,80
	0,075	3,74	0,53	0,54	1,26
	0,063	3,99	0,26	0,27	0,99
	< 0,063	> 3,99	0,98	0,99	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	0,99
Sand, fine	(0,063 mm - 0,200 mm):	24,97
Sand, medium	(0,2 mm - 0,6 mm):	71,80
Sand, coarse	(0,6 mm - 2 mm):	2,06
Gravel	(> 2 mm):	0,18
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,48	1,06
16%	84%	0,35	1,51
25%	75%	0,33	1,62
40%	60%	0,28	1,83
Median 50%	50%	0,25	1,99
75%	25%	0,20	2,34
84%	16%	0,18	2,50
90%	10%	0,15	2,75
95%	5%	0,12	3,02

Moments Statistics

Mean	2,00
Sorting	0,55
Skewness	0,03
Kurtosis	1,12
Uniformity Coefficient	1,90

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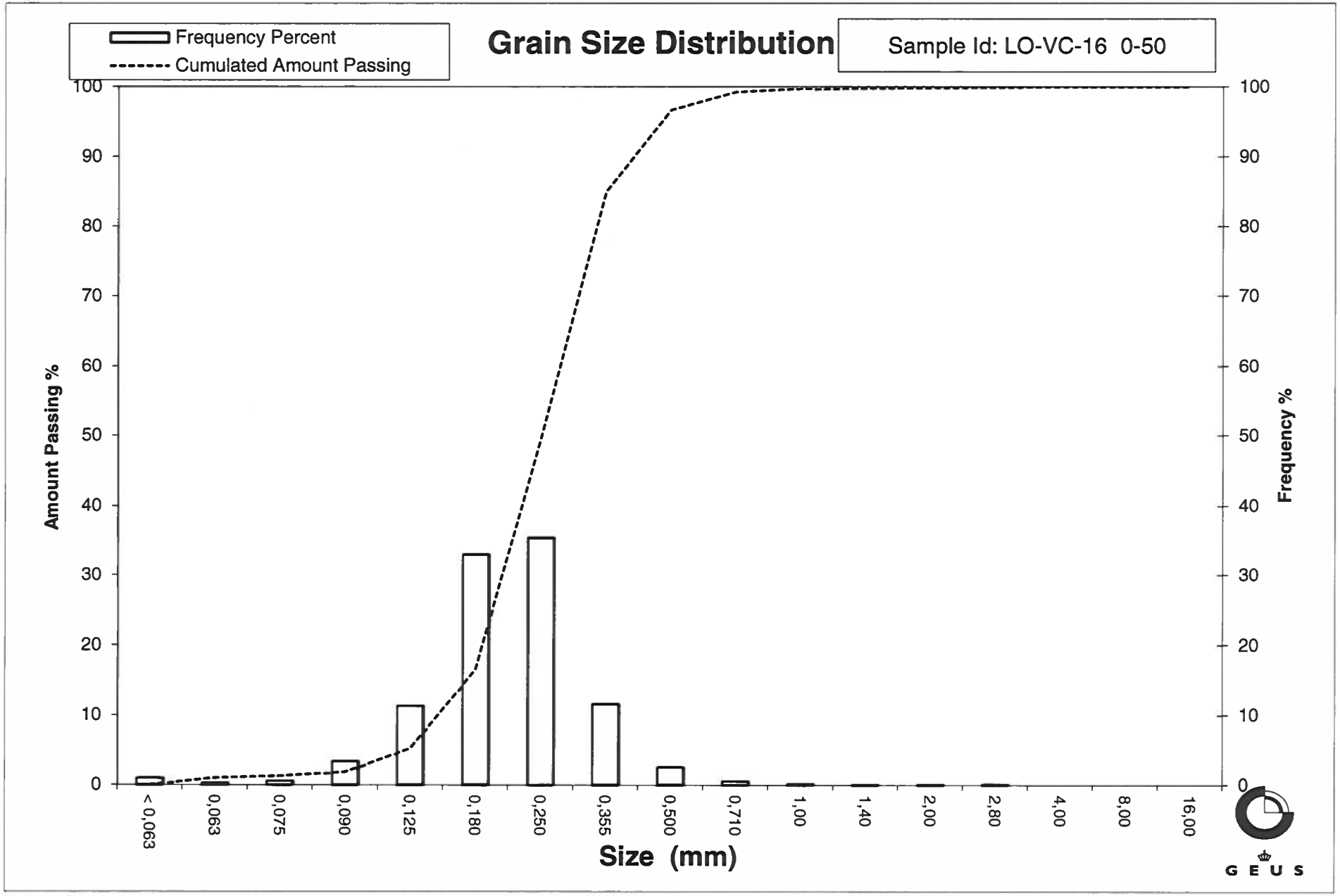
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-16 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-16 100-150
Lab. Id: 230542
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 93,611 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	0,01	0,01	99,99
	0,710	0,49	0,05	0,05	99,94
	0,500	1,00	0,08	0,08	99,85
	0,355	1,49	0,86	0,92	98,94
	0,250	2,00	14,26	15,23	83,71
	0,180	2,47	47,99	51,26	32,44
	0,125	3,00	12,75	13,62	18,82
	0,090	3,47	13,19	14,09	4,73
	0,075	3,74	2,30	2,45	2,28
	0,063	3,99	0,82	0,87	1,41
	< 0,063	> 3,99	1,32	1,41	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	1,41
Sand, fine	(0,063 mm - 0,200 mm):	45,68
Sand, medium	(0,2 mm - 0,6 mm):	52,80
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%	0,33	1,61
16%	84%	0,25	1,99
25%	75%	0,24	2,07
40%	60%	0,22	2,20
Median 50%	50%	0,20	2,29
75%	25%	0,15	2,74
84%	16%	0,12	3,08
90%	10%	0,10	3,28
95%	5%	0,09	3,46

Moments Statistics

Mean	2,46
Sorting	0,55
Skewness	0,35
Kurtosis	1,14
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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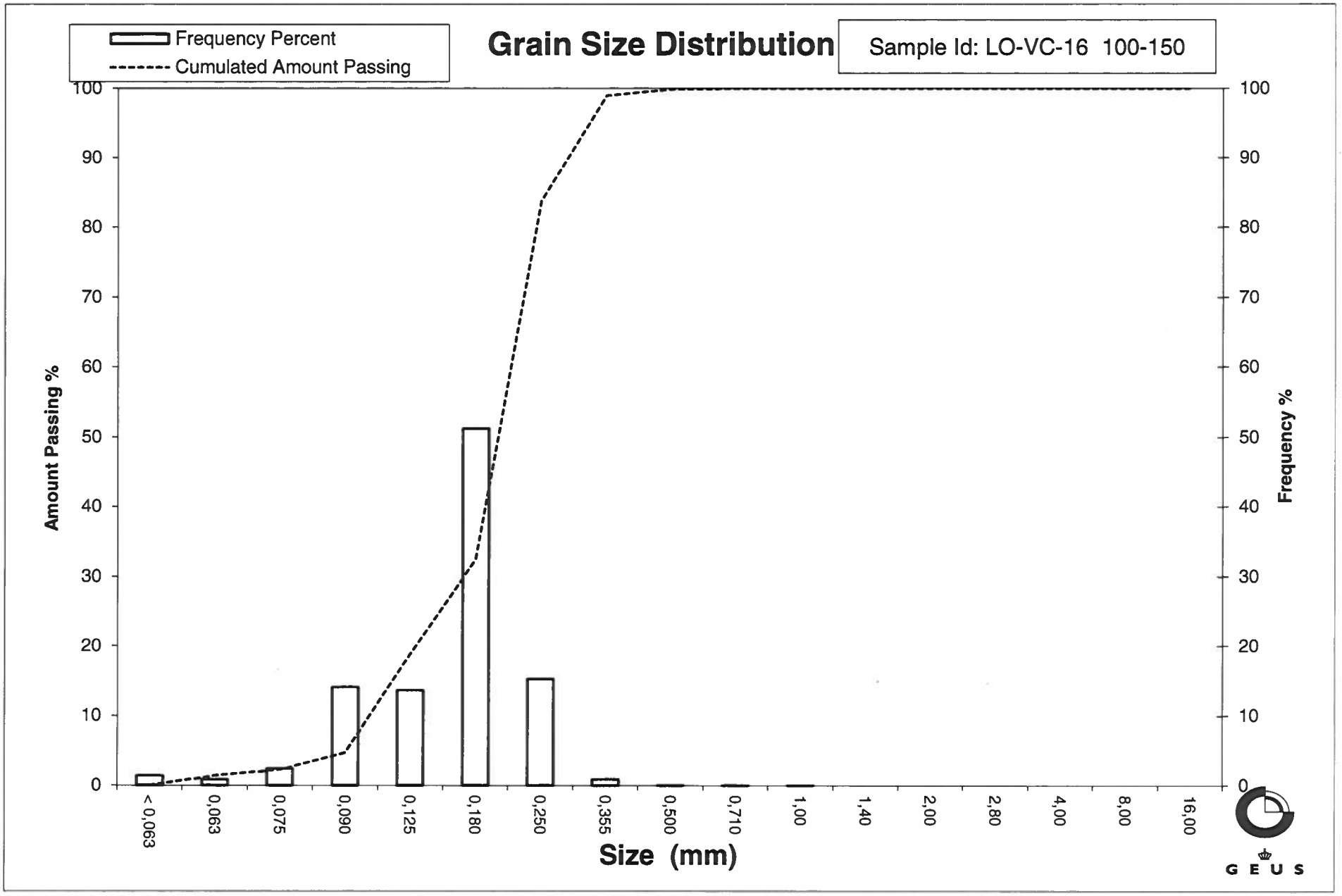
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-16 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-16 185-235
Lab. Id: 230543
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,3g skaller

GEUS

Total Weight 99,103 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	0,15	0,15	99,85
	2,80	-1,49	0,07	0,07	99,79
	2,00	-1,00	0,10	0,10	99,69
Sand	1,40	-0,49	0,10	0,10	99,59
	1,00	0,00	0,30	0,30	99,28
	0,710	0,49	0,41	0,41	98,87
	0,500	1,00	2,50	2,52	96,36
	0,355	1,49	12,14	12,25	84,11
	0,250	2,00	38,17	38,52	45,59
	0,180	2,47	28,94	29,20	16,39
	0,125	3,00	8,36	8,44	7,95
	0,090	3,47	5,38	5,42	2,53
	0,075	3,74	1,01	1,02	1,51
	0,063	3,99	0,36	0,37	1,14
	< 0,063	> 3,99	1,13	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):	23,59
Sand, medium	(0,2 mm - 0,6 mm):	72,82
Sand, coarse	(0,6 mm - 2 mm):	2,13
Gravel	(> 2 mm):	0,31
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,48	1,05
16%	84%	0,35	1,50
25%	75%	0,33	1,60
40%	60%	0,29	1,79
Median 50%	50%	0,26	1,93
75%	25%	0,20	2,32
84%	16%	0,18	2,49
90%	10%	0,14	2,85
95%	5%	0,11	3,24

Moments Statistics

Mean	1,97
Sorting	0,58
Skewness	0,16
Kurtosis	1,25
Uniformity Coefficient	2,09

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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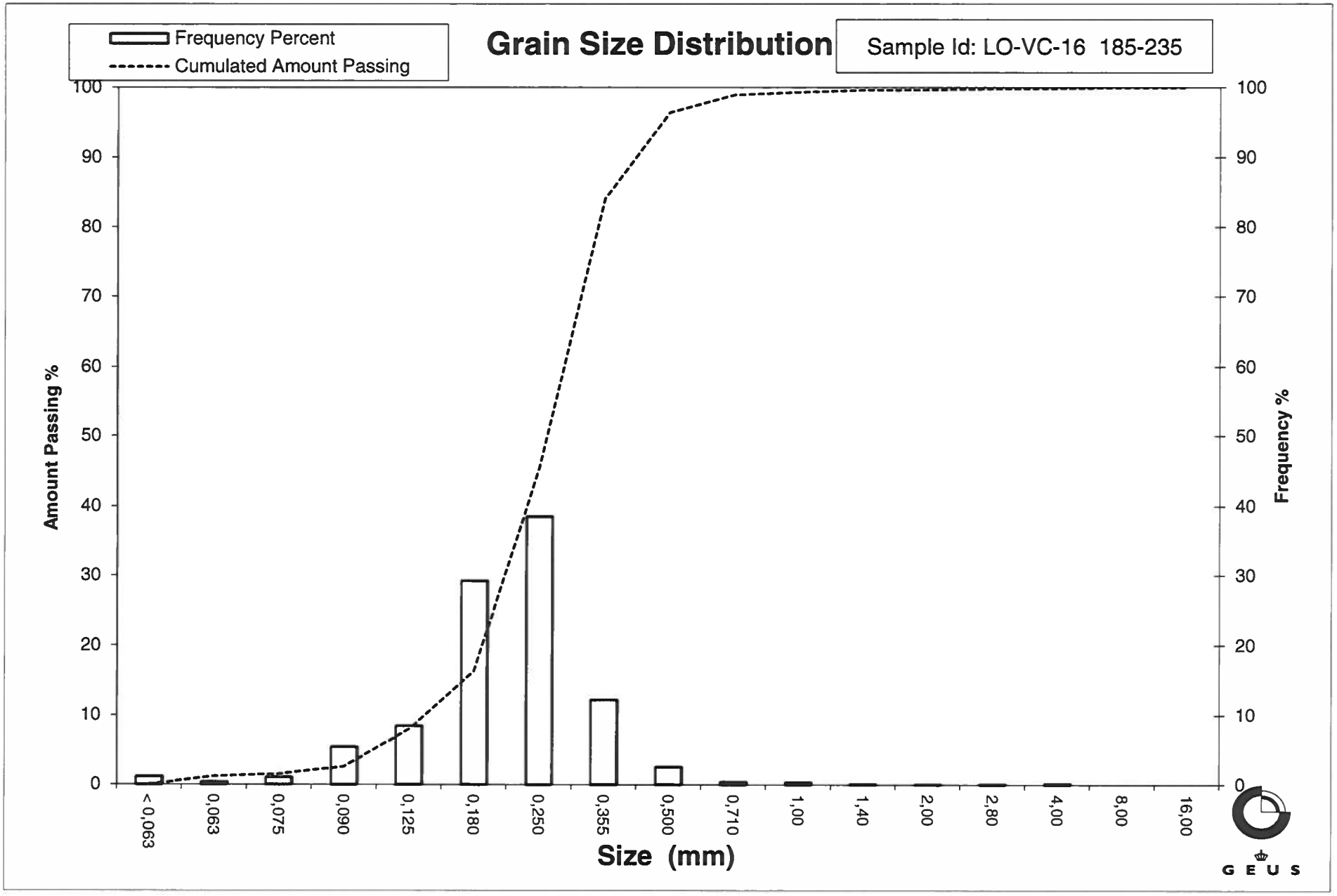
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-16 185-235
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-16 270-320
Lab. Id: 230544
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1mm består af skaller

G E U S

Total Weight 92,759 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	0,03	0,04	99,96
	2,00	-1,00	0,01	0,01	99,96
Sand	1,40	-0,49	0,01	0,01	99,94
	1,00	0,00	0,02	0,02	99,93
	0,710	0,49	0,03	0,04	99,89
	0,500	1,00	0,16	0,17	99,72
	0,355	1,49	0,81	0,87	98,85
	0,250	2,00	4,90	5,28	93,56
	0,180	2,47	12,91	13,92	79,65
	0,125	3,00	16,26	17,52	62,12
	0,090	3,47	42,68	46,01	16,11
	0,075	3,74	6,99	7,53	8,58
	0,063	3,99	2,73	2,94	5,64
	< 0,063	> 3,99	5,23	5,64	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,64
Sand, fine	(0,063 mm - 0,200 mm):	77,98
Sand, medium	(0,2 mm - 0,6 mm):	16,18
Sand, coarse	(0,6 mm - 2 mm):	0,16
Gravel	(> 2 mm):	0,04
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,28	1,84
16%	84%	0,20	2,31
25%	75%	0,17	2,60
40%	60%	0,12	3,02
Median 50%	50%	0,12	3,11
75%	25%	0,10	3,37
84%	16%	0,09	3,48
90%	10%	0,08	3,68
95%	5%	-------	-------

Moments Statistics

Mean	2,97
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,59

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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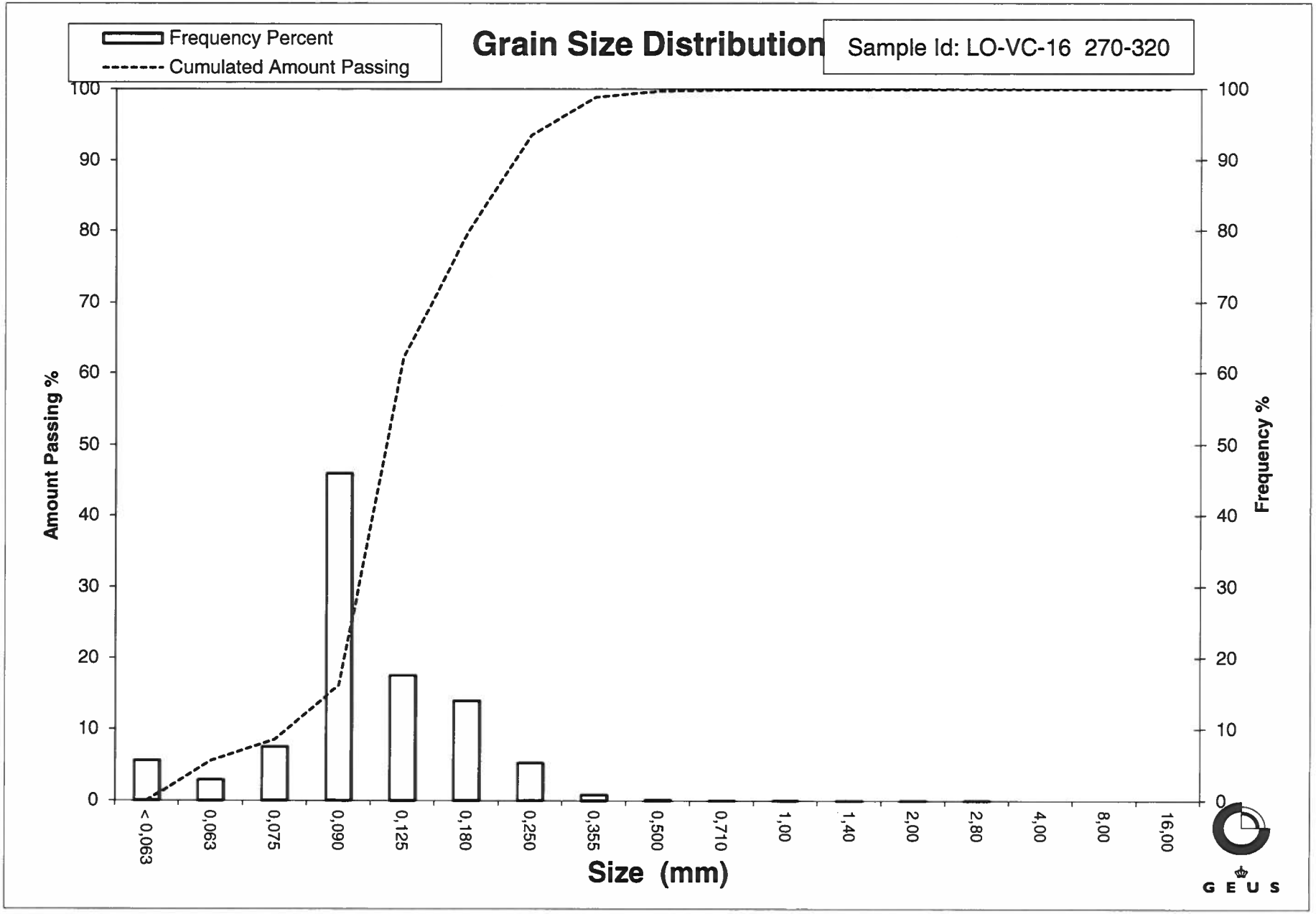
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-16 270-320
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-17 0-50
Lab. Id: 230545
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

Total Weight 95,336 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	0,08	0,08	99,92
	2,80	-1,49	0,01	0,01	99,91
	2,00	-1,00	0,05	0,05	99,86
Sand	1,40	-0,49	0,02	0,02	99,84
	1,00	0,00	0,05	0,06	99,78
	0,710	0,49	0,05	0,05	99,73
	0,500	1,00	0,06	0,06	99,66
	0,355	1,49	0,11	0,12	99,55
	0,250	2,00	0,21	0,22	99,33
	0,180	2,47	0,34	0,36	98,97
	0,125	3,00	28,75	30,16	68,81
	0,090	3,47	51,86	54,40	14,41
	0,075	3,74	6,95	7,28	7,12
	0,063	3,99	2,07	2,18	4,95
	< 0,063	> 3,99	4,72	4,95	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,95
Sand, fine	(0,063 mm - 0,200 mm):	94,12
Sand, medium	(0,2 mm - 0,6 mm):	0,62
Sand, coarse	(0,6 mm - 2 mm):	0,16
Gravel	(> 2 mm):	0,14
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,17	2,53
16%	84%	0,15	2,71
25%	75%	0,14	2,88
40%	60%	0,12	3,07
Median 50%	50%	0,11	3,15
75%	25%	0,10	3,37
84%	16%	0,09	3,46
90%	10%	0,08	3,63
95%	5%	0,06	3,98

Moments Statistics

Mean	3,11
Sorting	0,41
Skewness	-0,01
Kurtosis	1,20
Uniformity Coefficient	1,47

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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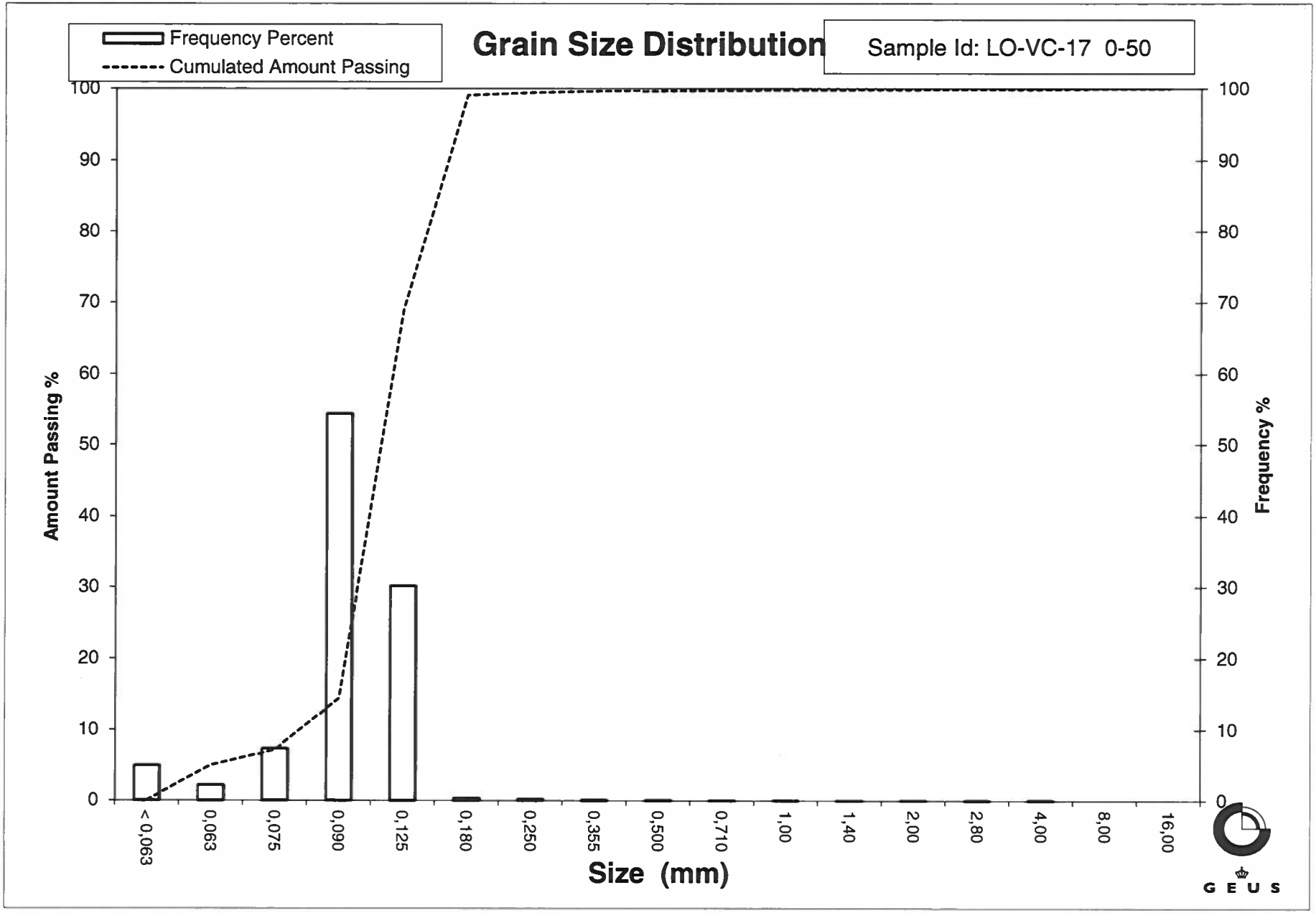
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-17 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-17 100-150
Lab. Id: 230546
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf skaller 0,2g

G E U S

Total Weight 93,354 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	0,05	0,05	99,95
	4,00	-2,00	0,07	0,08	99,87
	2,80	-1,49	0,05	0,05	99,82
	2,00	-1,00	0,11	0,11	99,70
Sand	1,40	-0,49	0,03	0,03	99,68
	1,00	0,00	0,05	0,06	99,62
	0,710	0,49	0,03	0,04	99,58
	0,500	1,00	0,04	0,04	99,54
	0,355	1,49	0,05	0,06	99,48
	0,250	2,00	0,11	0,11	99,37
	0,180	2,47	0,22	0,23	99,13
	0,125	3,00	17,91	19,19	79,95
	0,090	3,47	57,87	61,99	17,96
	0,075	3,74	9,34	10,00	7,95
	0,063	3,99	2,70	2,89	5,06
	< 0,063	> 3,99	4,72	5,06	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,06
Sand, fine	(0,063 mm - 0,200 mm):	94,14
Sand, medium	(0,2 mm - 0,6 mm):	0,36
Sand, coarse	(0,6 mm - 2 mm):	0,14
Gravel	(> 2 mm):	0,30
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,17	2,57
16%	84%	0,14	2,87
25%	75%	0,12	3,03
40%	60%	0,11	3,14
Median 50%	50%	0,11	3,21
75%	25%	0,09	3,41
84%	16%	0,09	3,52
90%	10%	0,08	3,68
95%	5%	-------	-------

Moments Statistics

Mean	3,20
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,46

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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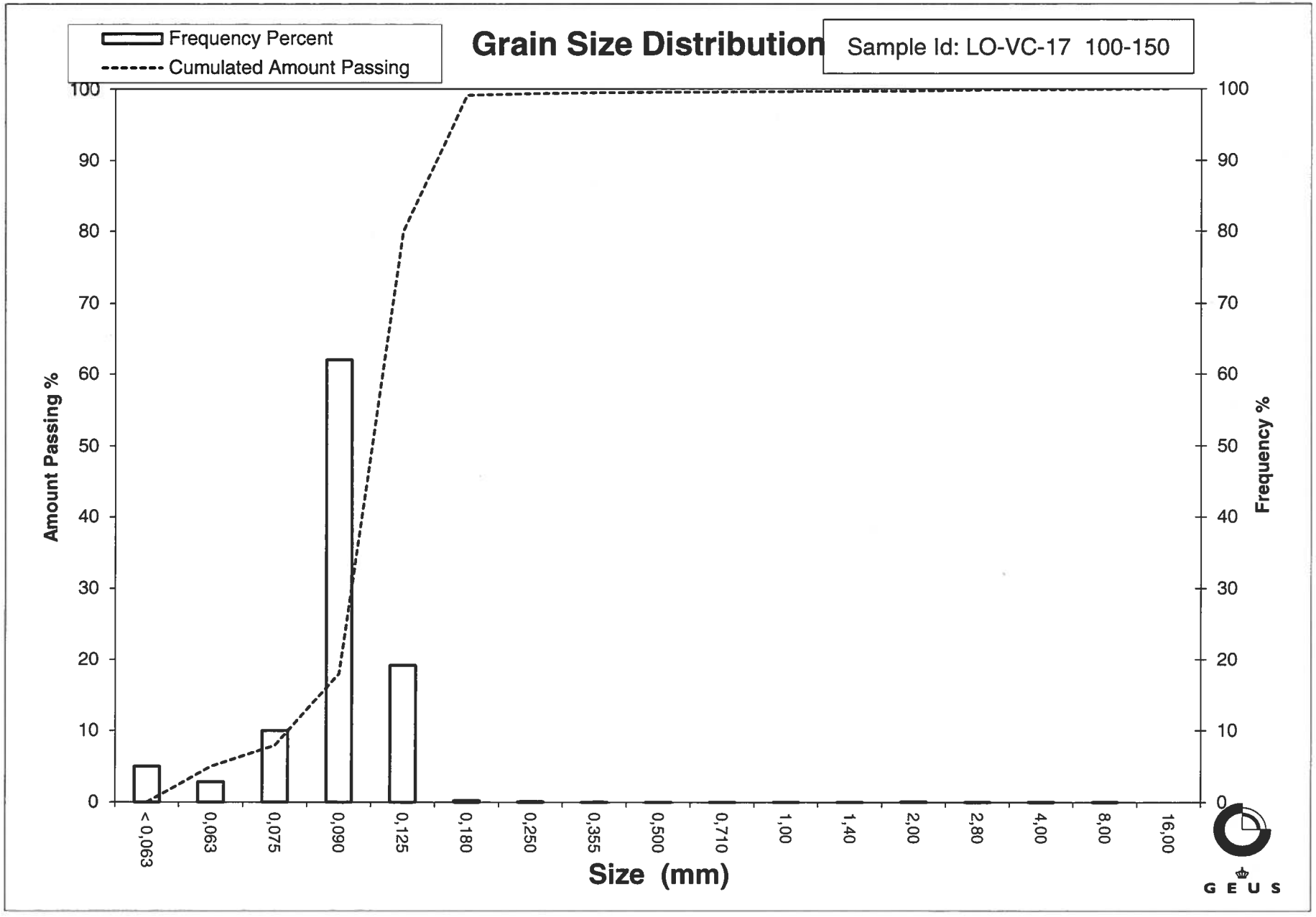
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-17 100-150
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-17 200-250
Lab. Id: 230547
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1mm består af skaller

G E U S

Total Weight 93,347 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	0,01	0,01	99,99
	2,00	-1,00	0,03	0,03	99,95
Sand	1,40	-0,49	0,01	0,01	99,94
	1,00	0,00	0,02	0,02	99,92
	0,710	0,49	0,03	0,03	99,89
	0,500	1,00	0,03	0,03	99,86
	0,355	1,49	0,05	0,05	99,81
	0,250	2,00	0,05	0,06	99,75
	0,180	2,47	0,26	0,28	99,47
	0,125	3,00	13,79	14,77	84,70
	0,090	3,47	62,75	67,22	17,48
	0,075	3,74	8,22	8,80	8,68
	0,063	3,99	3,07	3,29	5,39
	< 0,063	> 3,99	5,03	5,39	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,39
Sand, fine	(0,063 mm - 0,200 mm):	94,16
Sand, medium	(0,2 mm - 0,6 mm):	0,32
Sand, coarse	(0,6 mm - 2 mm):	0,08
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%	0,16	2,61
16%	84%	0,12	3,00
25%	75%	0,12	3,06
40%	60%	0,11	3,16
Median 50%	50%	0,11	3,23
75%	25%	0,09	3,41
84%	16%	0,09	3,51
90%	10%	0,08	3,69
95%	5%	-------	-------

Moments Statistics

Mean	3,25
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,45

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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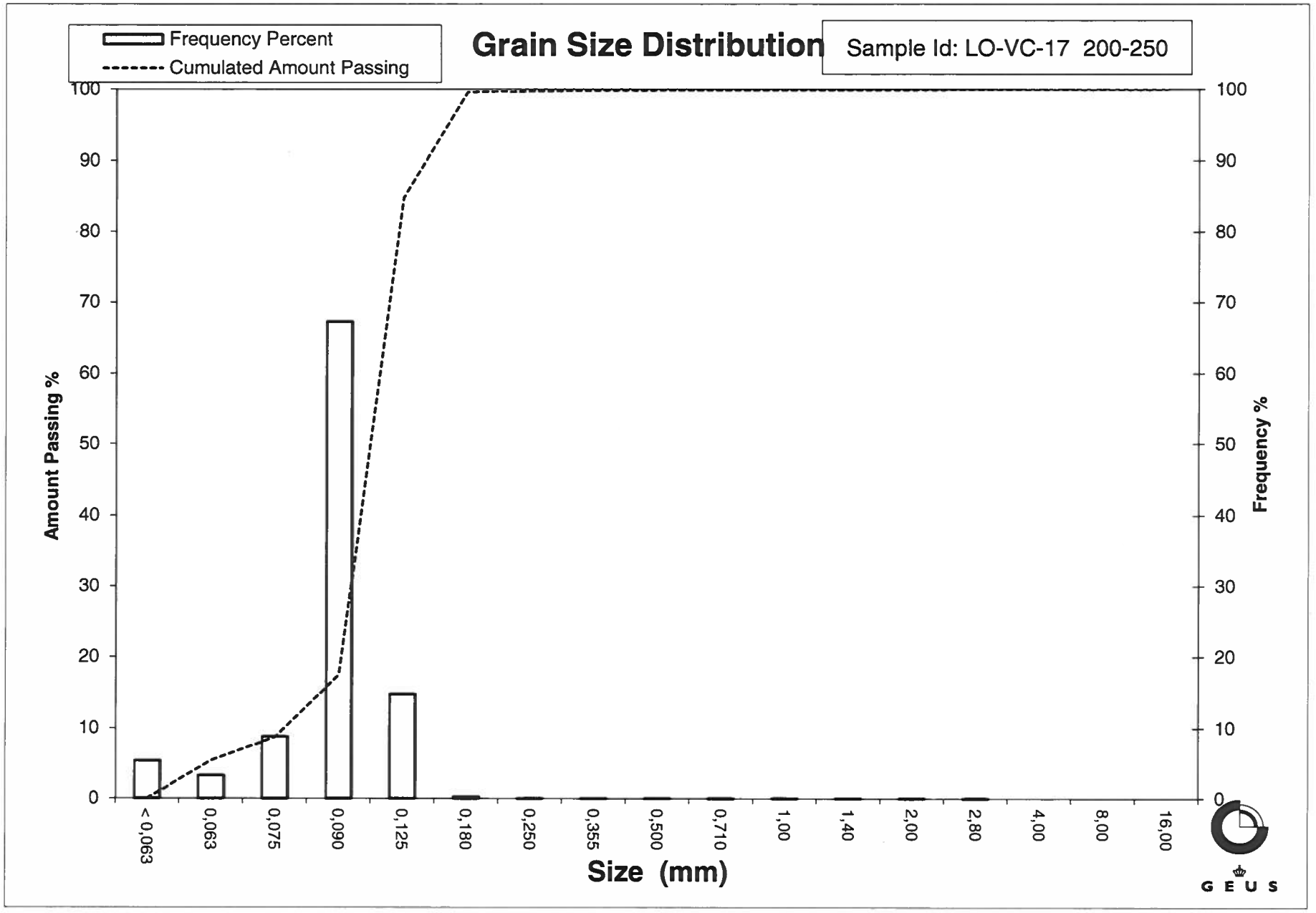
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-17 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-17 330-380
Lab. Id: 230548
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

GEUS

Total Weight 93,752 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	0,03	0,03	99,97
	2,00	-1,00	0,17	0,18	99,79
Sand	1,40	-0,49	0,13	0,14	99,65
	1,00	0,00	0,10	0,10	99,55
	0,710	0,49	0,20	0,21	99,33
	0,500	1,00	0,44	0,47	98,87
	0,355	1,49	0,71	0,76	98,10
	0,250	2,00	0,67	0,72	97,39
	0,180	2,47	0,54	0,58	96,81
	0,125	3,00	3,94	4,20	92,61
	0,090	3,47	25,18	26,86	65,75
	0,075	3,74	19,21	20,48	45,27
	0,063	3,99	18,24	19,45	25,82
	< 0,063	> 3,99	24,21	25,82	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	25,82
Sand, fine	(0,063 mm - 0,200 mm):	71,16
Sand, medium	(0,2 mm - 0,6 mm):	2,11
Sand, coarse	(0,6 mm - 2 mm):	0,70
Gravel	(> 2 mm):	0,21
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,16	2,68
16%	84%	0,11	3,14
25%	75%	0,10	3,29
40%	60%	0,09	3,54
Median 50%	50%	0,08	3,67
75%	25%	-------	-------
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,40
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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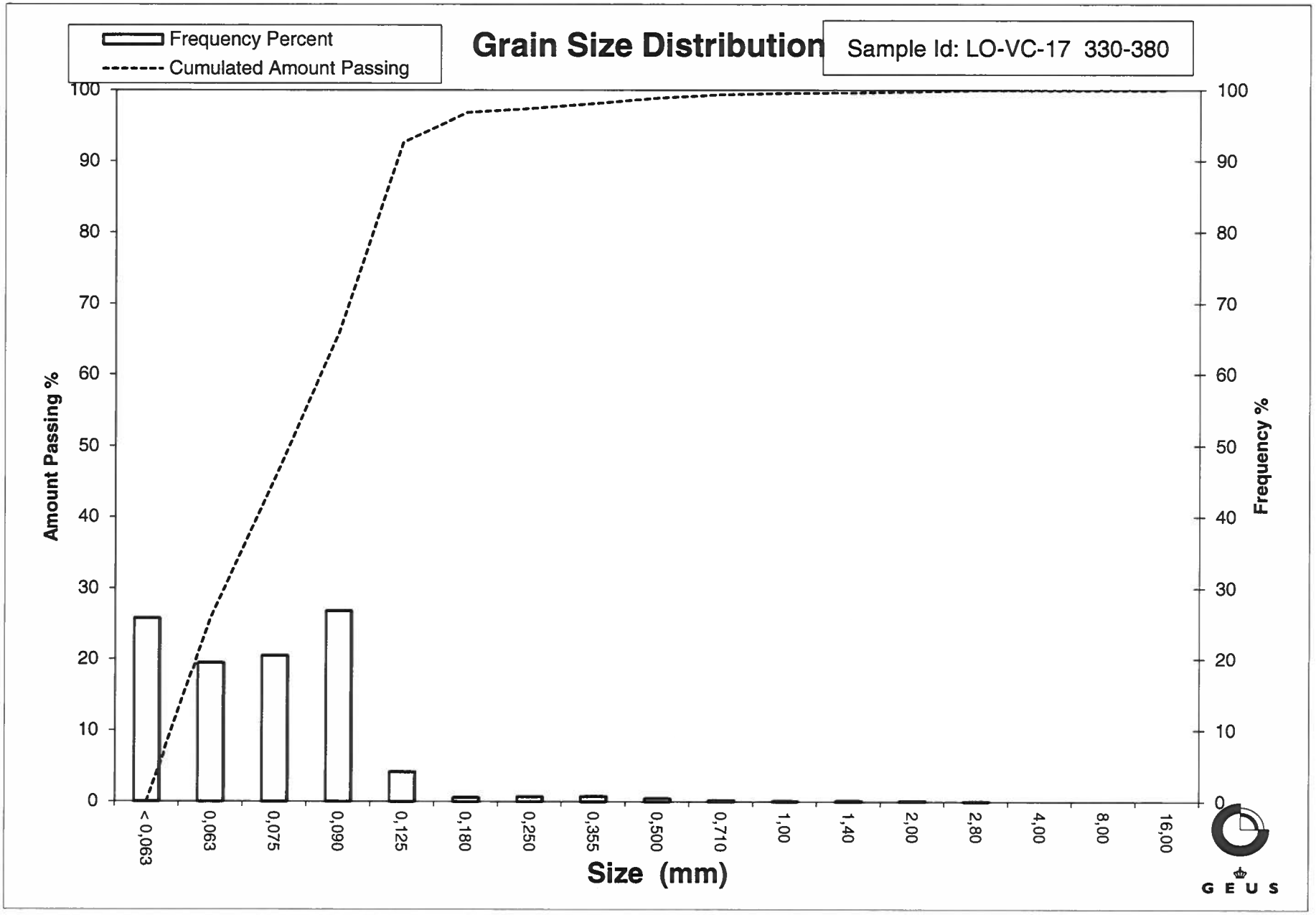
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-17 330-380
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-17 430-480
Lab. Id: 230549
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 94,322 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	0,00	0,00	100,00
	0,710	0,49	0,01	0,01	99,99
	0,500	1,00	0,01	0,01	99,98
	0,355	1,49	0,02	0,02	99,96
	0,250	2,00	0,08	0,08	99,87
	0,180	2,47	0,07	0,07	99,81
	0,125	3,00	1,52	1,61	98,20
	0,090	3,47	16,46	17,45	80,75
	0,075	3,74	11,18	11,85	68,89
	0,063	3,99	20,62	21,86	47,03
	< 0,063	> 3,99	44,36	47,03	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	47,03
Sand, fine	(0,063 mm - 0,200 mm):	52,79
Sand, medium	(0,2 mm - 0,6 mm):	0,16
Sand, coarse	(0,6 mm - 2 mm):	0,01
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%	0,10	3,37
25%	75%	0,08	3,60
40%	60%	0,07	3,83
Median 50%	50%	0,06	3,95
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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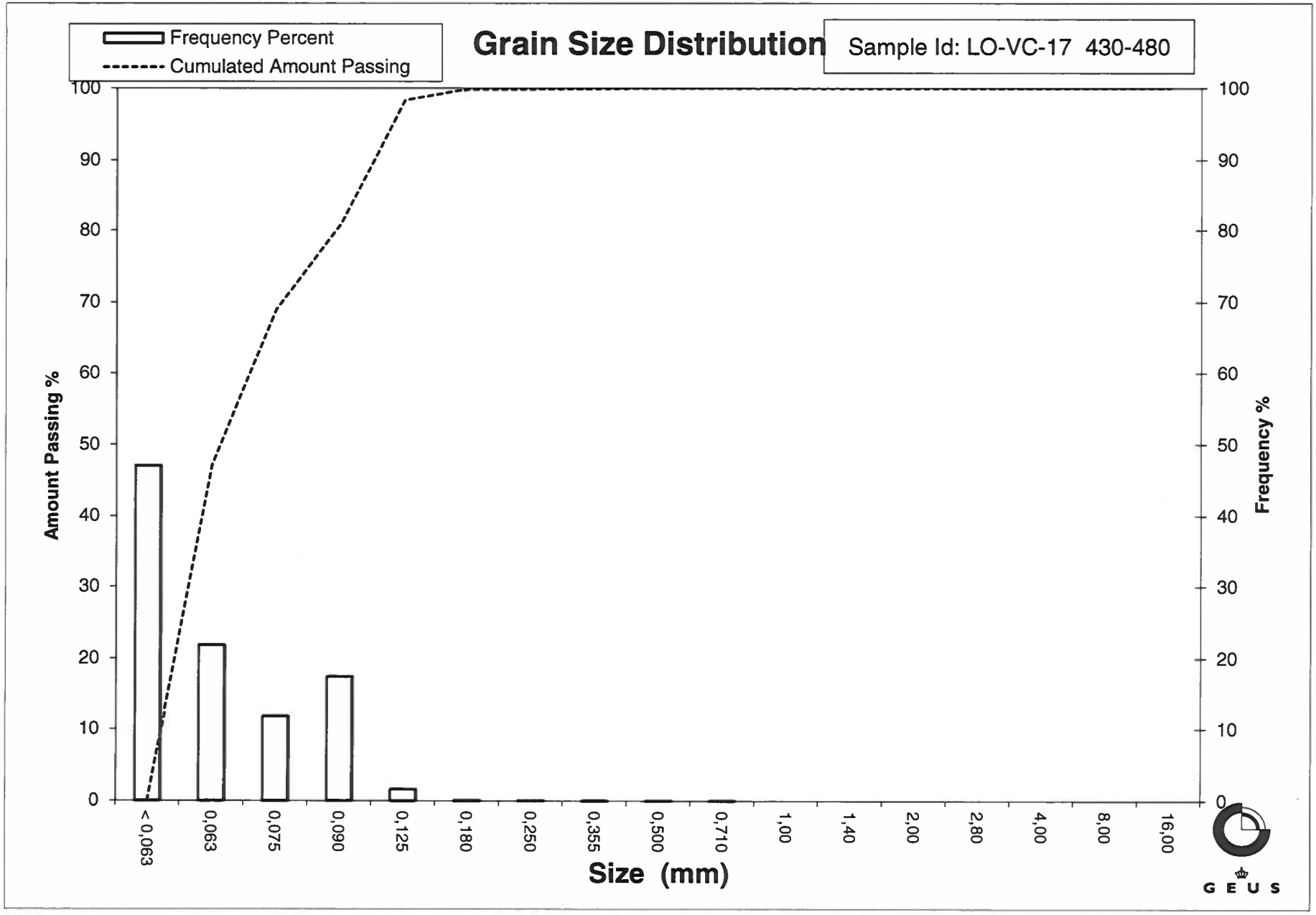
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-17 430-480
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-18 0-50
Lab. Id: 230550
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm heraf 0,2g skaller

GEUS

Total Weight 94,476 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	0,16	0,17	99,83
	2,80	-1,49	0,02	0,03	99,81
	2,00	-1,00	0,04	0,04	99,77
Sand	1,40	-0,49	0,04	0,05	99,72
	1,00	0,00	0,04	0,04	99,68
	0,710	0,49	0,16	0,17	99,52
	0,500	1,00	0,54	0,57	98,95
	0,355	1,49	1,95	2,06	96,88
	0,250	2,00	5,05	5,34	91,54
	0,180	2,47	13,36	14,14	77,40
	0,125	3,00	17,38	18,40	59,00
	0,090	3,47	33,58	35,54	23,45
	0,075	3,74	7,82	8,28	15,17
	0,063	3,99	2,72	2,88	12,29
	< 0,063	> 3,99	11,61	12,29	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	12,29
Sand, fine	(0,063 mm - 0,200 mm):	69,15
Sand, medium	(0,2 mm - 0,6 mm):	17,78
Sand, coarse	(0,6 mm - 2 mm):	0,55
Gravel	(> 2 mm):	0,23
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,32	1,65
16%	84%	0,21	2,23
25%	75%	0,17	2,53
40%	60%	0,13	2,97
Median 50%	50%	0,12	3,11
75%	25%	0,09	3,45
84%	16%	0,08	3,71
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,02
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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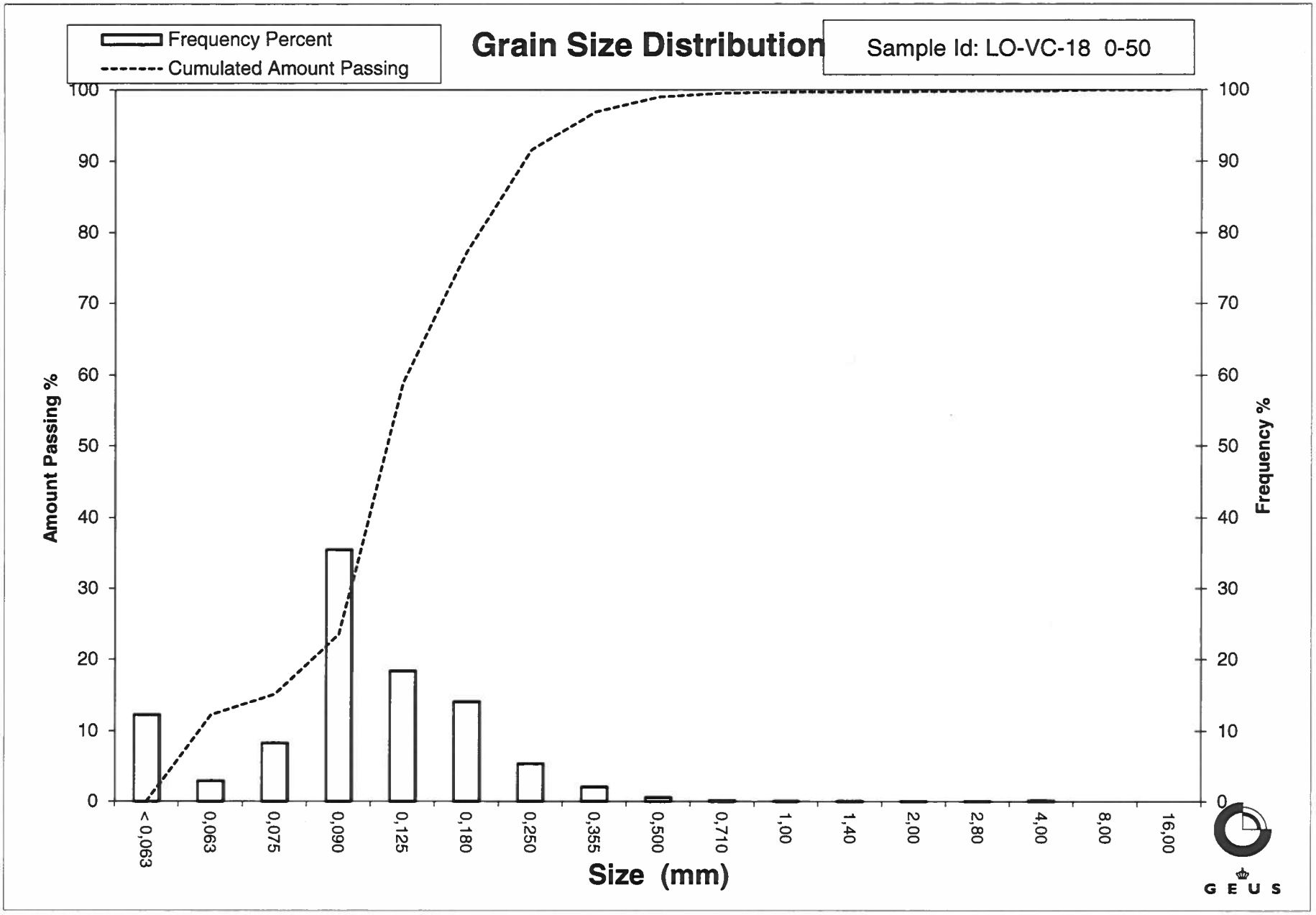
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-18 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-18 100-150
Lab. Id: 230551
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

G E U S

Total Weight 95 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	0,23	0,24	99,76
	2,80	-1,49	0,02	0,02	99,73
	2,00	-1,00	0,06	0,07	99,67
Sand	1,40	-0,49	0,03	0,03	99,63
	1,00	0,00	0,12	0,12	99,51
	0,710	0,49	0,19	0,20	99,31
	0,500	1,00	0,41	0,43	98,88
	0,355	1,49	0,83	0,87	98,01
	0,250	2,00	2,10	2,21	95,81
	0,180	2,47	4,43	4,66	91,15
	0,125	3,00	15,14	15,93	75,21
	0,090	3,47	37,59	39,57	35,64
	0,075	3,74	13,30	14,00	21,64
	0,063	3,99	4,66	4,90	16,73
	< 0,063	> 3,99	15,90	16,73	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	16,73
Sand, fine	(0,063 mm - 0,200 mm):	75,74
Sand, medium	(0,2 mm - 0,6 mm):	6,61
Sand, coarse	(0,6 mm - 2 mm):	0,58
Gravel	(> 2 mm):	0,33
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%	0,16	2,69
25%	75%	0,12	3,00
40%	60%	0,11	3,16
Median 50%	50%	0,10	3,28
75%	25%	0,08	3,67
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	2,99
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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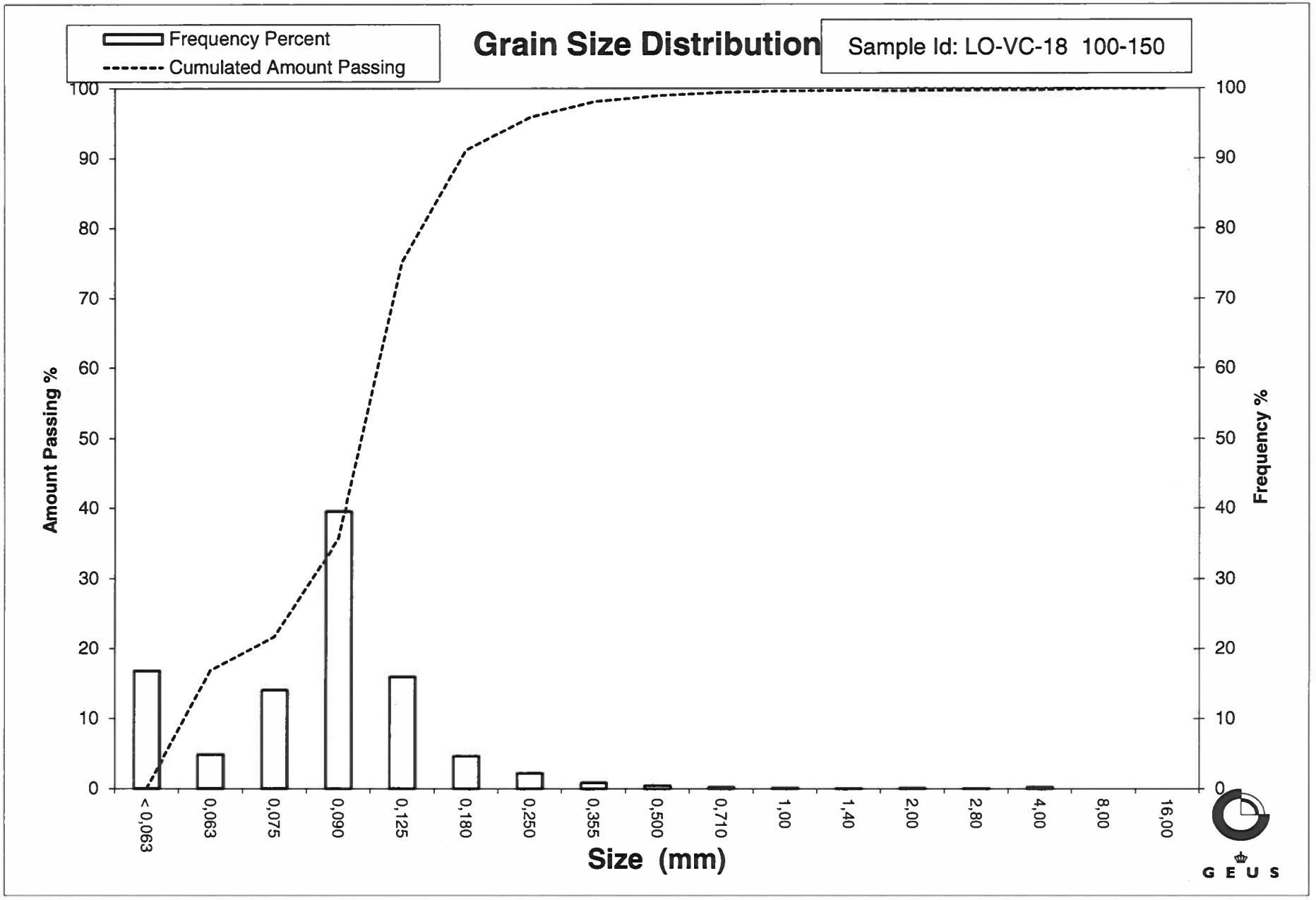
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-18 100-150
Amount Passing %
Frequency %
Size (mm)
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-18 200-250
Lab. Id: 230552
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1mm består af skaller

GEUS

Total Weight 94,402 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	0,23	0,24	99,76
	4,00	-2,00	0,15	0,16	99,60
	2,80	-1,49	0,12	0,13	99,47
	2,00	-1,00	0,14	0,14	99,33
Sand	1,40	-0,49	0,07	0,08	99,25
	1,00	0,00	0,09	0,10	99,15
	0,710	0,49	0,09	0,10	99,05
	0,500	1,00	0,10	0,10	98,95
	0,355	1,49	0,17	0,18	98,77
	0,250	2,00	0,50	0,53	98,24
	0,180	2,47	1,56	1,66	96,58
	0,125	3,00	11,05	11,71	84,88
	0,090	3,47	47,80	50,63	34,24
	0,075	3,74	13,81	14,63	19,62
	0,063	3,99	4,63	4,90	14,72
	< 0,063	> 3,99	13,89	14,72	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	14,72
Sand, fine	(0,063 mm - 0,200 mm):	82,34
Sand, medium	(0,2 mm - 0,6 mm):	1,94
Sand, coarse	(0,6 mm - 2 mm):	0,33
Gravel	(> 2 mm):	0,67
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,17	2,53
16%	84%	0,12	3,01
25%	75%	0,12	3,08
40%	60%	0,11	3,21
Median 50%	50%	0,10	3,31
75%	25%	0,08	3,63
84%	16%	0,07	3,92
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,41
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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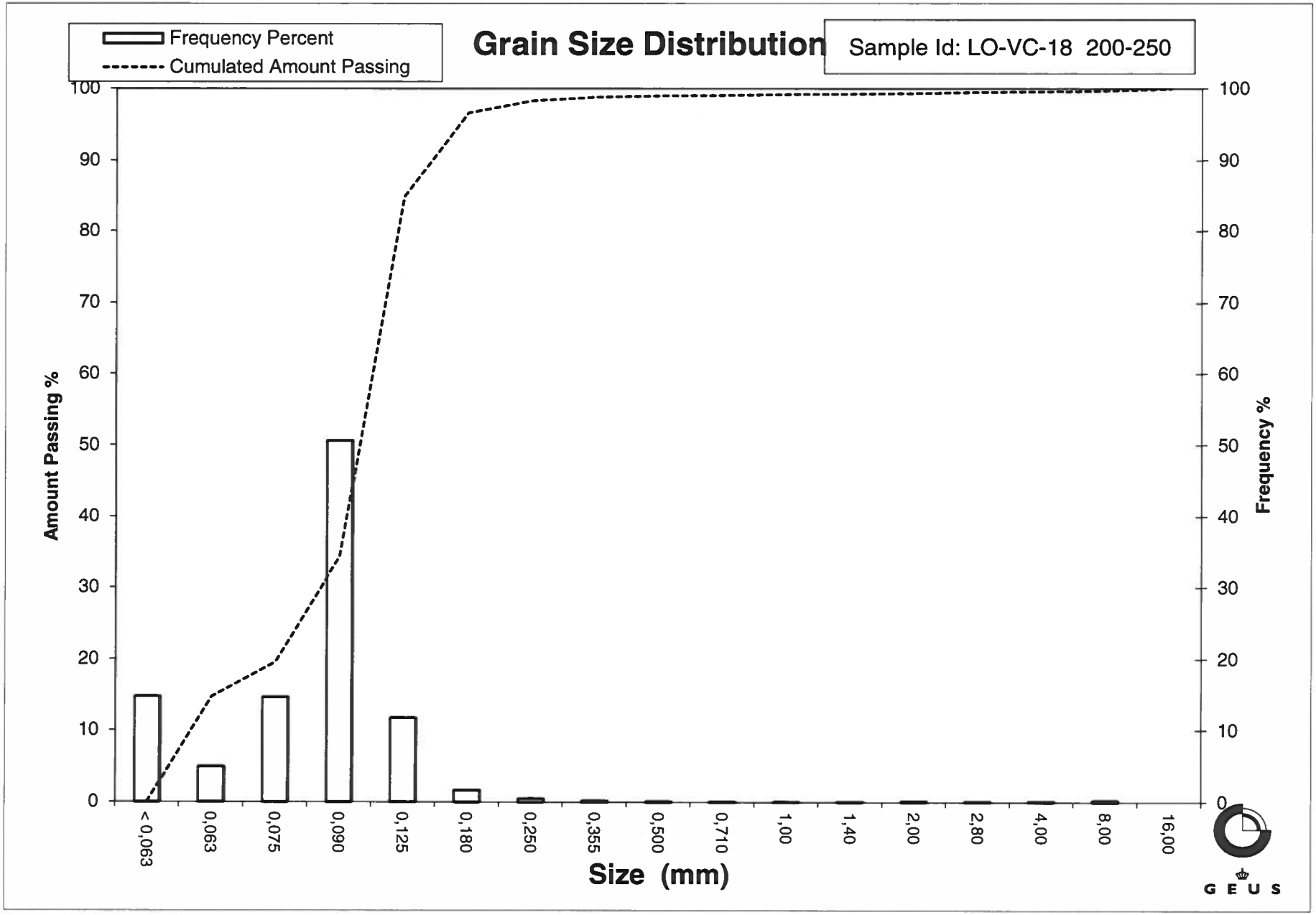
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-18 200-250
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-18 300-350
Lab. Id: 230553
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 90,992 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	0,01	0,01	99,99
Sand	1,40	-0,49	0,00	0,00	99,99
	1,00	0,00	0,01	0,01	99,98
	0,710	0,49	0,02	0,02	99,96
	0,500	1,00	0,02	0,03	99,93
	0,355	1,49	0,05	0,05	99,88
	0,250	2,00	0,06	0,07	99,81
	0,180	2,47	1,01	1,11	98,70
	0,125	3,00	17,22	18,92	79,78
	0,090	3,47	35,72	39,26	40,52
	0,075	3,74	12,48	13,72	26,81
	0,063	3,99	11,72	12,88	13,93
	< 0,063	> 3,99	12,67	13,93	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	13,93
Sand, fine	(0,063 mm - 0,200 mm):	85,09
Sand, medium	(0,2 mm - 0,6 mm):	0,93
Sand, coarse	(0,6 mm - 2 mm):	0,04
Gravel	(> 2 mm):	0,01
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,17	2,56
16%	84%	0,14	2,86
25%	75%	0,12	3,05
40%	60%	0,11	3,22
Median 50%	50%	0,10	3,34
75%	25%	0,07	3,77
84%	16%	0,06	3,94
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,38
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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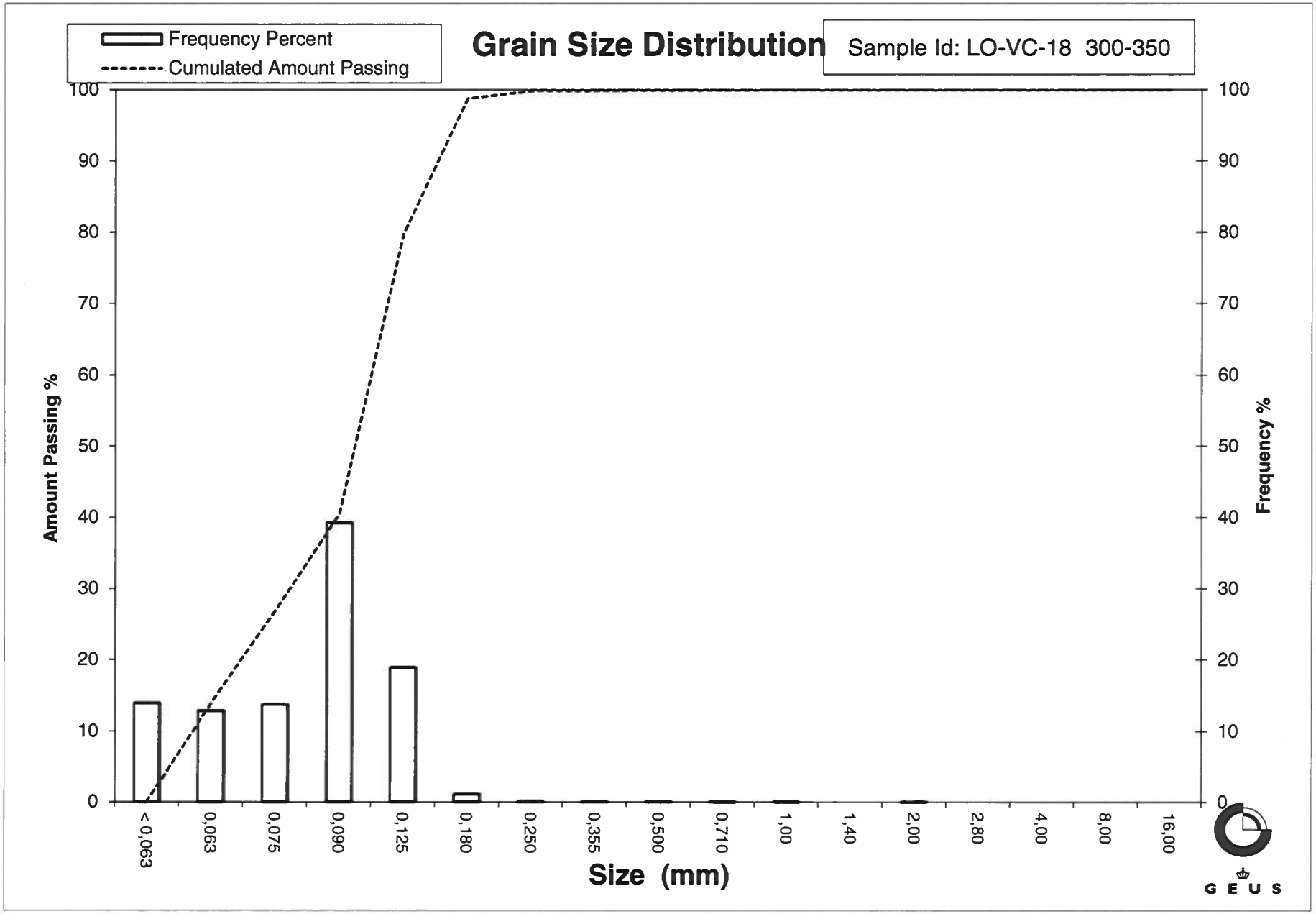
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-18 300-350
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-18 400-450
Lab. Id: 230554
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks:

GEUS

Total Weight 98,009 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	0,00	0,00	100,00
	0,710	0,49	0,01	0,01	99,99
	0,500	1,00	0,01	0,01	99,98
	0,355	1,49	0,03	0,03	99,95
	0,250	2,00	0,24	0,24	99,71
	0,180	2,47	5,06	5,17	94,54
	0,125	3,00	19,24	19,63	74,91
	0,090	3,47	29,06	29,65	45,25
	0,075	3,74	11,41	11,65	33,61
	0,063	3,99	10,10	10,30	23,31
	< 0,063	> 3,99	22,84	23,31	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	23,31
Sand, fine	(0,063 mm - 0,200 mm):	72,71
Sand, medium	(0,2 mm - 0,6 mm):	3,97
Sand, coarse	(0,6 mm - 2 mm):	0,01
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%	0,19	2,42
16%	84%	0,15	2,73
25%	75%	0,13	3,00
40%	60%	0,11	3,22
Median 50%	50%	0,10	3,39
75%	25%	0,06	3,94
84%	16%	-------	-------
90%	10%	-------	-------
95%	5%	-------	-------

Moments Statistics

Mean	3,06
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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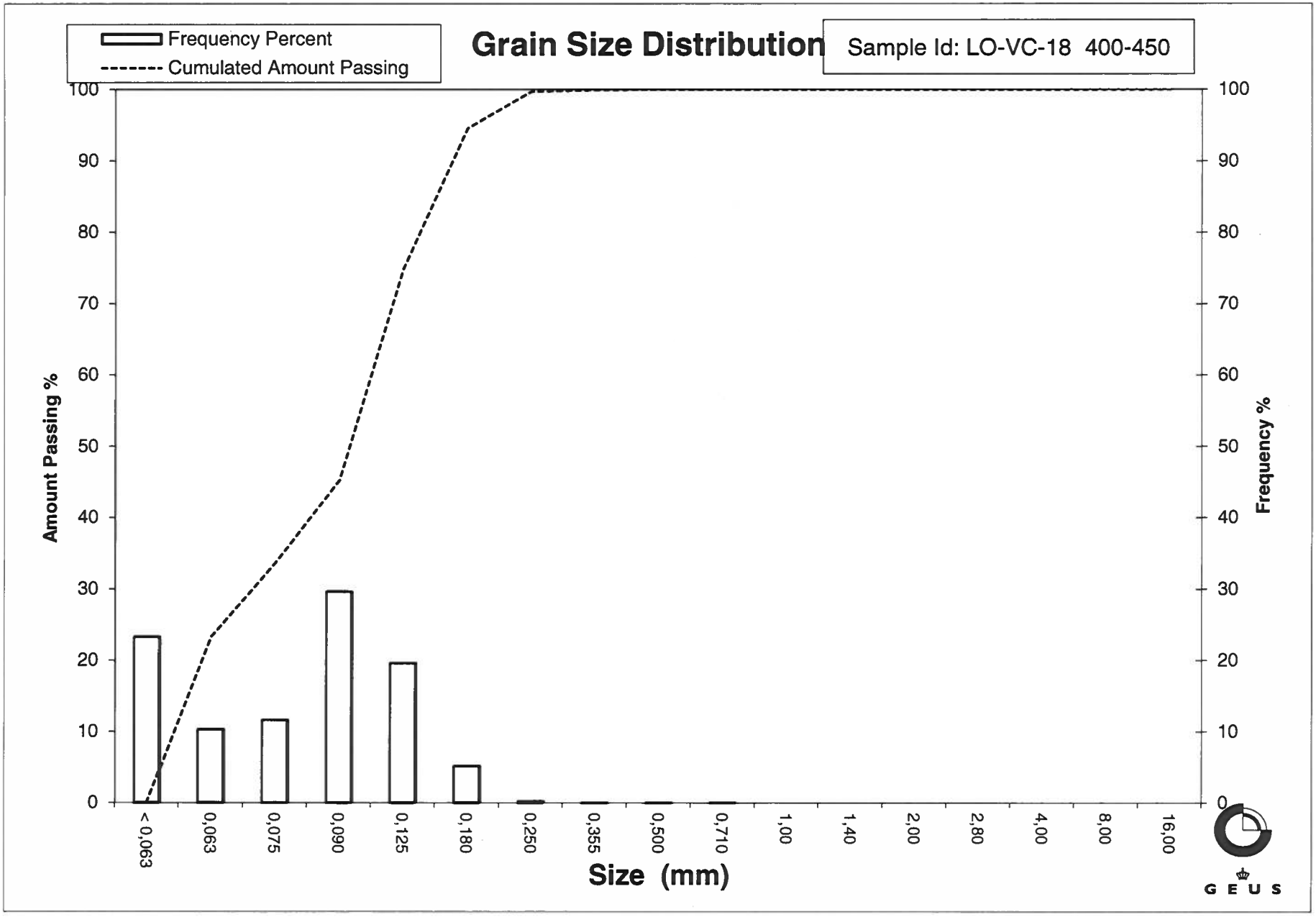
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-18 400-450
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-19 0-50
Lab. Id: 230555
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 0,6g skaller

GEUS

Total Weight 99,13 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	0,27	0,27	99,73
	4,00	-2,00	0,12	0,13	99,61
	2,80	-1,49	0,13	0,13	99,47
	2,00	-1,00	0,13	0,13	99,35
Sand	1,40	-0,49	0,06	0,06	99,29
	1,00	0,00	0,34	0,35	98,94
	0,710	0,49	0,44	0,44	98,50
	0,500	1,00	0,90	0,91	97,59
	0,355	1,49	1,26	1,27	96,32
	0,250	2,00	1,95	1,97	94,35
	0,180	2,47	3,05	3,08	91,28
	0,125	3,00	29,64	29,90	61,38
	0,090	3,47	49,40	49,83	11,55
	0,075	3,74	5,60	5,65	5,89
	0,063	3,99	1,52	1,53	4,36
	< 0,063	> 3,99	4,32	4,36	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	4,36
Sand, fine	(0,063 mm - 0,200 mm):	87,80
Sand, medium	(0,2 mm - 0,6 mm):	5,87
Sand, coarse	(0,6 mm - 2 mm):	1,32
Gravel	(> 2 mm):	0,65
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,28	1,81
16%	84%	0,17	2,59
25%	75%	0,15	2,74
40%	60%	0,12	3,01
Median 50%	50%	0,12	3,10
75%	25%	0,10	3,33
84%	16%	0,09	3,42
90%	10%	0,09	3,54
95%	5%	0,07	3,88

Moments Statistics

Mean	3,04
Sorting	0,52
Skewness	-0,23
Kurtosis	1,43
Uniformity Coefficient	1,44

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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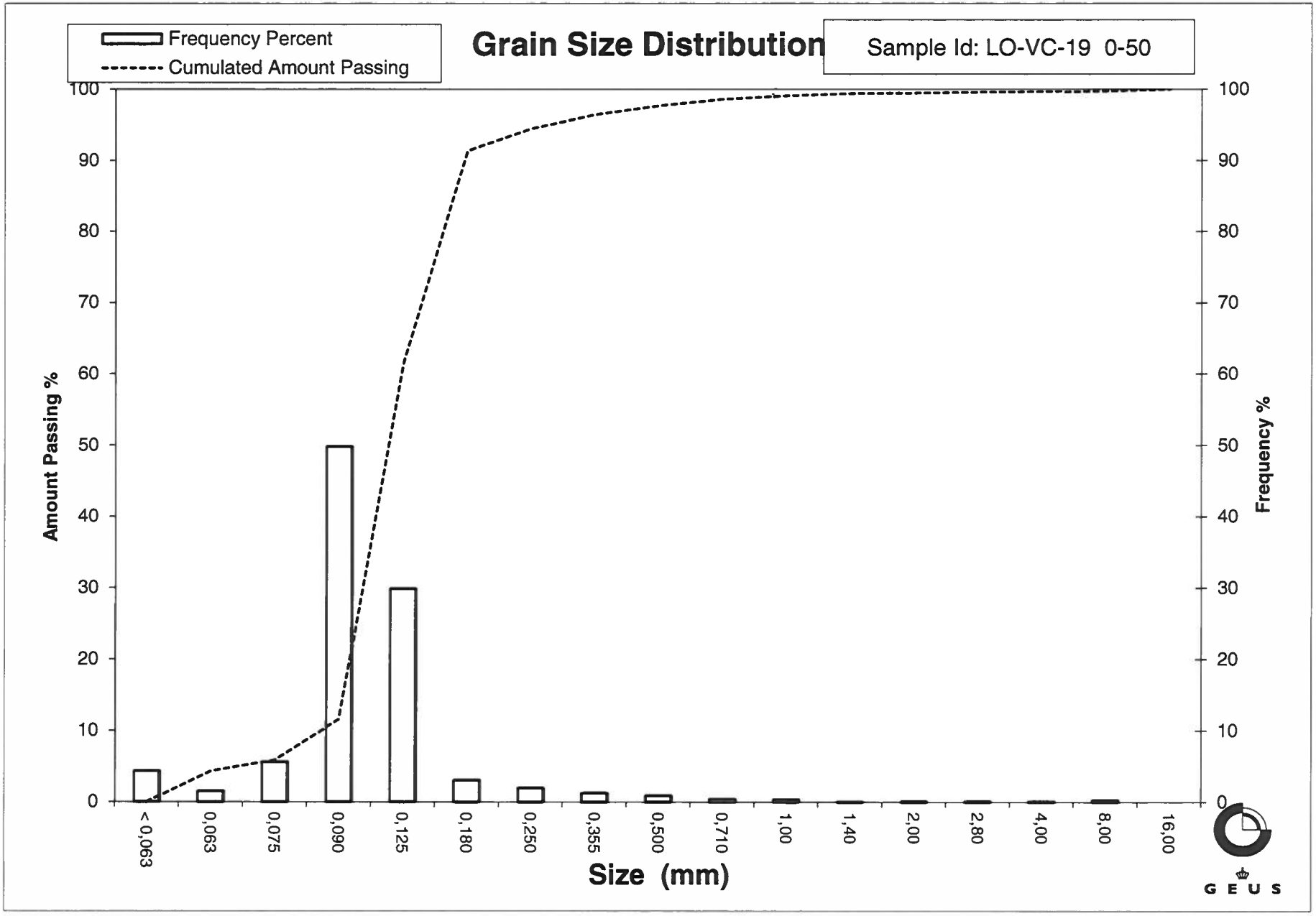
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-19 0-50
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-19 100-115
Lab. Id: 230556
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >1,4mm består af skaller

GEUS

Total Weight 94,759 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	0,08	0,09	99,91
	2,80	-1,49	0,02	0,02	99,89
	2,00	-1,00	0,08	0,09	99,80
Sand	1,40	-0,49	0,03	0,03	99,77
	1,00	0,00	0,08	0,09	99,68
	0,710	0,49	0,14	0,15	99,54
	0,500	1,00	0,22	0,23	99,30
	0,355	1,49	0,64	0,68	98,62
	0,250	2,00	1,81	1,91	96,72
	0,180	2,47	4,47	4,72	92,00
	0,125	3,00	26,01	27,45	64,55
	0,090	3,47	50,57	53,37	11,18
	0,075	3,74	5,84	6,16	5,03
	0,063	3,99	1,53	1,61	3,41
	< 0,063	> 3,99	3,23	3,41	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,41
Sand, fine	(0,063 mm - 0,200 mm):	89,94
Sand, medium	(0,2 mm - 0,6 mm):	6,06
Sand, coarse	(0,6 mm - 2 mm):	0,39
Gravel	(> 2 mm):	0,20
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile	Percentile		
Amount in sieve	Amount passing	d(mm)	Φ
5%	95%	0,22	2,16
16%	84%	0,16	2,61
25%	75%	0,15	2,78
40%	60%	0,12	3,03
Median 50%	50%	0,12	3,11
75%	25%	0,10	3,34
84%	16%	0,09	3,42
90%	10%	0,09	3,52
95%	5%	0,07	3,74

Moments Statistics

Mean	3,05
Sorting	0,44
Skewness	-0,23
Kurtosis	1,16
Uniformity Coefficient	1,40

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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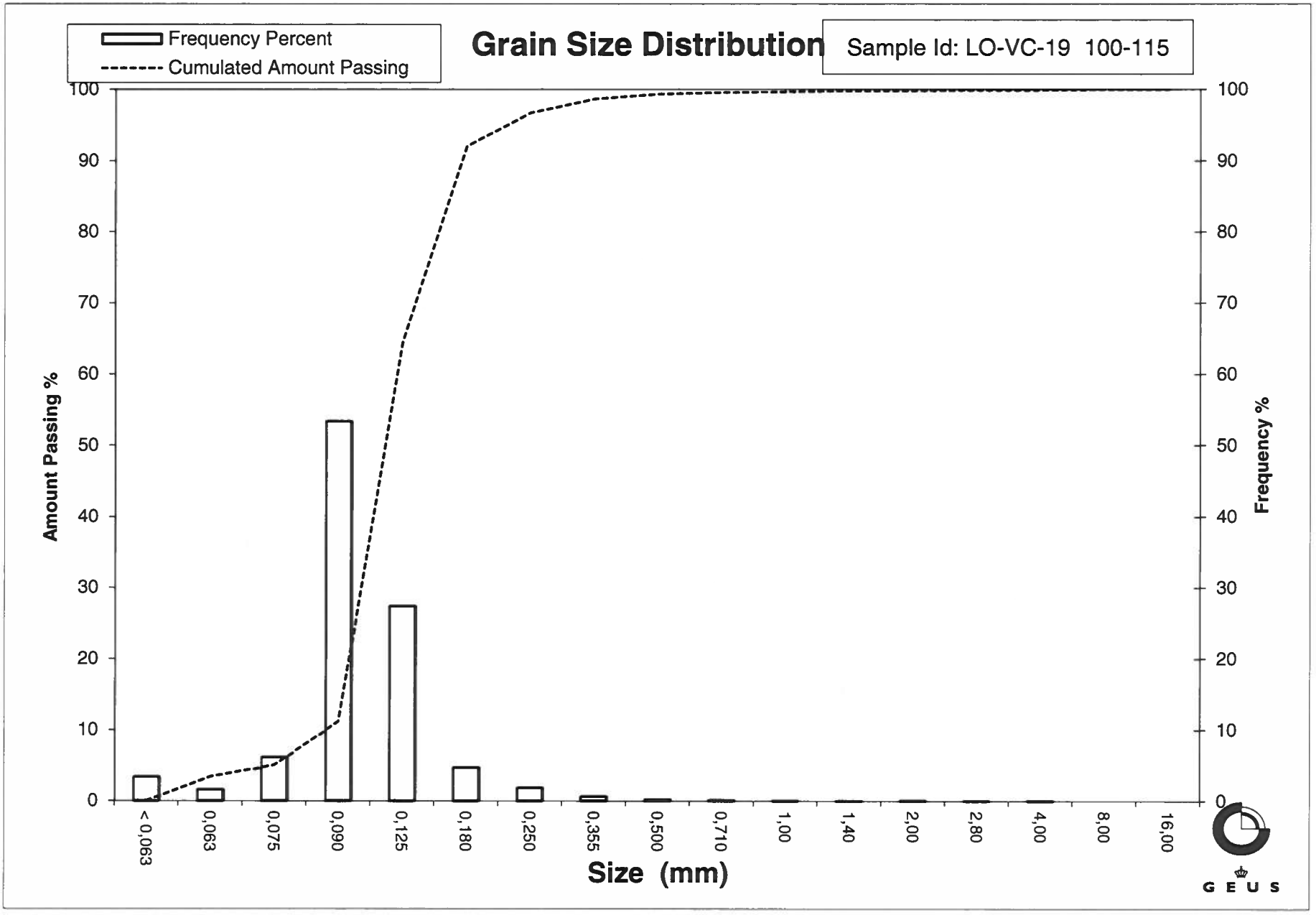
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-19 100-115
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: LO-VC-19 200-240
Lab. Id: 230557
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2mm heraf 1,5g skaller

GEUS

Total Weight 107,876 g

Size Fractions

Sieve Analysis

	Size	Size	Weight	Weight	Cumulated amount passing
	mm	Φ	g	%	%
Gravel	16,00	-4,00	1,43	1,32	98,68
	8,00	-3,00	0,00	0,00	98,68
	4,00	-2,00	0,00	0,00	98,68
	2,80	-1,49	0,06	0,06	98,62
	2,00	-1,00	0,04	0,03	98,59
Sand	1,40	-0,49	0,15	0,14	98,45
	1,00	0,00	0,15	0,14	98,31
	0,710	0,49	0,29	0,27	98,04
	0,500	1,00	0,52	0,48	97,56
	0,355	1,49	1,22	1,13	96,43
	0,250	2,00	3,55	3,29	93,14
	0,180	2,47	6,60	6,12	87,02
	0,125	3,00	29,73	27,55	59,47
	0,090	3,47	54,71	50,72	8,75
	0,075	3,74	4,70	4,36	4,39
	0,063	3,99	1,27	1,18	3,21
	< 0,063	> 3,99	3,47	3,21	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	3,21
Sand, fine	(0,063 mm - 0,200 mm):	85,56
Sand, medium	(0,2 mm - 0,6 mm):	9,02
Sand, coarse	(0,6 mm - 2 mm):	0,80
Gravel	(> 2 mm):	1,41
Sum:		100,00

Moments Measures (Folk and Wards)

Percentile Amount in sieve	Percentile Amount passing	d(mm)	Φ
5%	95%	0,31	1,69
16%	84%	0,17	2,52
25%	75%	0,16	2,68
40%	60%	0,13	2,99
Median 50%	50%	0,12	3,08
75%	25%	0,10	3,30
84%	16%	0,10	3,40
90%	10%	0,09	3,46
95%	5%	0,08	3,70

Moments Statistics

Mean	3,00
Sorting	0,52
Skewness	-0,33
Kurtosis	1,32
Uniformity Coefficient	1,39

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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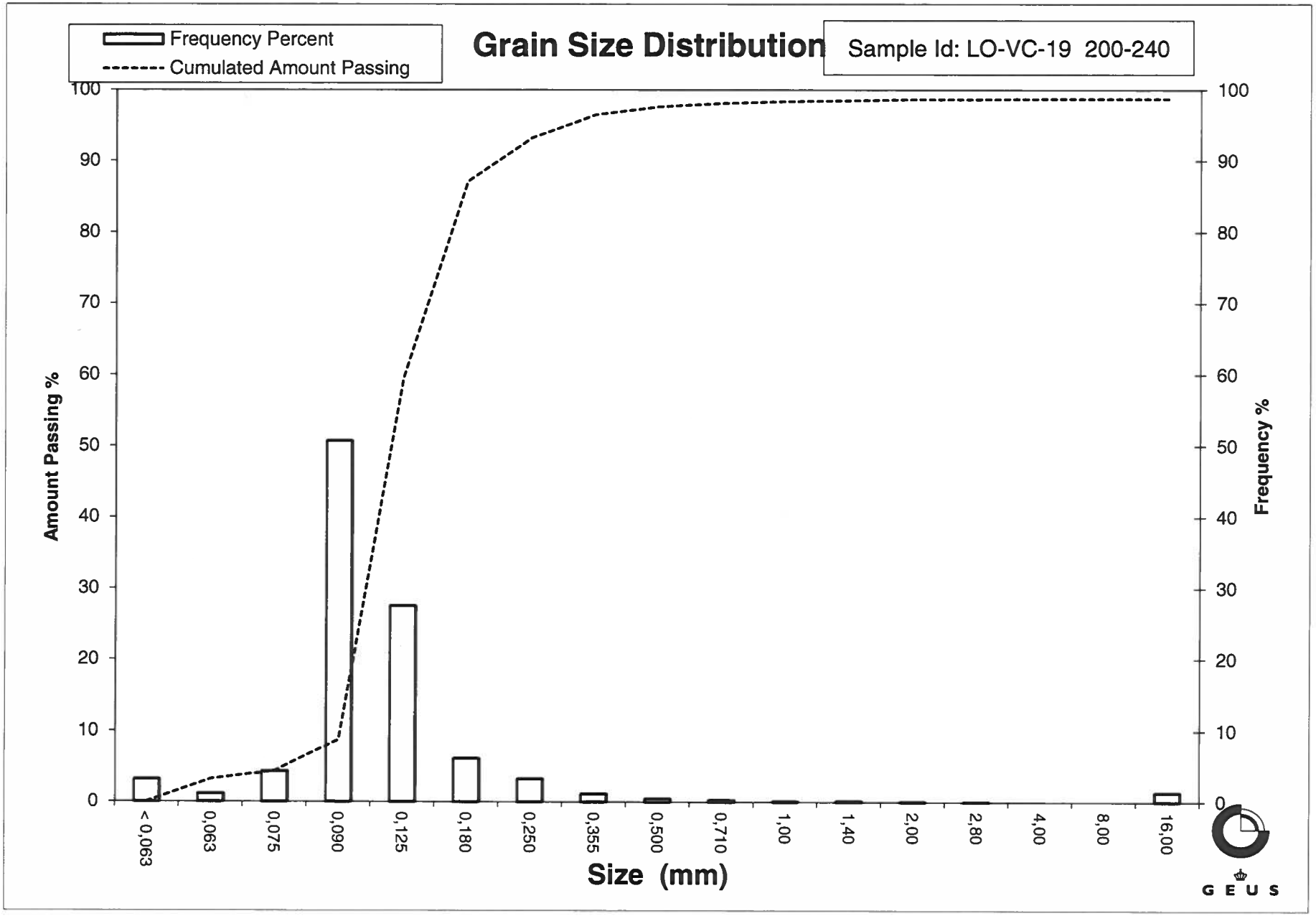
Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: LO-VC-19 200-240
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Grain Size Distribution
Geotechnical

Sample Id: MG-01 350-400
Lab. Id: 230592
Projekt Kystdirektoratet
Subject: 0
Date: 07-11-2023
Executed: PS
Remarks: >2,8mm består af skaller

GEUS

Total Weight 93,365 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	0,02	0,02	99,98
	2,00	-1,00	0,08	0,09	99,89
Sand	1,40	-0,49	0,12	0,13	99,76
	1,00	0,00	0,12	0,13	99,64
	0,710	0,49	0,26	0,28	99,36
	0,500	1,00	0,78	0,84	98,52
	0,355	1,49	1,77	1,89	96,63
	0,250	2,00	3,99	4,28	92,35
	0,180	2,47	33,36	35,73	56,62
	0,125	3,00	37,31	39,96	16,66
	0,090	3,47	8,97	9,61	7,05
	0,075	3,74	1,24	1,33	5,73
	0,063	3,99	0,59	0,63	5,09
	< 0,063	> 3,99	4,76	5,09	0,00

Size Classes (DGF-Bulletin 1 1988)

		Weight %
Silt and clay	(< 0,063 mm):	5,09
Sand, fine	(0,063 mm - 0,200 mm):	61,74
Sand, medium	(0,2 mm - 0,6 mm):	32,09
Sand, coarse	(0,6 mm - 2 mm):	0,97
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%	0,31	1,67
16%	84%	0,23	2,10
25%	75%	0,22	2,21
40%	60%	0,19	2,42
Median 50%	50%	0,17	2,55
75%	25%	0,14	2,87
84%	16%	0,12	3,03
90%	10%	0,10	3,31
95%	5%	-------	-------

Moments Statistics

Mean	2,56
Sorting	-------
Skewness	-------
Kurtosis	-------
Uniformity Coefficient	1,85

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

Size Classes and Percentiles are found by linear interpolation

Formulas

Mean (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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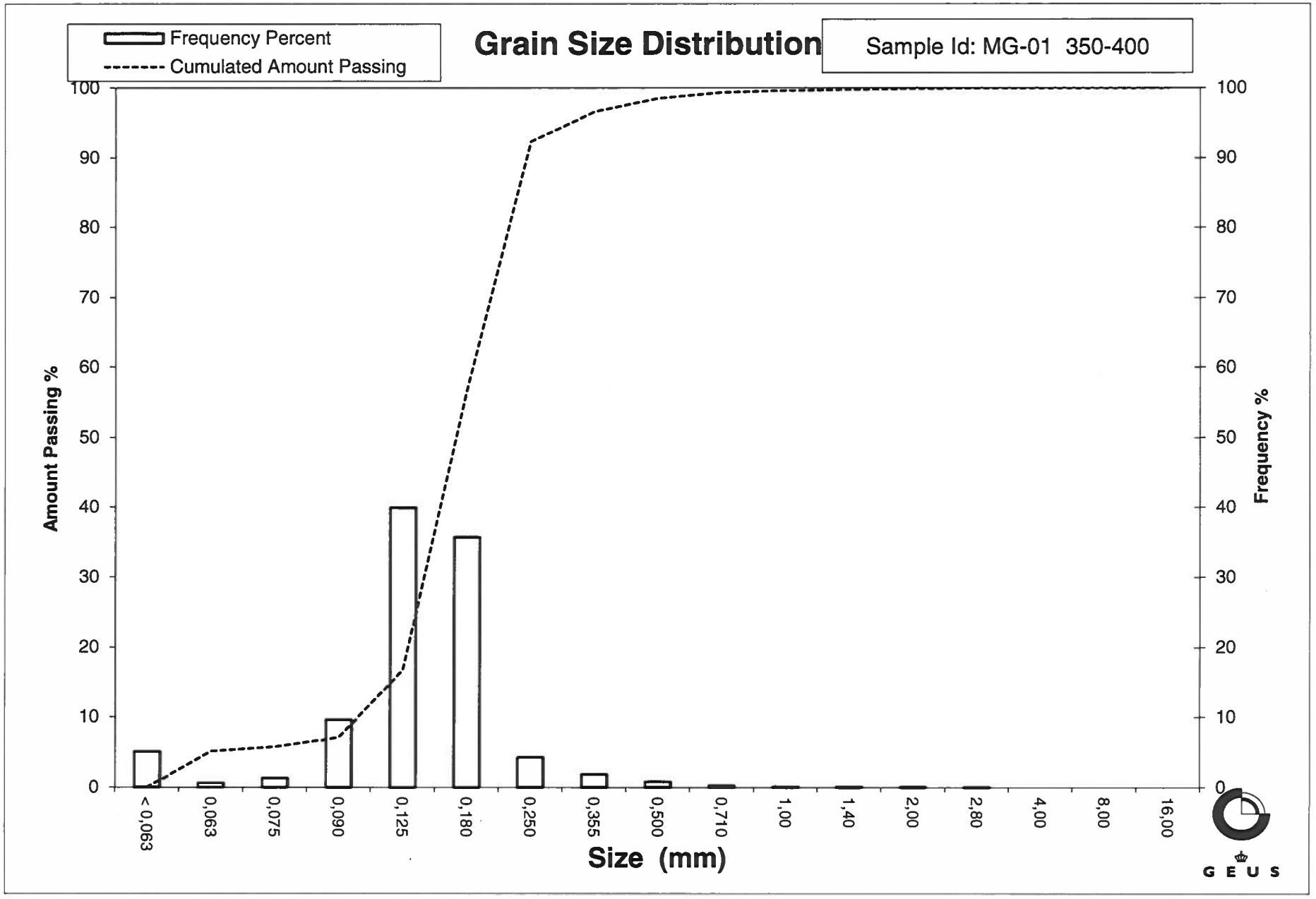

Frequency Percent
Cumulated Amount Passing
Grain Size Distribution
Sample Id: MG-01 350-400
Amount Passing %
Frequency %
100
90
80
70
60
50
40
30
20
10
0
< 0,063
0,063
0,075
0,090
0,125
0,180
0,250
0,355
0,500
0,710
1,00
1,40
2,00
2,80
4,00
8,00
16,00
Size (mm)
GEUS

Appendiks 2 – Vibrationskerne analyseresultater

Lab. nummer	Vibrocore ID	Dybde (cm under top)	Vandindhold (%)	Glødetab (%)	D50 (mm)	<0.125 mm (%)	Silt+ler (%)	Fint sand (%)	Medium sand (%)	Groft sand (%)	Grus (%)	Mean	Sorting	Skewness	Kurtosis	Uniformity Coefficient
230492	LO-VC-01	0-50	18	0,4	0,14	40,97	1,99	83,13	14,11	0,68	0,09	2,86	0,53	-0,10	1,18	1,63
230493	LO-VC-01	100-150	20	0,7	0,13	46,22	3,32	86,29	9,40	0,93	0,07	2,95	0,48	-0,03	1,08	1,61
230494	LO-VC-01	200-250	21	1,0	0,12	56,69	7,09	81,76	9,15	1,79	0,21	3,01	-------	-------	-------	1,68
230495	LO-VC-01	300-350	20	0,7	0,11	69,45	4,53	88,28	5,88	1,05	0,26	3,08	0,48	-0,19	1,41	1,48
230496	LO-VC-02	0-50	19	0,4	0,15	31,91	1,68	76,38	21,22	0,58	0,14	2,73	0,50	0,02	0,87	1,72
230497	LO-VC-02	100-150	17	0,4	0,15	26,95	1,51	75,45	22,38	0,58	0,08	2,69	0,55	-0,07	1,14	1,71
230498	LO-VC-02	200-250	18	0,5	0,14	42,07	2,39	80,38	15,54	1,55	0,15	2,84	0,60	-0,15	1,23	1,68
230499	LO-VC-03	0-50	20	0,5	0,14	36,35	1,97	80,40	16,89	0,72	0,03	2,79	0,55	-0,14	1,21	1,65
230500	LO-VC-03	100-150	20	0,5	0,11	68,86	1,72	95,56	2,43	0,21	0,08	3,08	0,36	-0,15	1,01	1,35
230501	LO-VC-04	0-50	18	0,3	0,19	17,48	1,38	53,24	44,94	0,17	0,27	2,49	0,48	0,38	1,00	1,97
230502	LO-VC-04	100-150	17	0,4	0,17	22,96	2,17	63,31	34,41	0,12	0,00	2,61	0,54	0,19	0,95	1,95
230503	LO-VC-04	200-250	18	0,5	0,17	29,71	1,85	61,77	36,04	0,32	0,03	2,62	0,62	0,08	0,88	2,03
230504	LO-VC-05	0-50	18	0,6	0,14	39,98	1,94	71,14	24,70	1,92	0,30	2,72	0,64	-0,27	0,98	1,73
230505	LO-VC-05	100-150	20	0,6	0,11	70,66	2,82	93,55	3,00	0,53	0,10	3,08	0,35	-0,18	1,11	1,31
230506	LO-VC-06	0-50	18	0,4	0,15	35,66	1,58	71,75	26,16	0,48	0,04	2,71	0,58	-0,08	0,89	1,79
230507	LO-VC-06	100-150	18	0,5	0,14	44,05	2,42	76,87	19,68	0,78	0,25	2,81	0,59	-0,18	1,03	1,69
230508	LO-VC-06	260-310	17	0,8	0,10	75,47	17,90	79,47	2,59	0,02	0,03	3,05	-------	-------	-------	-------
230509	LO-VC-07	0-50	20	0,7	0,12	51,81	3,93	86,80	6,68	1,81	0,78	2,99	0,50	-0,13	1,18	1,58
230510	LO-VC-07	100-150	20	0,6	0,12	64,27	4,20	92,01	2,45	0,78	0,55	3,07	0,41	-0,04	1,04	1,48
230511	LO-VC-07	280-320	19	0,5	0,11	74,79	11,22	87,30	1,47	0,02	0,00	3,28	-------	-------	-------	-------
230512	LO-VC-08	0-50	17	0,4	0,19	12,30	1,24	53,30	44,00	1,43	0,03	2,38	0,59	-0,05	1,17	1,81
230513	LO-VC-08	100-150	19	0,4	0,19	11,03	1,11	52,14	45,35	1,23	0,17	2,37	0,54	0,03	1,09	1,76
230514	LO-VC-08	200-250	18	0,4	0,17	20,15	1,35	62,70	35,66	0,27	0,02	2,57	0,52	0,10	0,97	1,86
230515	LO-VC-08	300-330	18	0,4	0,15	34,88	1,44	74,42	24,02	0,11	0,01	2,73	0,55	-0,08	0,91	1,74
230516	LO-VC-08	350-400	19	0,4	0,12	50,09	4,03	70,81	23,21	1,76	0,19	2,83	0,78	-0,32	1,07	1,94
230517	LO-VC-09	0-50	19	0,4	0,16	26,62	2,89	66,64	29,87	0,46	0,13	2,65	0,58	0,05	0,99	1,86
230518	LO-VC-09	100-125	17	0,4	0,16	27,33	1,74	66,58	30,64	0,46	0,58	2,64	0,59	0,02	0,96	1,87
230519	LO-VC-09	150-200	19	0,8	0,13	47,64	7,50	65,30	24,81	1,18	1,21	2,80	-------	-------	-------	2,07
230520	LO-VC-09	280-330	20	0,8	0,07	95,17	37,89	61,86	0,23	0,02	0,00	3,59	-------	-------	-------	-------
230521	LO-VC-09	400-450	19	0,5	0,10	80,91	10,83	88,58	0,57	0,02	0,00	3,36	-------	-------	-------	-------
230522	LO-VC-10	0-50	18	0,6	0,14	41,61	3,29	79,09	15,70	1,68	0,24	2,82	0,61	-0,19	1,33	1,65
230523	LO-VC-10	100-150	20	0,5	0,12	55,49	2,39	93,16	4,07	0,31	0,07	3,01	0,39	-0,09	0,90	1,44

230524	LO-VC-10	200-250	19	0,5	0,12	52,14	4,16	83,94	10,65	0,84	0,40	2,98	0,56	-0,17	1,33	1,62
230525	LO-VC-10	300-350	20	0,7	0,12	61,06	5,45	89,86	4,35	0,23	0,11	3,05	-------	-------	-------	1,52
230526	LO-VC-10	400-450	22	0,6	0,11	76,94	5,43	86,74	6,92	0,60	0,31	3,19	-------	-------	-------	1,54
230527	LO-VC-11	0-50	17	0,5	0,14	36,07	2,73	76,30	18,78	2,01	0,18	2,75	0,65	-0,20	1,41	1,69
230528	LO-VC-11	100-150	19	0,7	0,13	48,27	3,19	84,98	10,75	0,92	0,17	2,95	0,51	-0,15	1,20	1,57
230529	LO-VC-11	300-350	18	0,5	0,12	61,66	4,18	88,93	5,98	0,61	0,30	3,04	0,47	-0,16	1,22	1,45
230530	LO-VC-12	0-50	19	0,4	0,13	46,40	2,24	85,68	10,96	0,72	0,39	2,93	0,49	-0,12	1,12	1,58
230531	LO-VC-12	100-150	19	0,5	0,12	56,57	5,49	91,26	2,33	0,44	0,48	3,04	-------	-------	-------	1,59
230532	LO-VC-12	190-225	17	0,4	0,19	25,38	2,62	53,26	44,08	0,04	0,00	2,52	0,64	0,24	0,91	2,23
230533	LO-VC-13	0-50	16	0,3	0,27	3,10	0,91	21,44	74,22	2,58	0,85	1,90	0,55	0,02	1,08	1,85
230534	LO-VC-13	100-150	16	0,3	0,23	5,76	1,21	27,90	69,17	1,70	0,02	2,05	0,53	-0,12	1,26	1,66
230535	LO-VC-14	0-50	17	0,2	0,28	4,22	1,16	18,90	76,77	2,94	0,22	1,84	0,57	0,08	1,14	1,89
230536	LO-VC-14	100-150	16	0,3	0,22	10,74	1,48	40,36	57,58	0,58	0,00	2,24	0,60	0,10	1,06	1,93
230537	LO-CV-14	180-220	18	0,4	0,16	28,98	3,19	61,78	34,13	0,76	0,14	2,60	0,68	-0,03	0,97	1,99
230538	LO-VC-15	0-50	13	0,3	0,18	18,80	1,36	59,34	38,83	0,46	0,02	2,53	0,54	0,08	1,02	1,90
230539	LO-VC-15	100-150	16	0,3	0,16	23,42	1,94	71,76	26,04	0,24	0,02	2,64	0,54	-0,08	1,09	1,71
230540	LO-VC-15	200-236	17	0,3	0,16	27,14	2,18	69,89	27,32	0,42	0,19	2,65	0,61	-0,09	1,03	1,77
230541	LO-VC-16	0-50	11	0,2	0,25	5,21	0,99	24,97	71,80	2,06	0,18	2,00	0,55	0,03	1,12	1,90
230542	LO-VC-16	100-150	16	0,3	0,20	18,82	1,41	45,68	52,80	0,11	0,00	2,46	0,55	0,35	1,14	2,11
230543	LO-VC-16	185-235	15	0,3	0,26	7,95	1,14	23,59	72,82	2,13	0,31	1,97	0,58	0,16	1,25	2,09
230544	LO-VC-16	270-320	18	0,6	0,12	62,12	5,64	77,98	16,18	0,16	0,04	2,97	-------	-------	-------	1,59
230545	LO-VC-17	0-50	20	0,5	0,11	68,81	4,95	94,12	0,62	0,16	0,14	3,11	0,41	-0,01	1,20	1,47
230546	LO-VC-17	100-150	21	0,6	0,11	79,95	5,06	94,14	0,36	0,14	0,30	3,20	-------	-------	-------	1,46
230547	LO-VC-17	200-250	21	0,7	0,11	84,70	5,39	94,16	0,32	0,08	0,05	3,25	-------	-------	-------	1,45
230548	LO-VC-17	330-380	21	1,2	0,08	92,61	25,82	71,16	2,11	0,70	0,21	3,40	-------	-------	-------	-------
230549	LO-VC-17	430-480	18	1,4	0,06	98,20	47,03	52,79	0,16	0,01	0,00	3,66	-------	-------	-------	-------
230550	LO-VC-18	0-50	21	0,9	0,12	59,00	12,29	69,15	17,78	0,55	0,23	3,02	-------	-------	-------	-------
230551	LO-VC-18	100-150	24	1,3	0,10	75,21	16,73	75,74	6,61	0,58	0,33	2,99	-------	-------	-------	-------
230552	LO-VC-18	200-250	22	1,1	0,10	84,88	14,72	82,34	1,94	0,33	0,67	3,41	-------	-------	-------	-------
230553	LO-VC-18	300-350	20	0,7	0,10	79,78	13,93	85,09	0,93	0,04	0,01	3,38	-------	-------	-------	-------
230554	LO-VC-18	400-450	18	0,6	0,10	74,91	23,31	72,71	3,97	0,01	0,00	3,06	-------	-------	-------	-------
230555	LO-VC-19	0-50	21	0,8	0,12	61,38	4,36	87,80	5,87	1,32	0,65	3,04	0,52	-0,23	1,43	1,44
230556	LO-VC-19	100-115	20	0,5	0,12	64,55	3,41	89,94	6,06	0,39	0,20	3,05	0,44	-0,23	1,16	1,40
230557	LO-VC-19	200-240	19	0,5	0,12	59,47	3,21	85,56	9,02	0,80	1,41	3,00	0,52	-0,33	1,32	1,39

Appendiks 3 – Vibrationskerne logs

Legend to logs

Lithology

- Mud
- Clay
- Silt
- Sand
- Heterolith with alternating layers of clay and sand
- Gravel
- Peat
- Till

Structures

- Homogenous
- Laminated/layered
- Bioturbated

Boundaries

- Gradational
- Sharp
- Erosive

Grain size scale on logs (mm)

64	pebbles
4	granules
2	Very coarse-grained sand
1	coarse-grained sand
0.5	medium-grained sand
0.250	fine-grained sand
0.125	very fine-grained sand
0.063	silt and clay

Grain size scale (DGF Bulletin 1, 1998; mm)

>2	gravel
2	coarse-grained sand
0.6	medium-grained sand
0.200	fine-grained sand
0.063	silt and clay

Holocene deposits

- FG - Lacustrine or fluvial gravel
- FS - Lacustrine or fluvial sand
- FI - Lacustrine or fluvial silt
- FL - Lacustrine or fluvial clay
- FP - Lacustrine gyttja
- FT - Peat
- HG - Marine gravel
- HS - Marine sand
- HI - Marine silt
- HL - Marine clay
- HP - Marine gyttja

Late-glacial deposits

- TG - Lacustrine or fluvial gravel
- TS -Lacustrine or fluvial sand
- TI - Lacustrine or fluvial silt
- TL - Lacustrine or fluvial clay
- YG - Marine gravel
- YS - Marine sand
- YL - Marine clay
- YP - Marine gyttja

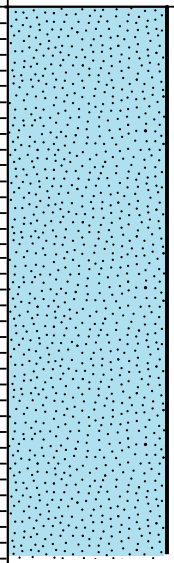
Glacial deposits

- DG - Fluvial gravel
- DS - Fluvial sand
- DI - Lacustrine silt
- DL - Lacustrine clay
- MG - Gravelly till
- MS - Sandy till
- ML - Clayey till

Interglacial deposits

- IT - Peat
- QG - Marine gravel
- QS - Marine sand
- QL - Marine clay

Core ID: LO-VC-01	Coordinates (m): E: 544626 N: 6375708	Water depth (m): 13.7	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570915.15	Longitude: 9°44.705'E Latitude: 57°31.303'N		
Core type: Vibrocore	Core length (m): 3.48		

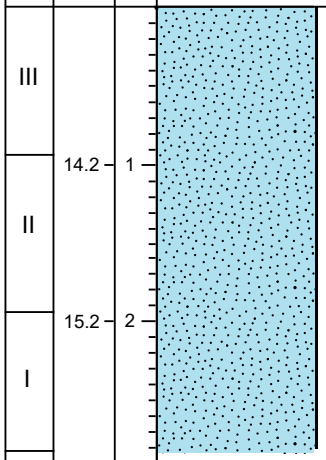


0-348 cm: fine-grained sand
mainly dark grey 5Y 4/1
Spisula, Venus, Ensis

Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
IV					230492	0.14	1.99	83.13	14.11	0.68	0.09	0.4	18		
III	14.7	1												+	
					230493	0.13	3.32	86.29	9.40	0.93	0.07	0.7	20		
II	15.7	2	HS												
					230494	0.12	7.09	81.76	9.15	1.79	0.21	1.0	21		
I	16.7	3												+	
					230495	0.11	4.53	88.28	5.88	1.05	0.26	0.7	20		

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

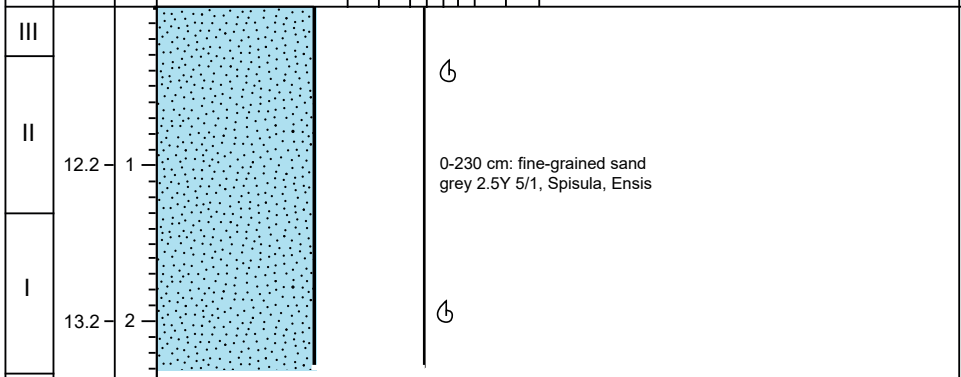
Core ID: LO-VC-02	Coordinates (m): E: 546231 N: 6377528	Water depth (m): 14.1	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.9	Longitude: 9°46.333'E Latitude: 57°32.274'N		
Core type: Vibrocore	Core length (m): 2.83		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Lithology	Description	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
III							230496	0.15	1.68	76.38	21.22	0.58	0.14	0.4	19	+	
II	14.2	1		0-283 cm: fine-grained sand grey 5Y 5/1 Spisula, Venus	HS		230497	0.15	1.51	75.45	22.38	0.58	0.08	0.4	17	+	
I	15.2	2					230498	0.14	2.39	80.38	15.54	1.55	0.15	0.5	18		
	16.2	3															
		4															
	18.4	5															

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

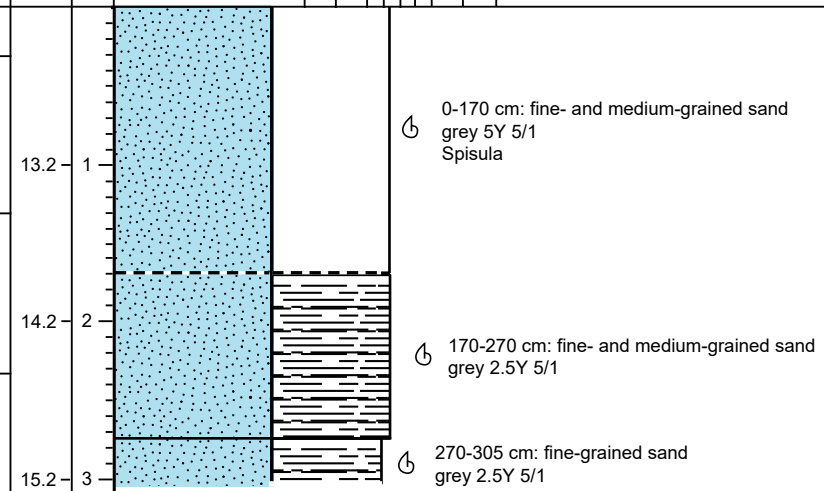
Core ID: LO-VC-03	Coordinates (m): E: 549688 N: 6377313	Water depth (m): 11.2	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.7	Longitude: 9°49.795'E Latitude: 57°32.136'N		
Core type: Vibrocore	Core length (m): 2.30		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Lithology	Description	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
III							230499	0.14	1.97	80.40	16.89	0.72	0.03	0.5	20		
II	12.2	1		0-230 cm: fine-grained sand grey 2.5Y 5/1, Spisula, Ensis	HS											+	
I	13.2	2					230500	0.11	1.72	95.56	2.43	0.21	0.08	0.5	20		

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

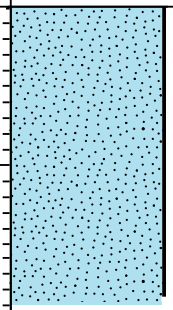
Core ID: LO-VC-04	Coordinates (m): E: 549040 N: 6377777	Water depth (m): 12.2	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.5	Longitude: 9°49.151'E Latitude: 57°32.390'N		
Core type: Vibrocore	Core length (m): 3.05		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Lithology	Description	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
	13.2	1		0-170 cm: fine- and medium-grained sand grey 5Y 5/1 Spisula	HS		230501	0.19	1.38	53.24	44.94	0.17	0.27	0.3	18	+	
							230502	0.17	2.17	63.31	34.41	0.12	0.00	0.4	17		
	14.2	2		170-270 cm: fine- and medium-grained sand grey 2.5Y 5/1			230503	0.17	1.85	61.77	36.04	0.32	0.03	0.5	18	+	
	15.2	3		270-305 cm: fine-grained sand grey 2.5Y 5/1													
		4															
		5															

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

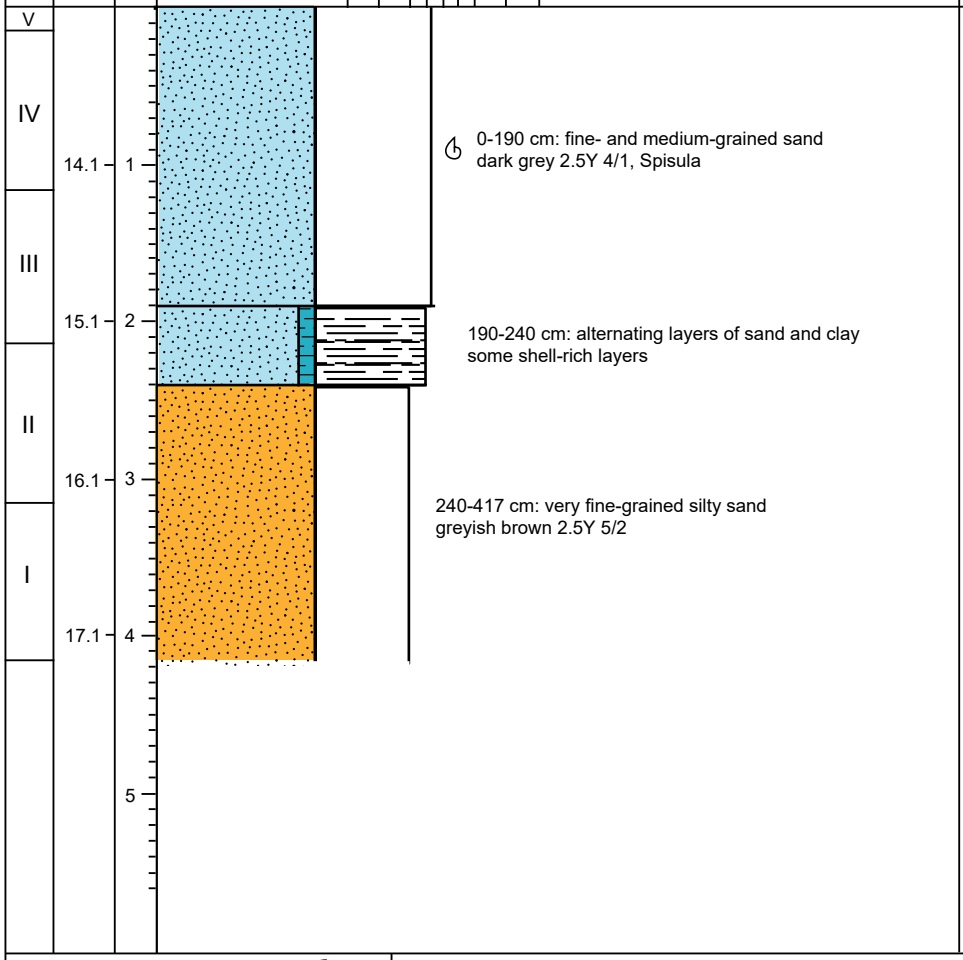
Core ID: LO-VC-05	Coordinates (m): E: 549365 N: 6376114	Water depth (m): 9.9	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.11	Longitude: 9°49.456'E Latitude: 57°31.492'N		
Core type: Vibrocore	Core length (m): 1.90		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
II			HS		230504	0.14	1.94	71.14	24.70	1.92	0.30	0.6	18	+	
I	10.9	1			230505	0.11	2.82	93.55	30.09	3.00	0.53	0.6	20		
	11.9	2													

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

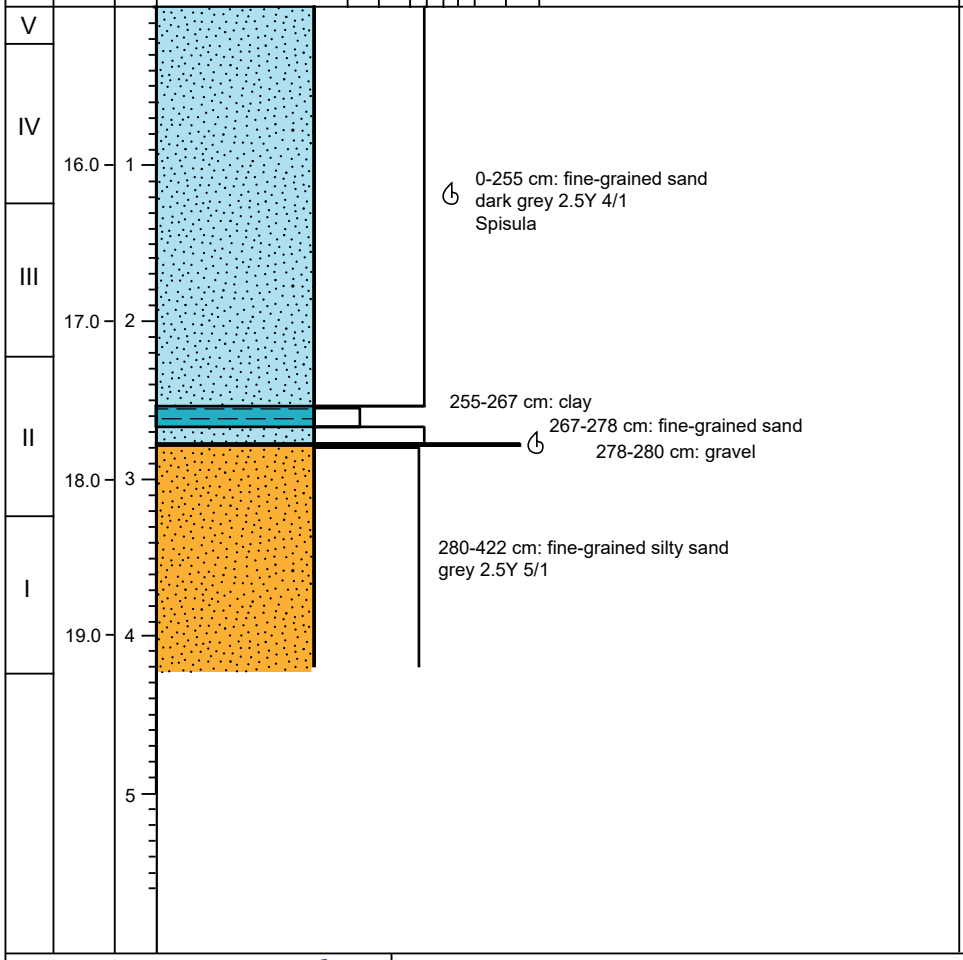
Core ID: LO-VC-06	Coordinates (m): E: 548183 N: 6375136	Water depth (m): 13.1	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.8	Longitude: 9°48.260'E Latitude: 57°30.973'N		
Core type: Vibrocore	Core length (m): 4.17		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
HS		230506	0.15	1.58	71.75	26.16	0.48	0.04	0.4	18	+	
		230507	0.14	2.42	76.87	19.68	0.78	0.25	0.5	18		
HV												
		230508	0.10	17.90	79.47	2.59	0.02	0.03	0.8	17	+	
TS												

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane — Date: 26 September 2023
		Description: Ole Bennike — Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen — Date: 24 October 2023

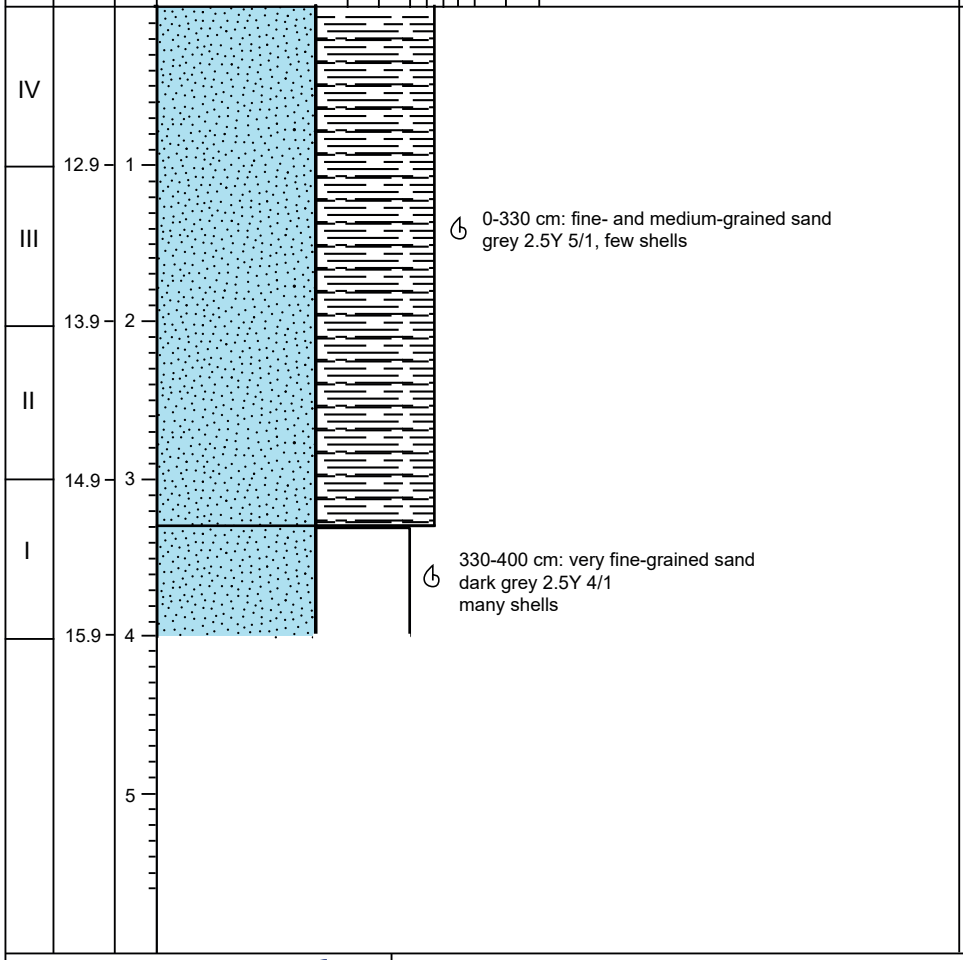
Core ID: LO-VC-07	Coordinates (m): E: 545890 N: 6376457	Water depth (m): 15.0	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.10	Longitude: 9°45.979'E Latitude: 57°31.699'N		
Core type: Vibrocore	Core length (m): 4.22		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
HS		230509	0.12	3.93	86.80	6.68	1.81	0.78	0.7	20	+	
		230510	0.12	4.20	92.01	2.45	0.78	0.55	0.6	20		
HL												
HG		230511	0.11	11.22	87.30	1.47	0.02	0.00	0.5	19	+	
TS												

Geological Survey of Denmark and Greenland / GEUS	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane — Date: 26 September 2023
		Description: Ole Bennike — Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen — Date: 24 October 2023

Core ID: LO-VC-08	Coordinates (m): E: 548305 N: 6376934	Water depth (m): 11.9	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.4	Longitude: 9°48.405'E Latitude: 57°31.941'N		
Core type: Vibrocore	Core length (m): 4.00		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
		230512	0.19	1.24	53.30	44.00	1.43	0.03	0.4	17	+	
HS		230513	0.19	1.11	52.14	45.35	1.23	0.17	0.4	19		
		230514	0.17	1.35	62.70	35.66	0.27	0.02	0.4	18		
HS		230515	0.15	1.44	74.42	24.02	0.11	0.01	0.4	18	+	

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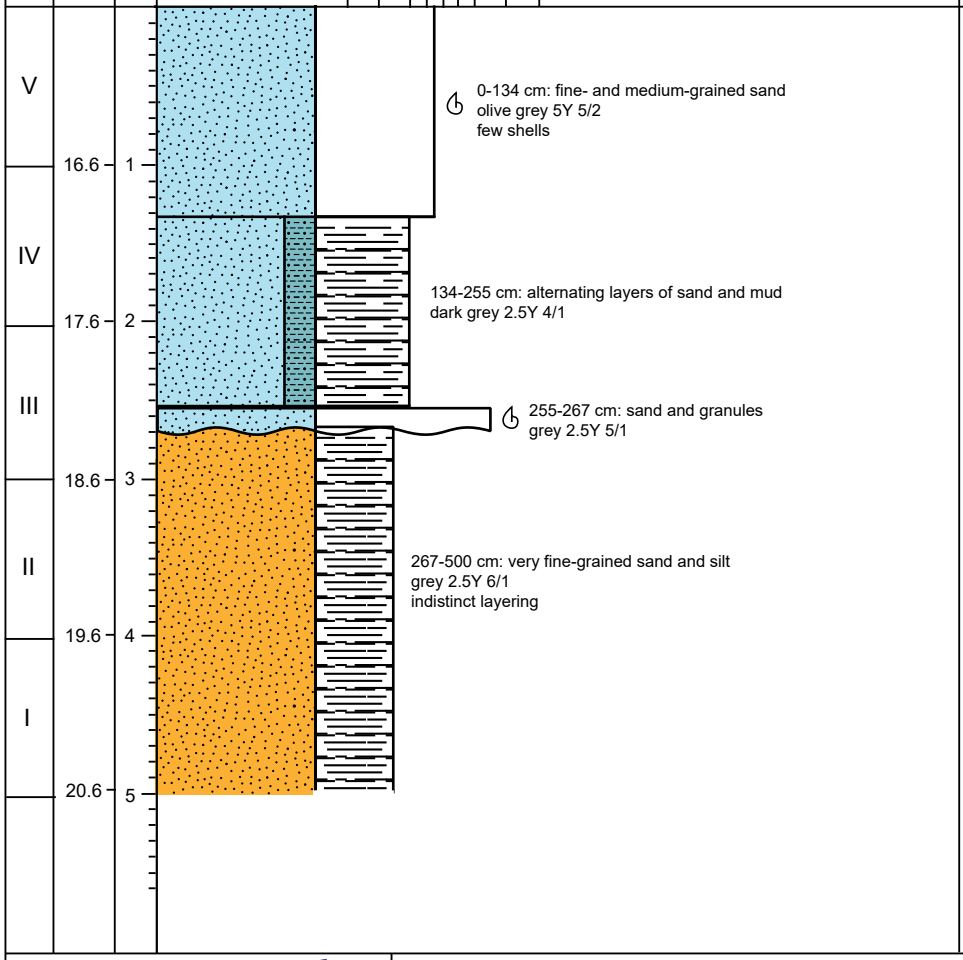
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

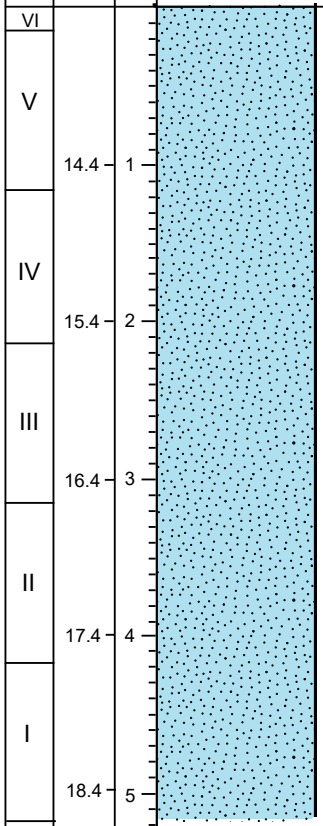
Core ID: LO-VC-09	Coordinates (m): E: 550348 N: 6378937	Water depth (m): 15.6	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570916.6	Longitude: 9°50.476'E Latitude: 57°33.007'N		
Core type: Vibrocore	Core length (m): 5.00		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
V	16.6	1	HS	■	230517	0.16	2.89	66.64	29.87	0.46	0.13	0.4	19	+	
				■	230518	0.16	1.74	66.58	30.64	0.46	0.58	0.4	17		
IV	17.6	2	HV	■	230519	0.13	7.50	65.30	24.81	1.18	1.21	0.8	19		
III	18.6	3	HS	■	230520	0.07	37.89	61.86	0.23	0.02	0.00	0.8	20	+	
II	19.6	4	TS	■	230521	0.10	10.83	88.58	0.57	0.02	0.00	0.5	19		
I	20.6	5													

Geological Survey of Denmark and Greenland / GEUS	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

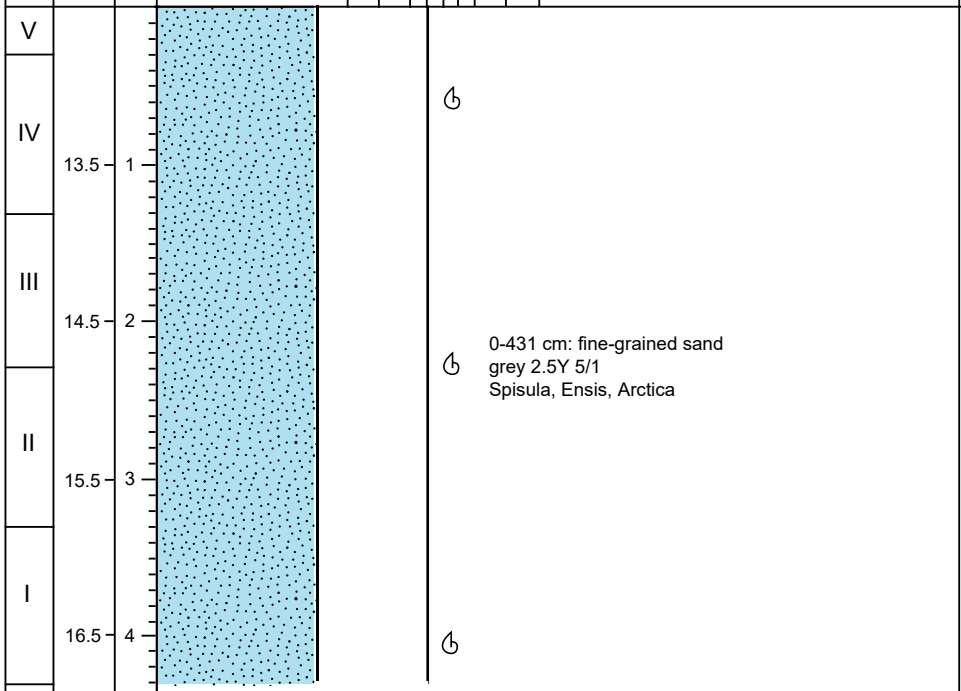
Core ID: LO-VC-10	Coordinates (m): E: 539196 N: 6360294	Water depth (m): 13.4	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570919.5	Longitude: 9°39.117'E Latitude: 57°23.026'N		
Core type: Vibrocore	Core length (m): 5.15		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
VI															
V	14.4	1	HS		230522	0.14	3.29	79.09	15.70	1.68	0.24	0.6	18	+	
IV	15.4	2			230523	0.12	2.39	93.16	4.07	0.31	0.07	0.5	20		
III	16.4	3			230524	0.12	4.16	83.94	10.65	0.84	0.40	0.5	19	+	
II	17.4	4			230525	0.12	5.45	89.86	4.35	0.23	0.11	0.7	20		
I	18.4	5			230526	0.11	5.43	86.74	6.92	0.60	0.31	0.6	22		

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

Core ID: LO-VC-11	Coordinates (m): E: 538026 N: 6359079	Water depth (m): 12.5	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.3	Longitude: 9°37.938'E Latitude: 57°22.377'N		
Core type: Vibrocore	Core length (m): 4.31		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
HS		230527	0.14	2.73	76.30	18.78	2.01	0.18	0.5	17		
		230528	0.13	3.19	84.98	10.75	0.92	0.17	0.7	19	+	
		230529	0.12	4.18	88.93	5.98	0.61	0.30	0.5	18	+	

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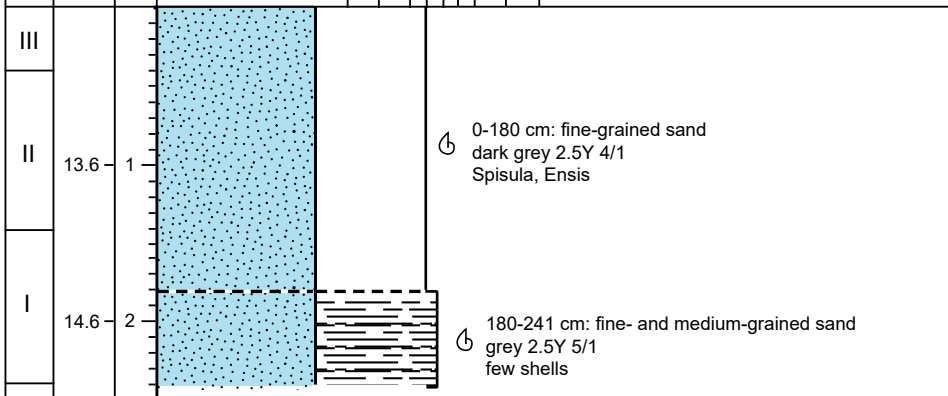
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

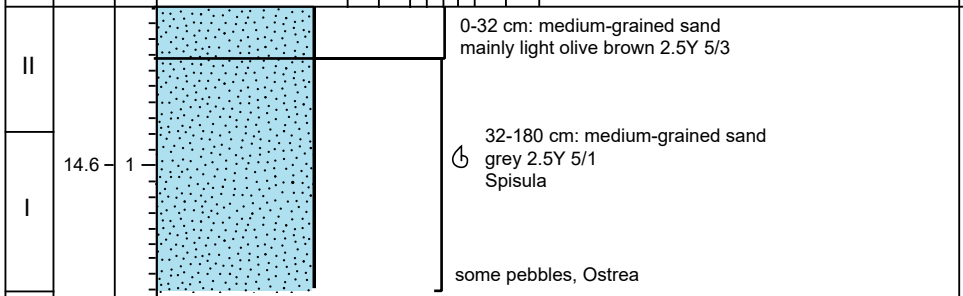
Core ID: LO-VC-12	Coordinates (m): E: 539229 N: 6357608	Water depth (m): 12.6	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.4	Longitude: 9°39.125'E Latitude: 57°21.578'N		
Core type: Vibrocore	Core length (m): 2.41		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Lithology	Description	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
III							230530	0.13	2.24	85.68	10.96	0.72	0.39	0.4	19	+	
II	13.6	1		0-180 cm: fine-grained sand, dark grey 2.5Y 4/1, Spisula, Ensis	HS		230531	0.12	5.49	91.26	2.33	0.44	0.48	0.5	19		
I	14.6	2		180-241 cm: fine- and medium-grained sand, grey 2.5Y 5/1, few shells	HS		230532	0.19	2.62	53.26	44.08	0.04	0.00	0.4	17	+	

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

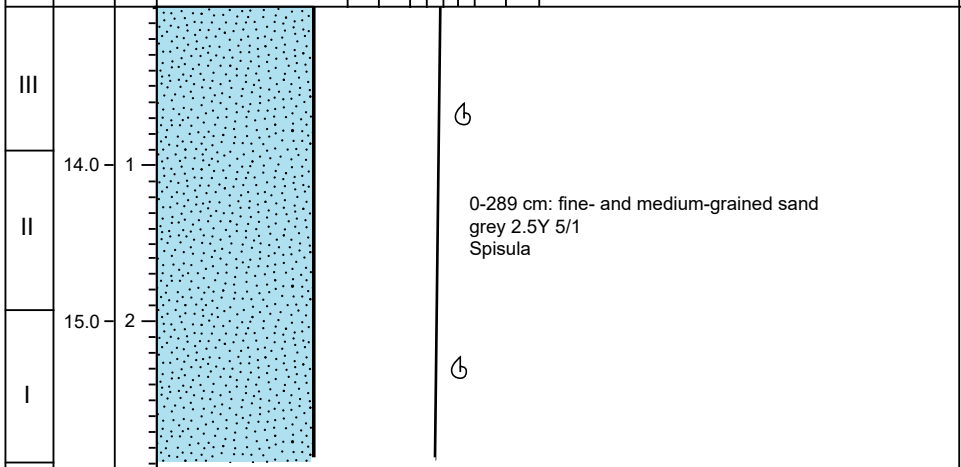
Core ID: LO-VC-13	Coordinates (m): E: 533000 N: 6359167	Water depth (m): 13.6	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.5	Longitude: 9°32.925'E Latitude: 57°22.448'N		
Core type: Vibrocore	Core length (m): 1.80		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
II			HS		230533	0.27	0.91	21.44	74.22	2.58	0.85	0.3	16	+	
I	14.6	1	HS		230534	0.23	1.21	27.90	69.17	1.70	0.02	0.3	16	+	
	15.6	2													
		3													
		4													
		5													

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

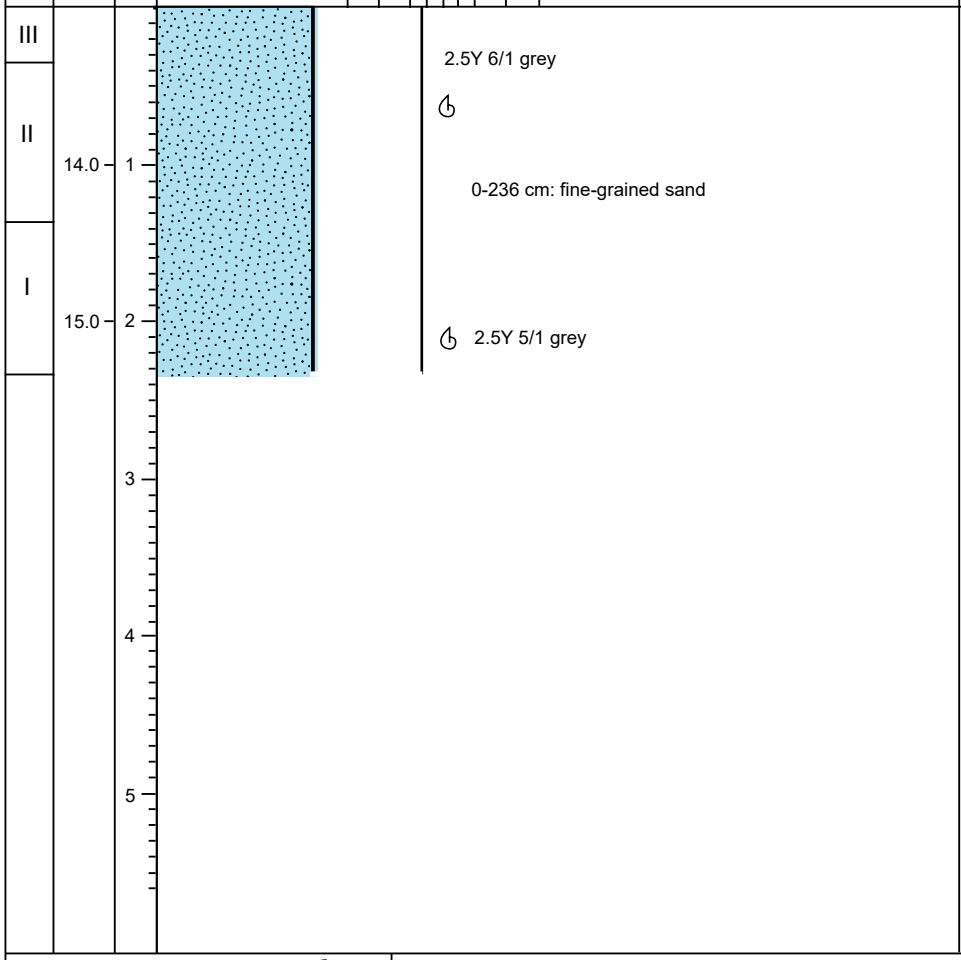
Core ID: LO-VC-14	Coordinates (m): E: 535212 N: 6357736	Water depth (m): 13.0	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.2	Longitude: 9°35.120'E Latitude: 57°21.667'N		
Core type: Vibrocore	Core length (m): 2.89		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Lithology	Description	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
III							230535	0.28	1.16	18.90	76.77	2.94	0.22	0.2	17	+	
II	14.0	1		0-289 cm: fine- and medium-grained sand grey 2.5Y 5/1 Spisula	HS		230536	0.22	1.48	40.36	57.58	0.58	0.00	0.3	16		
I	15.0	2					230537	0.16	3.19	61.78	34.13	0.76	0.14	0.4	18	+	
		3															
		4															
		5															

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

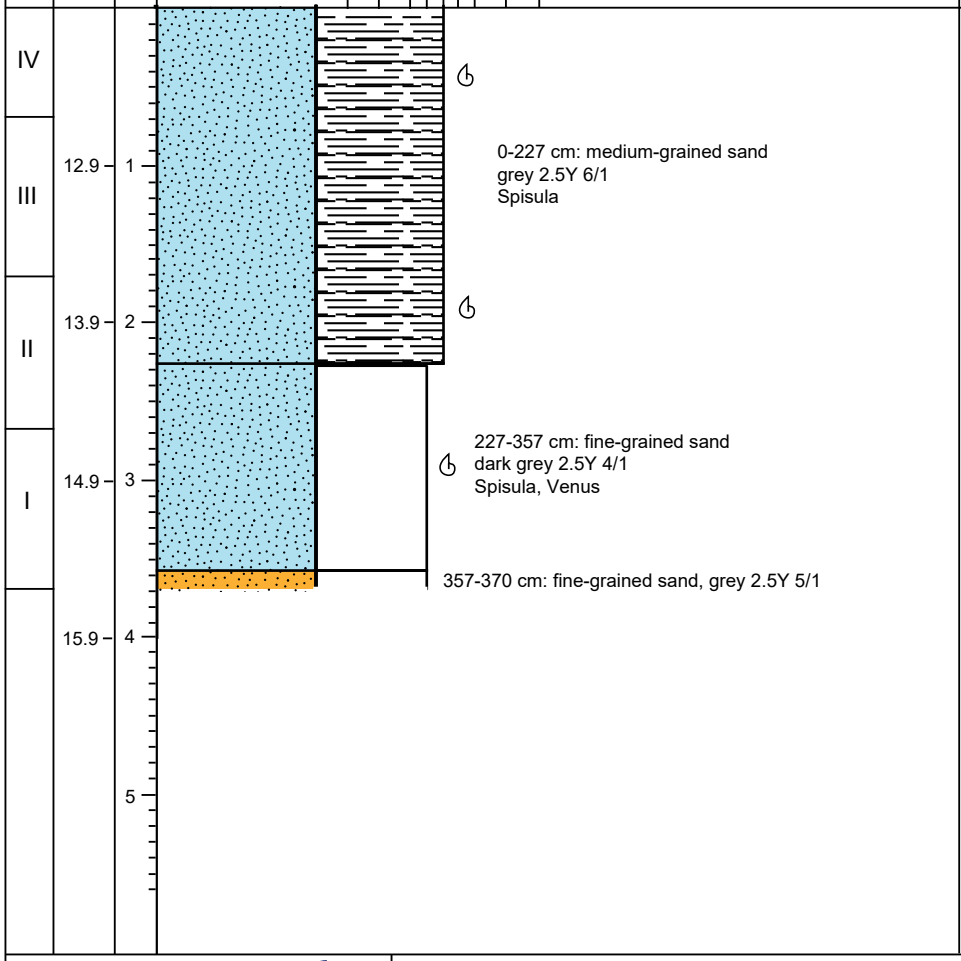
Core ID: LO-VC-15	Coordinates (m): E: 534291 N: 6360432	Water depth (m): 12.7	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570919.7	Longitude: 9°34.223'E Latitude: 57°23.124'N		
Core type: Vibrocore	Core length (m): 2.36		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
		230538	0.18	1.36	59.34	38.83	0.46	0.02	0.3	13	+	
HS		230539	0.16	1.94	71.76	26.04	0.24	0.02	0.3	16		
		230198	0.16	2.18	69.89	27.32	0.42	0.19	0.3	17	+	

Geological Survey of Denmark and Greenland / GEUS	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

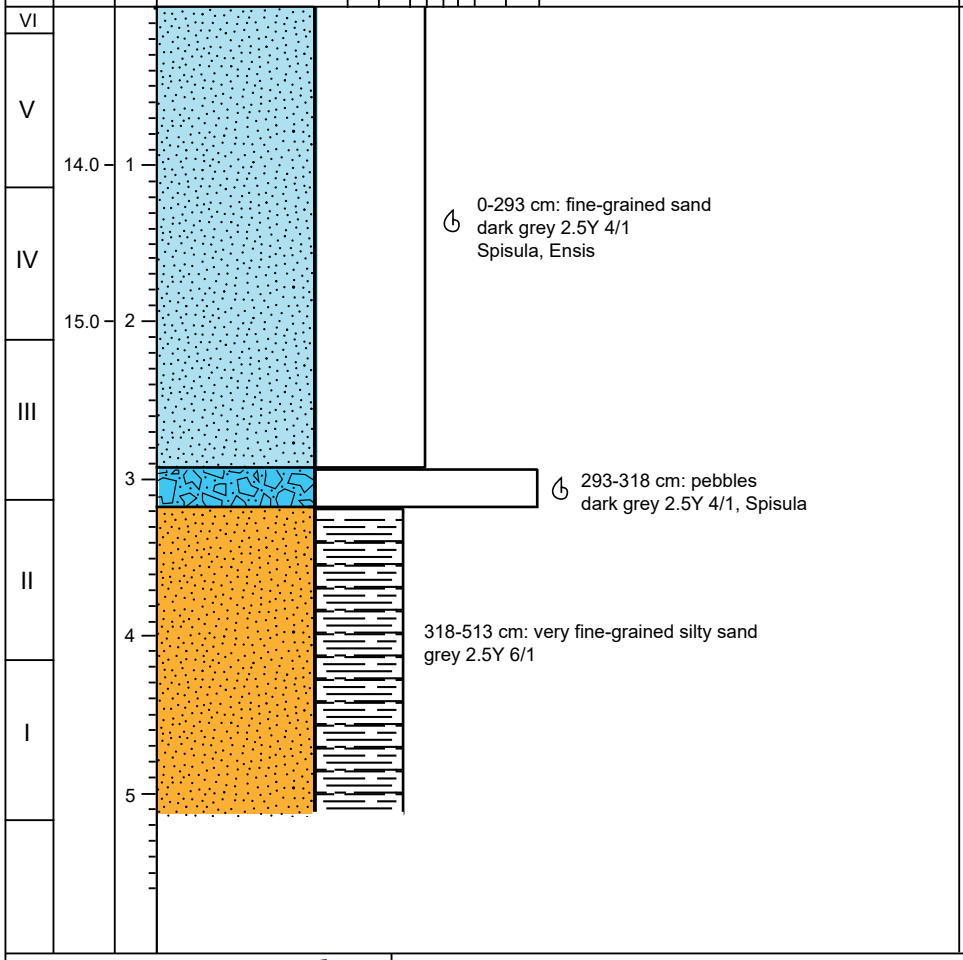
Core ID: LO-VC-16	Coordinates (m): E: 535869 N: 6354511	Water depth (m): 11.9	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.7	Longitude: 9°35.747'E Latitude: 57°19.926'N		
Core type: Vibrocore	Core length (m): 3.70		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
IV					230541	0.25	0.99	24.97	71.80	2.06	0.18	0.2	11		
III	12.9	1	HS		230542	0.20	1.41	45.68	52.80	0.11	0.00	0.3	16	+	
II	13.9	2			230543	0.26	1.14	23.59	72.82	2.13	0.31	0.3	15		
I	14.9	3	HS		230544	0.12	5.64	77.98	16.18	0.16	0.04	0.6	18	+	
	15.9	4	TS											+	
		5													

Geological Survey of Denmark and Greenland / GEUS	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 24 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 24 October 2023

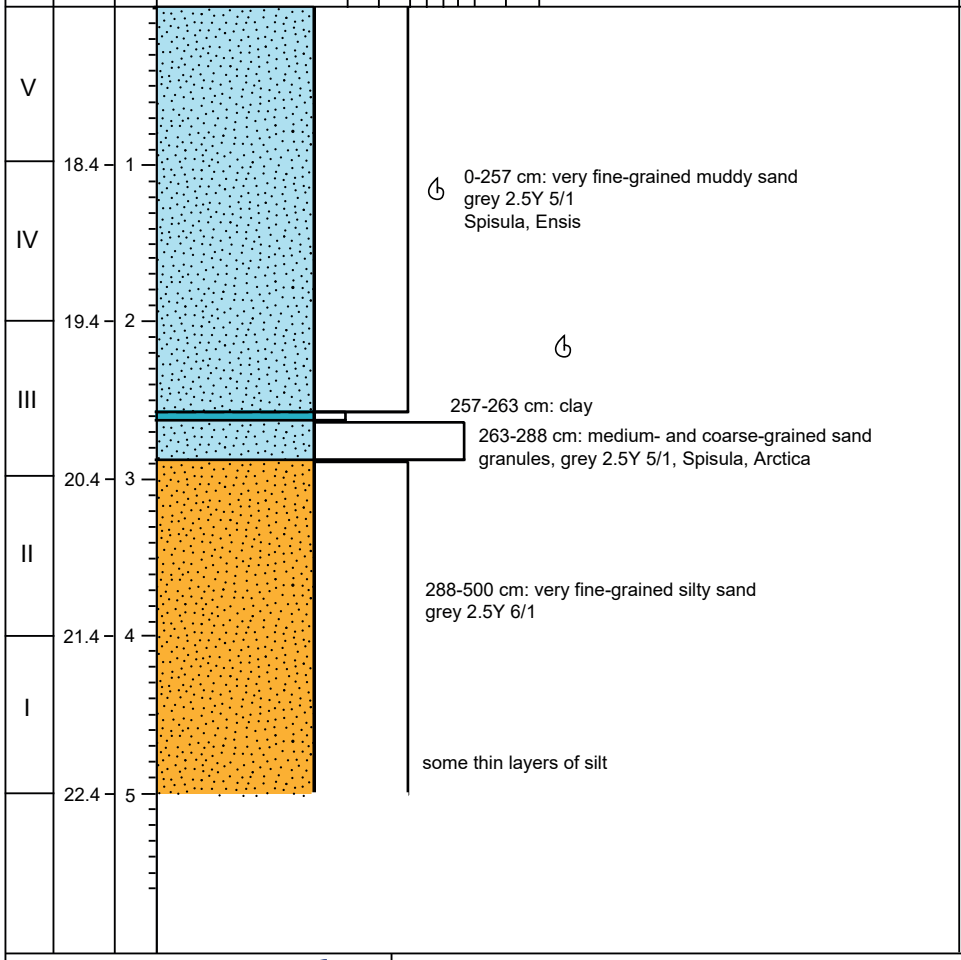
Core ID: LO-VC-17	Coordinates (m): E: 532902 N: 6354368	Water depth (m): 14.0	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.8	Longitude: 9°32.789'E Latitude: 57°19.862'N		
Core type: Vibrocore	Core length (m): 5.13		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Silt and clay (%)	Fine sand (%)	Medium sand (%)	Coarse sand (%)	Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
HS		230545	0.11	4.95	94.12	0.62	0.16	0.14	0.5	20		
		230546	0.11	5.06	94.14	0.36	0.14	0.30	0.6	21	+	
HG		230547	0.11	5.39	94.16	0.32	0.08	0.05	0.7	21	+	
TS		230548	0.08	25.82	71.16	2.11	0.70	0.21	1.2	21	+	
		230549	0.06	47.03	52.79	0.16	0.01	0.00	1.4	18		

Geological Survey of Denmark and Greenland / GEUS	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

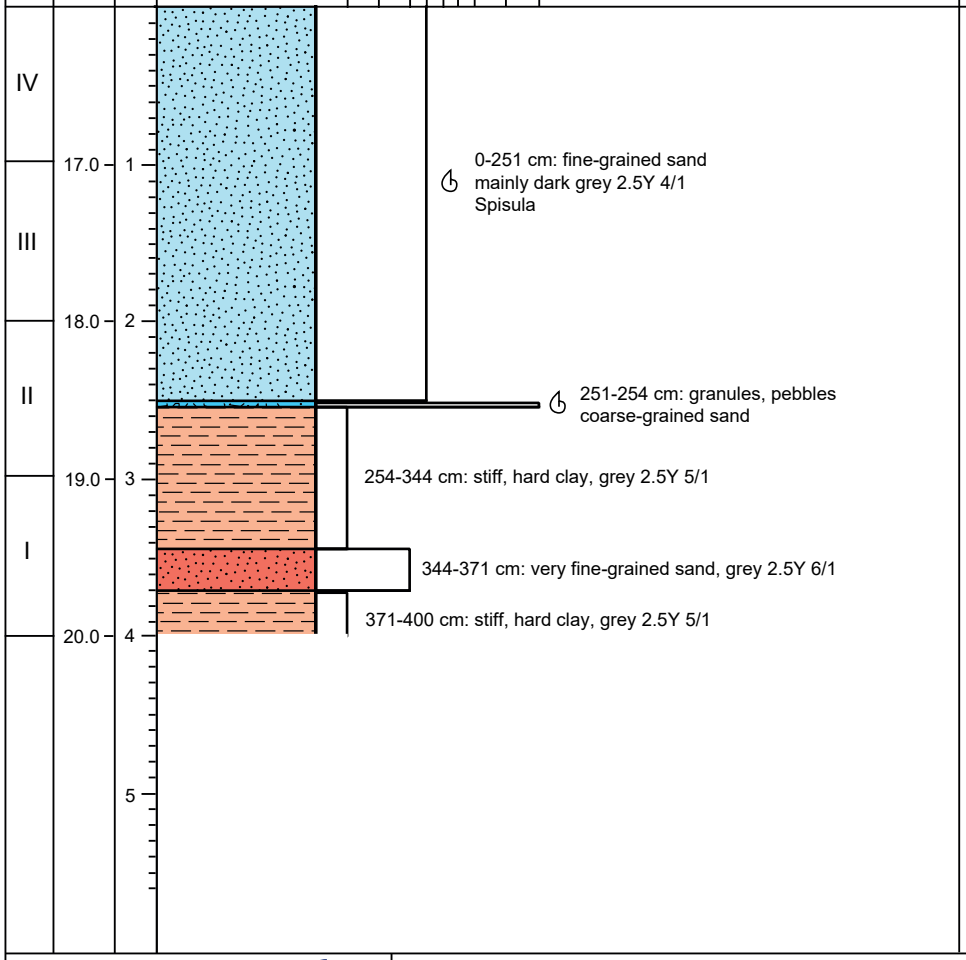
Core ID: LO-VC-18	Coordinates (m): E: 536663 N: 6361052	Water depth (m): 17.4	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570919.6	Longitude: 9°36.596'E Latitude: 57°23.447'N		
Core type: Vibrocore	Core length (m): 5.00		



Core section	Depth below mean sea level (m)	Depth below sea bed (m)	Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
V					230550	0.12	12.29	69.15	17.78	0.55	0.23	0.9	21		
IV	18.4	1	HS		230551	0.10	16.73	75.74	6.61	0.58	0.33	1.3	24	+	
III	19.4	2	HL HS		230552	0.10	14.72	82.34	1.94	0.33	0.67	1.1	22	+	
II	20.4	3			230553	0.10	13.93	85.09	0.93	0.04	0.01	0.7	20	+	
I	21.4	4	TS		230554	0.10	23.31	72.71	3.97	0.01	0.00	0.6	18		
	22.4	5													

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 24 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023

Core ID: LO-VC-19	Coordinates (m): E: 532490 N: 6356630	Water depth (m): 16.0	Coordinate system: UTM 32 Reference datum: WGS84
DGU no: 570923.6	Longitude: 9°32.396'E Latitude: 57°21.083'N		
Core type: Vibrocore	Core length (m): 4.00		



Age/environment	Samples	Laboratory ID	Grain size: Mean (mm)	Grain size: Silt and clay (%)	Grain size: Fine sand (%)	Grain size: Medium sand (%)	Grain size: Coarse sand (%)	Grain size: Gravel (%)	Loss on ignition (%)	Water (%)	$CaCO_3$	Other parameters
HS		230555	0.12	4.36	87.80	5.87	1.32	0.65	0.8	21	+	
		230556	0.12	3.41	89.94	6.06	0.39	0.20	0.5	20		
HG		230557	0.12	3.21	85.56	9.02	0.80	1.41	0.5	19		
DL											+	
DS												
DL											+	

Geological Survey of Denmark and Greenland	Client:: Kystdirektoratet	Coring: M/S Fortuna Crane	Date: 26 September 2023
		Description: Ole Bennike	Date: 25 October 2023
		QC: Niels Nørgaard-Pedersen	Date: 25 October 2023