









Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - Full	Name:	BH-01	Contractor:	Contractor 02	
Client:	Client	Depth [m]:	22	Method:	Continuous coring	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-22	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Soil Particles				Atterberg Limits			Physical Characteristics			Direct Shear Test		q u [kg/cm ²]	Triaxial Compression					Consolidation			Other Tests	Elevation [m]
					0	25	50	75	100	Gravel [%]	Sand [%]	Silt [%]	Clay [%]	LL [%]	PL [%]	PI [%]	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]		c [kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	phi' [deg.]	c' [kg/cm ²]	C c	C s		
0				Fill Material																											0	
1		ST		Sandy LEAN CLAY with Boulders	19					7.9	27.9	39.7	24.5	37	20	17															-1	
2																															-2	
3		SH		LEAN CLAY with Sand	30					0	21.7	78.3	-	31	19	12				UU	3.4	1.06				0.24	0.029	0.43			-3	
4																															-4	
5		ST			42					18.3	12.6	69.1	-	34	20	14	1.71	11.2													-5	
6																															-6	
7		SH		SILTY CLAY	50/5					1.9	3.3	53.8	41	25	18	7				CD		23.1	0.27			0.19	0.031			CH	-7	
8		ST		Poorly-Graded GRAVEL with Clay						82.6	8.9	8.5	-	34	21	13			F	37	0										-8	
9																															-9	
10		ST		Well-Graded GRAVEL with Clay and Sand	64					71.7	16.9	11.4	-	32	20	12		2.63													-10	

Sample		Disturbed	Index	LL: Liquid Limit	gd: Dry unit weight	Strength & Compression	F: Fast	CU: Consolidated Undrained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
		Undisturbed		PL: Plastic Limit	w: Moisture Content		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
		Rock core		PI: Plastic Index	Gs: Specific Gravity		phi, phi': Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	
				NP: Non-Plastic			c, c': Cohesion	qu: Unconfined Compression			K: Permeability	Full details available in supplementary legend.




Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - Full	Name:	BH-01	Contractor:	Contractor 02	
Client:	Client	Depth [m]:	22	Method:	Continuous coring	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-22	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)	Soil Particles				Atterberg Limits			Physical Characteristics			Direct Shear Test		Triaxial Compression					Consolidation			Other Tests	Elevation [m]
						Gravel [%]	Sand [%]	Silt [%]	Clay [%]	LL [%]	PL [%]	PI [%]	g _d [kg/cm ³]	w [%]	G _s	Type	phi [deg.]	c [kg/cm ²]	q _u [kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	phi ⁱ [deg.]	c ⁱ [kg/cm ²]	C _c	C _s	P _r c [kg/cm ²]
10																											-10
11		DT		Well-Graded GRAVEL with Clay and Sand	35	68.6	25.6	5.8	-	41	19	22															-11
12																											-12
13		SH		Clayey SAND with Cobbles and Boulders	27	6.8	48.3	27.9	17	38	22	16	1.99	5.3	2.68			1.62									-13
14		ST		Poorly-Graded GRAVEL with Silt, Sand and Cobbles		66.8	24.1	9.1	-	NP	NP	NP															-14
15																											-15
16		TT		Well-Graded SAND with Clay and Gravel	39	35.7	56.8	7.5	-	29	20	9														CH	-16
17		SS		Poorly-Graded GRAVEL with Sand and Boulders	48	79.2	16.8	4	-	31	21	10	2.01	8.1	2.66	F	35.4	0.02									-17
18																											-18
19				Highly Weathered Rock																							-19
20																											-20

Sample		Disturbed	Index	LL: Liquid Limit	gd: Dry unit weight	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
		Undisturbed		PL: Plastic Limit	w: Moisture Content		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
		Rock core		PI: Plastic Index	Gs: Specific Gravity		phi, phi': Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	Full details available in supplementary legend.
				NP: Non-Plastic			c, c': Cohesion	qu: Unconfined Compression			K: Permeability	

Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - Full	Name:	BH-01	Contractor:	Contractor 02	
Client:	Client	Depth [m]:	22	Method:	Continuous coring	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-22	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Soil Particles				Atterberg Limits			Physical Characteristics			Direct Shear Test		q u [kg/cm ²]	Triaxial Compression				Consolidation			Other Tests	Elevation [m]
					0	25	50	75	100	Gravel [%]	Sand [%]	Silt [%]	Clay [%]	LL [%]	PL [%]	PI [%]	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c [kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	phi' [deg.]	c' [kg/cm ²]	C c	C s		
20																															-20
21				Rock																											-21
22				End of boring																											-22
23																															-23
24																															-24
25																															-25
26																															-26
27																															-27
28																															-28
29																															-29
30																															-30

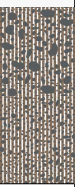
Sample	 Disturbed	Index	LL: Liquid Limit	gd: Dry unit weight	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
	 Undisturbed		PL: Plastic Limit	w: Moisture Content		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
	 Rock core		PI: Plastic Index	Gs: Specific Gravity		phi, phi': Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	Full details available in supplementary legend.
			NP: Non-Plastic			c, c': Cohesion	qu: Unconfined Compression			K: Permeability	

Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - a	Name:	TP-01	Contractor:	Contractor 01	
Client:	Client	Depth [m]:	12	Method:	Test pit	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-19	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-25	


Depth [m]	GWT [m]	Sample Type	USCS	Description	DP (Blows per 20 cm)					Soil Particles				Atterberg limits [%]			Physical characteristics			Direct Shear		Insitu Direct Shear			Other Tests	Elev. [m]
					0	80	160	240	320	G	S	M	C	LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c[kg/cm ²]	Type	phi [deg.]		
0				Top Soil																					0	
1																									-1	
2		BL	⊗	FAT CLAY	98					0	14.6	56.3	29.1	57	27	30	1.65	8.2							-2	
3																									-3	
4		BU	□	FAT CLAY with Sand	142					6.3	17.2	49.7	26.8	66	29	37			2.74					CH	-4	
5																									-5	
6		BU	□	ELASTIC SILT with Gravel	226									54	31	23				S	27.7	0.08		K	-6	
7																	1.73	6.4					S	30.2	0.14	-7
8		CC	⊗	LEAN CLAY	160/6					5.2	3.3	60.1	31.4	38	15	23									-8	
9																									-9	
10		BU	□	Silty GRAVEL with Sand	269					41.1	28.6	30.3		NP	NP	NP									-10	

Sample	□	Disturbed	Index	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	Strength	F: Fast	CH: Chemical	Other tests	Note:
	⊗	Undisturbed		S: Sand	PL: Plastic Limit	w: Moisture Content		S: Slow	CMP: Compaction		Full details available in supplementary legend.
	■	Rock core		M: Silt	PI: Plastic Index	Gs: Specific Gravity		phi: Friction angle	PLT: Plate loading test		
				C: Clay	NP: Non-Plastic			c: Cohesion	K: Permeability		

Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - a	Name:	TP-01	Contractor:	Contractor 01	
Client:	Client	Depth [m]:	12	Method:	Test pit	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-19	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-25	


Depth [m]	GWT [m]	Sample Type	USCS	Description	DP (Blows per 20 cm)	Soil Particles				Atterberg limits [%]			Physical characteristics		Direct Shear		Insitu Direct Shear		Other Tests	Elev. [m]
						G	S	M	C	LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c [kg/cm ²]		
10		BU		Silty GRAVEL with Sand	269	41.1	28.6	30.3		NP	NP	NP								-10
11																				-11
12		BU		Silty SAND with Cobbles and Boulders	135	19.3	55.6	15.2	9.9										PLT	-12
13				End of boring																-13
14																				-14
15																				-15
16																				-16
17																				-17
18																				-18
19																				-19
20																				-20

Sample	Index	Strength		Other tests		Note:	
		G: Gravel	LL: Liquid Limit	F: Fast	CH: Chemical	Full details available in supplementary legend.	
		S: Sand	w: Moisture Content	S: Slow	CMP: Compaction		
		M: Silt	Gs: Specific Gravity	phi: Friction angle	PLT: Plate loading test		
		C: Clay		c: Cohesion	K: Permeability		
			NP: Non-Plastic				




Project				Bore hole/Test pit		Drilling		Logo
Name:	Output - b			Name:	BH-01	Contractor:	Contractor 02	
Client:	Client			Depth [m]:	20	Method:	Continuous coring	
Location:	Location			Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code			Water table level [m]:	-	End date:	2017-08-22	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Fines [%]	Atterberg limits [%]			Physical characteristics			Direct Shear		q u [kg/cm ²]	Triaxial Compression		Consolidation		Other Tests	Elev. [m]
					0	25	50	75	100		LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c [kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	C c	C s	
0				Fill Material																					0
1		ST	■	Sandy LEAN CLAY with Boulders	19					64.2	37	20	17												-1
2																									-2
3		SH	⊗	LEAN CLAY with Sand	30					78.3	31	19	12							UU	3.4	1.06	0.24	0.029	-3
4																									-4
5		ST	■		42					69.1	34	20	14	1.71	11.2										-5
6																									-6
7		SH	⊗	SILTY CLAY	50/5					94.8	25	18	7							CD	23.1	0.27	0.19	0.031	-7
8		ST	■	Poorly-Graded GRAVEL with Clay						8.5	34	21	13				F	37	0						-8
9																									-9
10		ST	■	Well-Graded GRAVEL with Clay and Sand	64					11.4	32	20	12			2.63									-10

Sample	■	Disturbed	Index	LL: Liquid Limit	Fines: M+C	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
	⊗	Undisturbed		PL: Plastic Limit	gd: Dry unit weight		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
	■	Rock core		PI: Plastic Index	w: Moisture Content		phi: Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	Full details available in supplementary legend.
				NP: Non-Plastic	Gs: Specific Gravity		c: Cohesion	qu: Unconfined Compression			K: Permeability	




Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - b	Name:	BH-01	Contractor:	Contractor 02	
Client:	Client	Depth [m]:	20	Method:	Continuous coring	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-22	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Fines [%]	Atterberg limits [%]			Physical characteristics			Direct Shear		q u [kg/cm ²]	Triaxial Compression		Consolidation		Other Tests	Elev. [m]
					0	25	50	75	100		LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c [kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	C c	C s	
10																									-10
11		DT		Well-Graded GRAVEL with Clay and Sand	35					5.8	41	19	22												-11
12																									-12
13		SH		Clayey SAND with Cobbles and Boulders						44.9	38	22	16	1.99	5.3	2.68			1.62						-13
14																									-14
15		ST		Poorly-Graded GRAVEL with Silt, Sand and Cobbles						9.1	NP	NP	NP												-15
16																									-16
17		TT		Well-Graded SAND with Clay and Gravel	39					7.5	29	20	9											CH	-17
18																									-18
19																									-19
20		SS		Poorly-Graded GRAVEL with Sand and Boulders	48					4	31	21	10	2.01	8.1	2.66	F	35.4	0.02						-20
End of boring																									


Sample		Disturbed	Index	LL: Liquid Limit	Fines: M+C	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
		Undisturbed		PL: Plastic Limit	gd: Dry unit weight		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
		Rock core		PI: Plastic Index	w: Moisture Content		phi: Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	
				NP: Non-Plastic	Gs: Specific Gravity		c: Cohesion	qu: Unconfined Compression			K: Permeability	




Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - c	Name:	TP-01	Contractor:	Contractor 01	
Client:	Client	Depth [m]:	12	Method:	Test pit	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-19	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-25	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Soil Particles				Atterberg limits [%]			Physical characteristics		Direct Shear			q u	Consolidation		Other Tests	Elev. [m]
					0	25	50	75	100	G	S	M	C	LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c[kg/cm ²]	[kg/cm ²]	C c	C s	
0				Top Soil																						0
1																										-1
2		BL	⊗	FAT CLAY	30					0	14.6	56.3	29.1	57	27	30	1.65	8.2					2.78			-2
3																										-3
4		BU	□	FAT CLAY with Sand	>32					6.3	17.2	49.7	26.8	66	29	37			2.74						CH	-4
5																										-5
6		BU	□	ELASTIC SILT with Gravel	>32									54	31	23				S	27.7	0.08			K	-6
7																	1.73	6.4							PLT	-7
8		CC	⊗	LEAN CLAY	Over					5.2	3.3	60.1	31.4	38	15	23							0.32	0.039		-8
9																										-9
10		BU	□	Silty GRAVEL with Sand	>50					41.1	28.6	30.3		NP	NP	NP										-10

Sample	 Disturbed	Index	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	Strength & Compression	F: Fast	qu: Unconfined Compression	Other tests	CH: Chemical	Note:
	 Undisturbed		S: Sand	PL: Plastic Limit	w: Moisture Content		S: Slow	Cc: Coefficient of compression		CMP: Compaction	
	 Rock core		M: Silt	PI: Plastic Index	Gs: Specific Gravity		phi: Friction angle	Cs: Coefficient of swelling		PLT: Plate loading test	
			C: Clay	NP: Non-Plastic	c: Cohesion					K: Permeability	
Full details available in supplementary legend.											

Project		Bore hole/Test pit		Drilling		Logo
Name:	Output - c	Name:	TP-01	Contractor:	Contractor 01	
Client:	Client	Depth [m]:	12	Method:	Test pit	
Location:	Location	Elevation [m]:	-	Start date:	2017-08-19	
Code:	Project Code	Water table level [m]:	-	End date:	2017-08-25	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT (Blows per 30 cm)					Soil Particles				Atterberg limits [%]			Physical characteristics			Direct Shear			q u	Consolidation		Other Tests	Elev. [m]
					0	25	50	75	100	G	S	M	C	LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c[kg/cm ²]	[kg/cm ²]	C c	C s		
10		BU		Silty GRAVEL with Sand	>50					41.1	28.6	30.3		NP	NP	NP											-10
11				Silty SAND with Cobbles and Boulders																							-11
12		BU		End of boring	42						19.3	55.6	15.2	9.9											PLT		-12
13																										-13	
14																										-14	
15																										-15	
16																										-16	
17																										-17	
18																										-18	
19																										-19	
20																										-20	

Sample		Disturbed	Index	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	Strength & Compression	F: Fast	qu: Unconfined Compression	Other tests	CH: Chemical	Note:
		Undisturbed		S: Sand	PL: Plastic Limit	w: Moisture Content		S: Slow	Cc: Coefficient of compression		CMP: Compaction	
		Rock core		M: Silt	PI: Plastic Index	Gs: Specific Gravity		phi: Friction angle	Cs: Coefficient of swelling		PLT: Plate loading test	Full details available in supplementary legend.
				C: Clay	NP: Non-Plastic			c: Cohesion			K: Permeability	

Project				Bore hole/Test pit		Drilling		Logo
Name:	Output - d			Name:	BH-01	Contractor:	Contractor 02	
Client:	Client			Depth [m]:	20	Method:	Continuous coring	
Location:	Location			Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code			Water table level [m]:	-	End date:	2017-08-22	

Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Fines	Atterberg limits [%]			Physical characteristics			Direct Shear			q u	Triaxial Compression					Consolidation		Other Tests	Elev. [m]
						[%]	LL	PL	PI	g d [g/cm ³]	w [%]	G s	Type	phi [deg.]	c [kg/cm ²]	[kg/cm ²]	Type	phi [deg.]	c [kg/cm ²]	phi' [deg.]	c' [kg/cm ²]	C c	C s		
0				Fill Material																				0	
1		ST		Sandy LEAN CLAY with Boulders	19	64.2	37	20	17															-1	
2																								-2	
3		SH	⊗	LEAN CLAY with Sand	30	78.3	31	19	12								UU	3.4	1.06			0.24	0.029		-3
4																								-4	
5		ST			>30	69.1	34	20	14	1.71	11.2													K	-5
6																									-6
7		SH	⊗	SILTY CLAY	50/5	94.8	25	18	7								CD		23.1	0.27		0.19	0.031	CH	-7
8		ST		Poorly-Graded GRAVEL with Clay		8.5	34	21	13				F	37	0										-8
9																									-9
10		ST		Well-Graded GRAVEL with Clay and Sand	>50	11.4	32	20	12		2.63														-10

Sample	■	Disturbed	Index	LL: Liquid Limit	Fines: M+C	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
	⊗	Undisturbed		PL: Plastic Limit	gd: Dry unit weight		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
	■	Rock core		PI: Plastic Index	w: Moisture Content		phi, phi': Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	Full details available in supplementary legend.
				NP: Non-Plastic	Gs: Specific Gravity		c, c': Cohesion	qu: Unconfined Compression			K: Permeability	

Project				Bore hole/Test pit		Drilling		Logo
Name:	Output - d			Name:	BH-01	Contractor:	Contractor 02	
Client:	Client			Depth [m]:	20	Method:	Continuous coring	
Location:	Location			Elevation [m]:	-	Start date:	2017-08-18	
Code:	Project Code			Water table level [m]:	-	End date:	2017-08-22	

Depth	GWT	Sample	USCS	Description	SPT	Fines	Atterberg limits [%]	Physical characteristics	Direct Shear	q u	Triaxial Compression	Consolidation	Other Tests	Elev.
[m]	[m]	Type				[%]	LL PL PI	g d [g/cm ³] w [%] G s	Type phi [deg.] c [kg/cm ²] [kg/cm ²]		Type phi [deg.] c [kg/cm ²] phi' [deg.] c' [kg/cm ²]	C c C s		[m]
10														-10
11		DT		Well-Graded GRAVEL with Clay and Sand	35	5.8	41 19 22							-11
12														-12
13		SH		Clayey SAND with Cobbles and Boulders	27	44.9	38 22 16	1.99 5.3 2.68		1.62				-13
14		ST		Poorly-Graded GRAVEL with Silt, Sand and Cobbles		9.1	NP NP NP							-14
15					39									-15
16		TT		Well-Graded SAND with Clay and Gravel		7.5	29 20 9						CH	-16
17		SS		Poorly-Graded GRAVEL with Sand and Boulders	48	4	31 21 10	2.01 8.1 2.66	F 35.4 0.02					-17
18														-18
19														-19
20														-20

End of boring

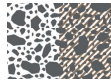
Sample	Disturbed	Index	LL: Liquid Limit	Fines: M+C	Strength & Compression	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	Other tests	CH: Chemical	Note:
	Undisturbed		PL: Plastic Limit	gd: Dry unit weight		S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling		CMP: Compaction	
	Rock core		PI: Plastic Index	w: Moisture Content		phi, phi': Friction angle	UU: Unconsolidated Undrained			PLT: Plate loading test	Full details available in supplementary legend.
			NP: Non-Plastic	Gs: Specific Gravity		c, c': Cohesion	qu: Unconfined Compression			K: Permeability	

Patterns

Gravel



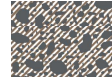
GW



GW-GC



GP-GC



GC



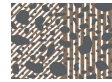
GP



GW-GM



GP-GM



GC-GM

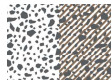


GM

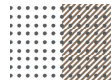
Sand



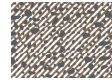
SW



SW-SC



SP-SC



SC



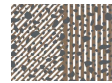
SP



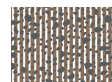
SW-SM



SP-SM



SC-SM



SM

Fines



CL



CH



OL



PT



CL-ML



MH



OH



ML

Rock & Others



ROCK



TS



FL



OTHER



HWR

Sample types

Disturbed

BU: Bulk

SS: Split-spoon

Undisturbed

BL: Block

FO: Foil

PT: Pitcher

CC: Core cutter

PH: Hydraulic piston

SH: Shelby

D: Denison

PS: Stationary piston

Rock core

ST: Single tube

TT: Triple tube

DT: Double tube

WL: Wire line

Symbols & Abbreviations

Index

G: Gravel

LL: Liquid limit

g_d : Dry unit weight

S: Sand

PL: Plastic limit

w: Moisture content

M: Silt

PI: Plastic index

G_s : Specific gravity

C: Clay

NP: Non-plastic

Strength

F: Fast

CD: Consolidated Drained

S: Slow

CU: Consolidated Undrained

ϕ , ϕ' : Friction Angle

UU: Unconsolidated Undrained

c, c': Cohesion

q_u : Unconfined compression

Compression

C_c : Coefficient of compression

C_s : Coefficient of swelling


Other tests

CH: Chemical




PLT: Plate Loading Test


CMP: Compaction

K: Permeability




Project		Bore hole/Test pit		Logo
Name:	Output - e	Name:	TP-01	
Client:	Client	Depth [m]:	15	
Location:	Location	Elevation [m]:	100	
Code:	Project Code	Water table level [m]:	12	


Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Soil Particles				Atterberg limits [%]		Physical characteristics		Direct Shear			Elev. [m]
						G	S	M	C	LL	PI	g d [g/cm ³]	w [%]	Type	phi [deg.]	c [kg/cm ²]	
0				Top Soil													100
		BU		Clayey GRAVEL with Sand and Cobbles	43	36.8	26.9	22.4	13.9	33	16						
2		BL		Clayey GRAVEL with Sand	>50	51.2	20.7	18.3	9.8	37	18			S	34.5	0.05	98
4		BU		Clayey SAND with Gravel	>50	26.4	38.8	34.8	-	32	16	1.97	6.7				96
6		BU		Poorly-Graded GRAVEL with Clay and Sand	>50	67.3	21.2	11.5	-	29	14			F	37.1	0.01	94
8		BU		Poorly-Graded GRAVEL with Sand	>50					-							92
10		CC		Silty, Clayey GRAVEL with Sand	Over	34.1	28.5	23.2	14.2					S	32.8	0.04	90
12		CC		LEAN CLAY with Gravel	Over	12.9	8.6	45.9	32.6	39	19	1.71	10.1				88
14		BL		Gravelly LEAN CLAY with Sand	>30									S	29.4	0.13	86
16				End of boring													84
18																	82
20																	80

Sample		Disturbed	Index	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	Strength	F: Fast	Note:
		Undisturbed		S: Sand	PL: Plastic Limit	w: Moisture Content		S: Slow	
		Rock core		M: Silt	PI: Plastic Index	Gs: Specific Gravity		phi: Friction angle	Full details available in supplementary legend.
				C: Clay	NP: Non-Plastic			c: Cohesion	




Project		Bore hole/Test pit		Logo
Name:	Output - f	Name:	BH-01	
Client:	Client	Depth [m]:	35	
Location:	Location	Elevation [m]:	102.5	
Code:	Project Code	Water table level [m]:	13.4	

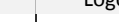
Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Fines [%]	Atterberg limits [%]		Physical characteristics		Direct Shear			Other Tests	Elev. [m]
							LL	PI	g d [g/cm ³]	w [%]	Type	phi [deg.]	c[kg/cm ²]		
0				Top Soil											102.5
2		SS		Clayey GRAVEL with Sand	28	43.1	37	17	1.99	5.3				CMP	100.5
4		SS			23	29.3	31	12						K-CH	98.5
6		ST		Clayey SAND with Gravel	34	31.7	34	14			S	31.8	0.04		96.5
8		ST		Well-Graded SAND with Silty Clay, Gravel and Cobbles	>50	9.7	25	7	1.89	7.2				CH	94.5
10		DT		Clayey GRAVEL with Sand	44	27.7	34	13							92.5
12		SH			50/6	22.8	32	12							90.5
14		SH		Gravelly LEAN CLAY	50/12	78.2	41	22						CH	88.5
16		SH			50	59.5	38	16							86.5
18		ST		Poorly-Graded GRAVEL with Sand	>50	3.9	-				F	36.9	0.01	K	84.5
20		SS			50/9	2.3								CH	82.5

Sample		Disturbed	Index	Fines: Silt + Clay	gd: Dry unit weight	Strength	F: Fast	Other tests	CH: Chemical	Note:
		Undisturbed		LL: Liquid Limit	w: Moisture Content		S: Slow		CMP: Compaction	
		Rock core		PI: Plastic Index	Gs: Specific Gravity		phi: Friction angle		PLT: Plate loading test	Full details available in supplementary legend.
				NP: Non-Plastic			c: Cohesion		K: Permeability	

Project		Bore hole/Test pit		Logo
Name:	Output - f	Name:	BH-01	
Client:	Client	Depth [m]:	35	
Location:	Location	Elevation [m]:	102.5	
Code:	Project Code	Water table level [m]:	13.4	

Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Fines [%]	Atterberg limits [%]	Physical characteristics	Direct Shear	Other Tests	Elev. [m]
							LL PI	g d [g/cm ³] w [%]	Type phi [deg.] c [kg/cm ²]		
20		SS		Poorly-Graded GRAVEL with Sand	50/9	2.3				CH	82.5
22		DT		Clayey GRAVEL with Sand	>50	27					80.5
24		DT		Well-Graded SAND with Silt and Gravel	50/5	10.2	NP NP	1.91 8.5	F 35.1 0.02	CH-K	78.5
26											76.5
28				Highly Weathered Rock							74.5
30											72.5
32				Rock							70.5
34											68.5
36				End of boring							66.5
38											64.5
40											62.5


Sample  Disturbed  Undisturbed  Rock core	Index Fines: Silt + Clay LL: Liquid Limit PI: Plastic Index NP: Non-Plastic gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	Strength F: Fast S: Slow phi: Friction angle c: Cohesion	Other tests CH: Chemical CMP: Compaction PLT: Plate loading test K: Permeability	Note: Full details available in supplementary legend.
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Project		Bore hole/Test pit		Logo
Name:	Output - g	Name:	TP-01	
Client:	Client	Depth [m]:	18	
Location:	Location	Elevation [m]:	100	
Code:	Project Code	Water table level [m]:	12	




Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Fines [%]	Atterberg limits [%]	Physical characteristics	Direct Shear	q u	Consolidation	Elev. [m]
							LL PI	g d [g/cm ³] w [%]	Type phi [deg.] c [kg/cm ²]	[kg/cm ²]	C c C s	
0				Fill Material								100
		BU		PEAT	138							
2												98
		BL		Clayey GRAVEL with Sand	193	28.1	37 18		S 34.5 0.05			
4												96
		BU		Clayey SAND with Gravel	226	34.8	32 16	1.97 6.7		2.23		
6												94
		BU		Poorly-Graded GRAVEL with Clay and Sand	301	11.5	29 14		F 37.1 0.01			
8												92
		BU		Poorly-Graded GRAVEL with Sand	320		-					
10												90
		CC		Silty, Clayey GRAVEL with Sand	160/7	37.4			S 32.8 0.04			
12												88
		CC		LEAN CLAY with Gravel	160/9	78.5	39 19	1.71 10.1		3.64	0.34 0.048	
14												86
		BL		Gravelly LEAN CLAY with Sand	294				S 29.4 0.13			
16												84
				Highly Weathered Rock								
18												82
				End of boring								
20												80

Sample	<div>Disturbed</div> <div>Undisturbed</div> <div>Rock core</div>	Index	Fines: Silt + Clay LL: Liquid Limit PI: Plastic Index NP: Non-Plastic	gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	Strength & Compression	F: Fast S: Slow phi: Friction angle c: Cohesion	qu: Unconfined Compression Cc: Coefficient of compression Cs: Coefficient of swelling	Note:
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Full details available in supplementary legend.




Project		Bore hole/Test pit		Logo
Name:	Output - h	Name:	BH-01	
Client:	Client	Depth [m]:	35	
Location:	Location	Elevation [m]:	102.5	
Code:	Project Code	Water table level [m]:	13.4	




Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Soil Particles				Physical characteristics		Direct Shear			q _u [kg/cm ²]	Consolidation		Elev. [m]
						G	S	M	C	g _d [g/cm ³]	w [%]	Type	phi [deg.]	c [kg/cm ²]		C _c	C _s	
0				Top Soil														102.5
2		SS		Well-Graded GRAVEL with Sand	28	63.1	35.8	1.1	-	1.99	5.3							100.5
4		SS			23	70.7	25.9	3.4	-									98.5
6		ST		Clayey SAND with Gravel	34	29.4	38.9	17.2	14.5			S	31.8	0.04				96.5
8		ST		Well-Graded SAND with Silty Clay, Gravel and Cobbles	67	22.5	67.8	9.7	-	1.89	7.2							94.5
10		DT			44	47.2	25.1	27.7	-									92.5
12		SH		Clayey GRAVEL with Sand	50/6	50.4	26.8	22.8	-									90.5
14		SH		Gravelly LEAN CLAY	50/12	14.6	7.2	51.4	26.8							0.29	0.041	88.5
16		SH			50	18.9	21.6	25.1	34.4						3.25			86.5
18		ST		Poorly-Graded GRAVEL with Sand	89	71.4	24.7	3.9	-			F	36.9	0.01				84.5
20		SS			50/9	64.8	32.9	2.3										82.5

Sample		Disturbed	Index	G: Gravel	gd: Dry unit weight	Strength & Compression	F: Fast	qu: Unconfined Compression	Note:
		Undisturbed		S: Sand	w: Moisture Content		S: Slow	Cc: Coefficient of compression	
		Rock core		M: Silt	Gs: Specific Gravity		phi: Friction angle	Cs: Coefficient of swelling	
				C: Clay			c: Cohesion		







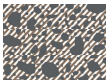





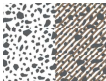

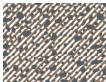



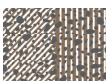



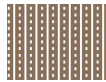



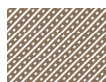



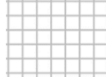


Full details available in supplementary legend.

Project		Bore hole/Test pit		Logo
Name:	Output - h	Name:	BH-01	
Client:	Client	Depth [m]:	35	
Location:	Location	Elevation [m]:	102.5	
Code:	Project Code	Water table level [m]:	13.4	

Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Soil Particles				Physical characteristics		Direct Shear		q u		Consolidation		Elev. [m]
						G	S	M	C	g d [g/cm ³]	w [%]	Type	phi [deg.]	c[kg/cm ²]	[kg/cm ²]	C c	C s	
20		SS		Poorly-Graded GRAVEL with Sand	50/9	64.8	32.9	2.3	-									82.5
22		DT		Clayey GRAVEL with Sand	100	56.7	16.3	27	-									80.5
24		DT		Well-Graded SAND with Silt and Gravel	50/5	22.9	66.9	10.2	-	1.91	8.5	F	35.1	0.02				78.5
26																		76.5
28				Highly Weathered Rock														74.5
30																		72.5
32				Rock														70.5
34																		68.5
36				End of boring														66.5
38																		64.5
40																		62.5

Sample		Disturbed	Index	G: Gravel	gd: Dry unit weight	Strength & Compression	F: Fast	qu: Unconfined Compression	Note:
		Undisturbed		S: Sand	w: Moisture Content		S: Slow	Cc: Coefficient of compression	
		Rock core		M: Silt	Gs: Specific Gravity		phi: Friction angle	Cs: Coefficient of swelling	
				C: Clay			c: Cohesion		

Full details available in supplementary legend.

Sample types	Disturbed	BU: Bulk		SS: Split-spoon					
	Undisturbed	BL: Block CC: Core cutter D: Denison		FO: Foil PH: Hydraulic piston PS: Stationary piston		PT: Pitcher SH: Shelby			
	Rock core	ST: Single tube DT: Double tube		TT: Triple tube WL: Wire line					
Patterns	Gravel		GW		GW-GC		GP-GC		GC
			GP		GW-GM		GP-GM		GC-GM
	Sand		SW		SW-SC		SP-SC		SC
			SP		SW-SM		SP-SM		SC-SM
									SM
Fines		CL		CH		OL		PT	
		CL-ML		MH		OH			
		ML							
Rock & Others		ROCK		TS		OTHER			
		HWR		FL					
Symbols & Abbreviations	Index	G: Gravel S: Sand M: Silt C: Clay		LL: Liquid limit PL: Plastic limit PI: Plastic index NP: Non-plastic		g_d : Dry unit weight w : Moisture content G_s : Specific gravity			
	Strength	F: Fast S: Slow ϕ , ϕ' : Friction Angle c , c' : Cohesion		CD: Consolidated Drained CU: Consolidated Undrained UU: Unconsolidated Undrained q_u : Unconfined compression					
	Compression	C_c : Coefficient of compression					C_s : Coefficient of swelling		
	Other tests	CH: Chemical CMP: Compaction		PLT: Plate Loading Test K: Permeability					