







<b>Project</b>		<b>Bore hole/Test pit</b>		<b>Drilling</b>		<b>Logo</b>
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 <sup>3</sup> ]	w [%]	G s	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	Type		
0				Top Soil																					0
2		BL		FAT CLAY	98					0	14.6	56.3	29.1	57	27	30	1.65	8.2							-2
4		BU		FAT CLAY with Sand	142					6.3	17.2	49.7	26.8	66	29	37		2.74					CH		-4
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	PLT	-7
8		CC		LEAN CLAY	160/6					5.2	3.3	60.1	31.4	38	15	23									-8
10		BU		Silty GRAVEL with Sand	269					41.1	28.6	30.3		NP	NP	NP									-10

<b>Sample</b>	 Disturbed	<b>Index</b>	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	<b>Strength</b>	F: Fast	CH: Chemical	<b>Note:</b>
	 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		

<b>Project</b>		<b>Bore hole/Test pit</b>		<b>Drilling</b>		<b>Logo</b>
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 <sup>3</sup> ]	w [%]	G s	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]		
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																-12
12				End of boring	135	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

<b>Sample</b>	 Disturbed	<b>Index</b>	G: Gravel	LL: Liquid Limit	gd: Dry unit weight	<b>Strength</b>	F: Fast	<b>Other tests</b>	CH: Chemical	<b>Note:</b>
	 Undisturbed		S: Sand	PL: Plastic Limit	w: Moisture Content	S: Slow	CMP: Compaction		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	PLT: Plate loading test		
			C: Clay	NP: Non-Plastic		c: Cohesion	K: Permeability	K: Permeability		

<b>Project</b>		<b>Bore hole/Test pit</b>		<b>Drilling</b>		<b>Logo</b> 
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		Triaxial Compression		Consolidation		Other Tests	Elev. [m]	
					0	25	50	75	100		LL	PL	PI	g d [g/cm <sup>3</sup> ]	w [%]	G s	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	kg/cm <sup>2</sup>	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	C c	C s			
0				Fill Material																						0		
1		ST	II	Sandy LEAN CLAY with Boulders	19					64.2	37	20	17													-1		
2		SH	IX	LEAN CLAY with Sand	30					78.3	31	19	12							UU	3.4	1.06	0.24	0.029			-2	
3																												
4																											-4	
5		ST	II		42					69.1	34	20	14	1.71	11.2												-5	
6		SH	IX	SILTY CLAY	50/5					94.8	25	18	7								CD	23.1	0.27	0.19	0.031	CH	-6	
7																												
8		ST	II	Poorly-Graded GRAVEL with Clay						8.5	34	21	13								F	37	0				-8	
9		ST	II	Well-Graded GRAVEL with Clay and Sand	64					11.4	32	20	12			2.63											-9	
10																											-10	

<b>Sample</b>	 Disturbed	 Undisturbed	 Rock core	<b>Index</b>	LL: Liquid Limit	Fines: M+C	<b>Strength &amp; Compression</b>	F: Fast	CD: Consolidated Drained	Cc: Coefficient of compression	<b>Other tests</b>	CH: Chemical	<b>Note:</b>
					PL: Plastic Limit	gd: Dry unit weight	S: Slow	CU: Consolidated Undrained	Cs: Coefficient of swelling			CMP: Compaction	Full details available in supplementary legend.
					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	









<b>Project</b>		<b>Bore hole/Test pit</b>		<b>Drilling</b>		<b>Logo</b>
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 <sup>3</sup> ]	w [%]	G s	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	[kg/cm <sup>2</sup> ]	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	phi' [deg.]	c' [kg/cm <sup>2</sup> ]	C c	C s					
10				Well-Graded GRAVEL with Clay and Sand	35	5.8	41	19	22																	-10		
11		DT																								-11		
12				Clayey SAND with Cobbles and Boulders		44.9	38	22	16	1.99	5.3	2.68				1.62										-12		
13		SH	⊗		27																					-13		
14				Poorly-Graded GRAVEL with Silt, Sand and Cobbles		9.1	NP	NP	NP																	-14		
15		ST																								-15		
16				Well-Graded SAND with Clay and Gravel	39	7.5	29	20	9															CH		-16		
17		TT																								-17		
18				Poorly-Graded GRAVEL with Sand and Boulders	48	4	31	21	10	2.01	8.1	2.66	F	35.4	0.02											-18		
19		SS																								-19		
20																										-20		

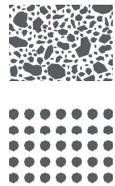
End of boring

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		K: Permeability	
				NP: Non-Plastic	Gs: Specific Gravity		c, c': Cohesion	qu: Unconfined Compression				

Full details available in supplementary legend.

Patterns

Gravel



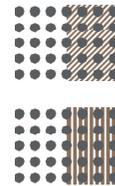
GW

GP



GW-GC

GW-GM



GP-GC

GP-GM



GC



GC-GM



GM

Sand



SW

SP



SW-SC

SW-SM



SP-SC

SP-SM



SC



SC-SM



SM

Fines



CL



CL-ML



ML



CH



MH



OL



OH



PT

Rock & Others



ROCK



HWR



TS



FL



OTHER

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

$\phi$ ,  $\phi'$ : 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 <sup>3</sup> ]	w [%]	Type	phi [deg.]		c [kg/cm <sup>2</sup> ]
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	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

<b>Sample</b>  Disturbed  Undisturbed  Rock core	<b>Index</b> G: Gravel S: Sand M: Silt C: Clay LL: Liquid Limit PL: Plastic Limit PI: Plastic Index NP: Non-Plastic	<b>Strength</b> gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	<b>Note:</b> F: Fast S: Slow phi: Friction angle c: Cohesion	Full details available in supplementary legend.
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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 <sup>3</sup> ]	w [%]	Type	phi [deg.]		
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		Clayey GRAVEL with Sand	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		Clayey GRAVEL with Sand	50/6	22.8	32	12						90.5
14		SH		Gravelly LEAN CLAY	50/12	78.2	41	22					CH	88.5
16		SH		Gravelly LEAN CLAY	50	59.5	38	16						86.5
18		ST		Poorly-Graded GRAVEL with Sand	>50	3.9	-				F	36.9	0.01	84.5
20		SS		Poorly-Graded GRAVEL with Sand	50/9	2.3							CH	82.5

<b>Sample</b>  Disturbed  Undisturbed  Rock core	<b>Index</b> Fines: Silt + Clay LL: Liquid Limit PI: Plastic Index NP: Non-Plastic gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	<b>Strength</b> F: Fast S: Slow phi: Friction angle c: Cohesion	<b>Other tests</b> CH: Chemical CMP: Compaction PLT: Plate loading test K: Permeability	<b>Note:</b> Full details available in supplementary legend.
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<b>Project</b> Name: Output - f Client: Client Location: Location Code: Project Code		<b>Bore hole/Test pit</b> Name: BH-01 Depth [m]: 35 Elevation [m]: 102.5 Water table level [m]: 13.4		<b>Logo</b> 
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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 <sup>3</sup> ]	w [%]	Type	phi [deg.]			c [kg/cm <sup>2</sup> ]
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	

<b>Sample</b>  Disturbed  Undisturbed  Rock core	<b>Index</b> Fines: Silt + Clay LL: Liquid Limit PI: Plastic Index NP: Non-Plastic gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	<b>Strength</b> F: Fast S: Slow phi: Friction angle c: Cohesion	<b>Other tests</b> CH: Chemical CMP: Compaction PLT: Plate loading test K: Permeability	<b>Note:</b> 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 <sup>3</sup> ]	w [%]	Type	phi [deg.]	c [kg/cm <sup>2</sup> ]	[kg/cm <sup>2</sup> ]	Cc	Cs			
0				Fill Material														100
		BU		PEAT	138													98
2																		
		BL		Clayey GRAVEL with Sand	193	28.1	37	18		S	34.5	0.05						96
4																		
		BU		Clayey SAND with Gravel	226	34.8	32	16	1.97	6.7			2.23					94
6																		
		BU		Poorly-Graded GRAVEL with Clay and Sand	301	11.5	29	14			F	37.1	0.01					92
8																		
		BU		Poorly-Graded GRAVEL with Sand	320													90
10																		
		CC		Silty, Clayey GRAVEL with Sand	160/7	37.4					S	32.8	0.04					88
12																		
		CC		LEAN CLAY with Gravel	160/9	78.5	39	19	1.71	10.1			3.64	0.34	0.048			86
14																		
		BL		Gravelly LEAN CLAY with Sand	294						S	29.4	0.13					84
16																		
				Highly Weathered Rock														82
18				End of boring														80

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

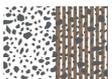
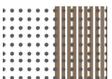
Depth [m]	GWT [m]	Sample Type	USCS	Description	SPT	Soil Particles				Physical characteristics		Direct Shear		qu [kg/cm <sup>2</sup> ]	Consolidation		Elev. [m]
						G	S	M	C	gd [g/cm <sup>3</sup> ]	w [%]	Type	phi [deg.]		c [kg/cm <sup>2</sup> ]	Cc	
0				Top Soil													102.5
2		SS		Well-Graded GRAVEL 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			50/12	14.6	7.2	51.4	26.8						0.29	0.041	88.5
16		SH		Gravelly LEAN CLAY	50	18.9	21.6	25.1	34.4					3.25			86.5
18		ST			89	71.4	24.7	3.9	-			F	36.9	0.01			84.5
20		SS		Poorly-Graded GRAVEL with Sand	50/9	64.8	32.9	2.3	-								82.5

<b>Sample</b>  Disturbed  Undisturbed  Rock core	<b>Index</b> G: Gravel S: Sand M: Silt C: Clay	gd: Dry unit weight w: Moisture Content Gs: Specific Gravity	<b>Strength &amp; Compression</b> F: Fast S: Slow phi: Friction angle c: Cohesion	qu: Unconfined Compression Cc: Coefficient of compression Cs: Coefficient of swelling	<b>Note:</b> Full details available in supplementary legend.
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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 <sub>u</sub> [kg/cm <sup>2</sup> ]	Consolidation		Elev. [m]
						G	S	M	C	g <sub>d</sub> [g/cm <sup>3</sup> ]	w [%]	Type	phi [deg.]		c [kg/cm <sup>2</sup> ]	C <sub>c</sub>	
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	Full details available in supplementary legend.
				C: Clay			c: Cohesion		

Sample types		Disturbed		Undisturbed		Rock core			
	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		Sand		Fines		Rock & Others	
	Gravel	 GW	 GW-GC	 GP-GC	 GC	 GC-GM	 GM		
		 GP	 GW-GM	 GP-GM					
	Sand	 SW	 SW-SC	 SP-SC	 SC	 SC-SM	 SM		
		 SP	 SW-SM	 SP-SM					
	Fines	 CL	 CH	 OL		 PT			
		 CL-ML	 MH	 OH					
		 ML							
	Rock & Others	 ROCK	 TS					 OTHER	
		 HWR	 FL						
Symbols & Abbreviations		G: Gravel S: Sand M: Silt C: Clay		LL: Liquid limit PL: Plastic limit PI: Plastic index NP: Non-plastic		g <sub>d</sub> : Dry unit weight w: Moisture content G <sub>s</sub> : Specific gravity			
	Index								
	Strength	F: Fast S: Slow phi, phi': Friction Angle c, c': Cohesion		CD: Consolidated Drained CU: Consolidated Undrained UU: Unconsolidated Undrained q <sub>u</sub> : Unconfined compression					
	Compression	C <sub>c</sub> : Coefficient of compression		C <sub>s</sub> : Coefficient of swelling					
	Other tests	CH: Chemical CMP: Compaction		PLT: Plate Loading Test K: Permeability					