



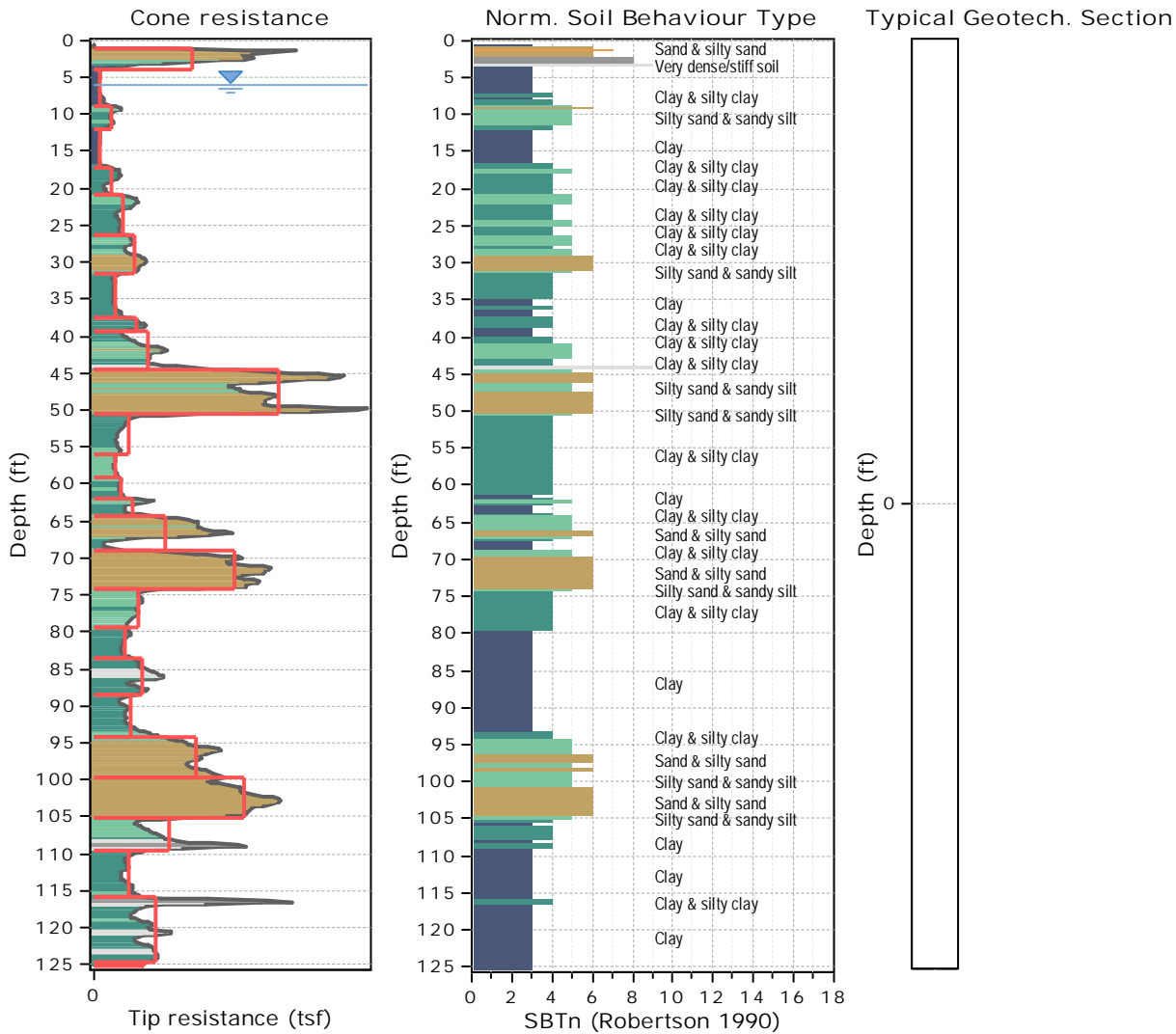
Terracon Consultants, Inc.  
 5075 Commercial Cir., Suite E  
 Concord, CA 94520  
 www.terracon.com

CPT: CPT-04  
 Total depth: 125.16 ft, Date: 3/25/2020  
 Surface Elevation: 56.00 ft  
 Coords: X:0.00, Y:0.00

Project: Fyffe  
 Location:

Cone Type:  
 Cone Operator:

Depth (ft)	Elevation: 56.00 (ft)	Description	qt (tsf)	Ksbt (ft/s)	N60	Es (tsf)	Dr	Phi (°)	M (tsf)	Go (tsf)	Su (tsf)	Su ratio	OCR	Gamma (pcf)
0														
0.98		Very dense/stiff soil	132.7	7.15E-4	27.2	1007.1	96.5	47.5	1483.6	992.7	-	-	-	124.5
5	63.94	Clay	9.0	1.47E-7	3.9	-	-	-	120.7	258.0	0.6	1.6	7.4	107.1
8.86		Silty sand & sandy silt	23.7	4.79E-6	7.4	314.6	35.6	35.6	363.0	385.9	-	-	-	110.0
11.98		Clay	7.1	4.12E-8	3.3	-	-	-	70.5	241.4	0.4	0.8	3.8	103.4
17.22		Clay & silty clay	23.8	6.52E-7	8.5	-	-	-	318.7	498.0	1.5	2.0	9.2	112.8
20.83		Clay & silty clay	38.9	1.30E-6	13.5	-	-	-	526.7	763.7	2.3	2.8	13.1	119.5
26.41		Silty sand & sandy silt	54.5	2.12E-5	15.6	586.9	40.4	36.1	809.9	756.8	-	-	-	117.0
31.66		Clay & silty clay	29.6	2.13E-7	12.1	-	-	-	387.7	771.0	1.9	1.8	8.4	118.2
37.57		Clay & silty clay	58.3	5.44E-7	21.5	-	-	-	785.1	1278.0	3.8	3.4	15.9	126.1
39.21		Clay & silty clay	73.5	2.58E-6	24.8	-	-	-	1095.2	1378.4	4.1	3.4	15.8	126.2
44.46		Sand & silty sand	250.7	1.18E-4	59.7	1936.7	73.2	42.4	3828.0	2427.3	-	-	-	134.3
50.52		Clay & silty clay	46.6	1.99E-6	17.5	-	-	-	616.9	1027.0	2.6	1.6	7.2	119.0
55.94		Clay & silty clay	29.3	1.39E-7	12.2	-	-	-	357.7	749.6	2.1	1.0	4.8	113.1
59.22		Clay & silty clay	37.2	1.31E-7	15.7	-	-	-	470.8	994.5	2.5	1.3	6.0	118.2
62.01		Clay & silty clay	53.2	4.59E-7	20.8	-	-	-	693.3	1278.0	3.1	1.6	7.5	122.7
64.30		Silty sand & sandy silt	96.3	2.67E-5	27.5	1310.2	47.1	37.6	1629.7	1327.2	-	-	-	121.0
69.06		Sand & silty sand	189.7	1.31E-4	43.4	1354.7	56.4	38.4	2575.3	1680.2	-	-	-	126.1
74.31		Clay & silty clay	60.8	5.11E-7	23.7	-	-	-	820.4	1433.9	3.9	1.6	7.5	122.9
79.40		Clay	42.5	4.80E-8	19.6	-	-	-	514.8	1336.6	2.6	1.1	5.0	121.8
83.50		Clay	66.3	6.64E-8	29.6	-	-	-	856.1	2026.7	4.0	1.7	7.7	128.6
88.42		Clay	49.5	6.89E-8	22.9	-	-	-	590.7	1561.7	3.0	1.1	5.2	123.5
94.32		Silty sand & sandy silt	139.9	1.24E-5	39.5	1440.3	40.2	35.7	2483.7	1811.9	-	-	-	125.0
99.57		Sand & silty sand	204.2	7.95E-5	50.3	1648.2	48.9	37.1	3145.3	2065.7	-	-	-	127.2
105.15		Clay & silty clay	101.4	8.53E-7	40.3	-	-	-	1360.4	2504.5	6.3	2.0	9.2	129.2
109.58		Clay	47.7	1.63E-8	24.5	-	-	-	477.8	1764.9	2.7	0.8	3.9	124.3
115.81		Clay	83.9	9.63E-8	37.6	-	-	-	1057.2	2559.5	5.0	1.5	6.9	129.5
124.67		Clay	68.8	3.25E-8	32.8	-	-	-	857.0	2298.9	4.1	1.1	5.2	128.1



Tabular results

:: Layer No: 1 ::		
Code: Layer_1    Start depth: 0.98 (ft), End depth: 3.94 (ft)		
Description: Very dense/stiff soil		
<b>Basic results</b>	<b>Estimation results</b>	
Total cone resistance: 132.74 ±92.30 tsf	Permeability: 7.15E-04 ±1.29E-03 ft/s	Constrained Mod.: 1483.59 ±941.02 tsf
Sleeve friction: 2.32 ±1.53 tsf	N <sub>60</sub> : 27.15 ±16.27 blows	Go: 992.70 ±517.48 tsf
I <sub>c</sub> : 1.94 ±0.53	Es: 1007.07 ±256.69 tsf	Su: 0.00 ±0.00 tsf
SBT <sub>n</sub> : 8	Dr (%): 96.55 ±7.89	Su ratio: 0.00 ±0.00
SBTn description: Very dense/stiff soil	φ (degrees): 47.51 ±1.71 °	O.C.R.: 0.00 ±0.00
	Unit weight: 124.54 ±11.11 pcf	



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Cone Type:  
Cone Operator:

Project: Fyffe  
Location:

Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
0.98 3.94	2.96	7.15E-04 (±1.29E-03)	27.2 (±16.3)	1007.1 (±256.7)	96.5 (±7.9)	47.5 (±1.7)	1483.6 (±941.0)	992.7 (±517.5)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	124.5 (±11.1)
3.94 8.86	4.92	1.47E-07 (±2.91E-07)	3.9 (±1.3)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	120.7 (±54.7)	258.0 (±70.9)	0.6 (±0.2)	1.6 (±0.5)	7.4 (±2.2)	107.1 (±3.6)
8.86 11.98	3.12	4.79E-06 (±6.21E-06)	7.4 (±1.2)	314.6 (±10.7)	35.6 (±3.0)	35.6 (±0.5)	363.0 (±159.5)	385.9 (±25.3)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	110.0 (±1.0)
11.98 17.22	5.24	4.12E-08 (±6.89E-08)	3.3 (±0.7)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	70.5 (±42.5)	241.4 (±37.0)	0.4 (±0.2)	0.8 (±0.3)	3.8 (±1.4)	103.4 (±2.3)
17.22 20.83	3.61	6.52E-07 (±4.09E-07)	8.5 (±2.8)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	318.7 (±125.2)	498.0 (±139.8)	1.5 (±0.5)	2.0 (±0.8)	9.2 (±3.7)	112.8 (±5.1)
20.83 26.41	5.58	1.30E-06 (±1.38E-06)	13.5 (±3.0)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	526.7 (±157.0)	763.7 (±136.5)	2.3 (±0.5)	2.8 (±0.6)	13.1 (±3.0)	119.5 (±3.3)
26.41 31.66	5.25	2.12E-05 (±2.80E-05)	15.6 (±0.7)	586.9 (±75.9)	40.4 (±2.9)	36.1 (±1.2)	809.9 (±212.9)	756.8 (±103.1)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	117.0 (±3.9)
31.66 37.57	5.91	2.13E-07 (±2.73E-07)	12.1 (±2.1)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	387.7 (±83.5)	771.0 (±132.7)	1.9 (±0.4)	1.8 (±0.3)	8.4 (±1.5)	118.2 (±2.5)
37.57 39.21	1.64	5.44E-07 (±2.35E-07)	21.5 (±2.8)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	785.1 (±139.8)	1278.0 (±114.6)	3.8 (±0.7)	3.4 (±0.6)	15.9 (±2.9)	126.1 (±1.4)
39.21 44.46	5.25	2.58E-06 (±3.78E-06)	24.8 (±7.7)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	1095.2 (±529.9)	1378.4 (±375.8)	4.1 (±1.8)	3.4 (±1.4)	15.8 (±6.5)	126.2 (±3.6)
44.46 50.52	6.06	1.18E-04 (±2.14E-04)	59.7 (±8.3)	1936.7 (±244.0)	73.2 (±8.6)	42.4 (±1.0)	3828.0 (±555.9)	2427.3 (±305.8)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	134.3 (±1.8)
50.52 55.94	5.42	1.99E-06 (±9.66E-06)	17.5 (±8.4)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	616.9 (±548.8)	1027.0 (±353.3)	2.6 (±0.8)	1.6 (±0.6)	7.2 (±2.9)	119.0 (±5.1)



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Surface Elevation: 56.00 ft  
Coords: X:0.00, Y:0.00  
Cone Type:  
Cone Operator:

Project: Fyffe  
Location:

Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
55.94	3.28	1.39E-07	12.2	0.0	0.0	0.0	357.7	749.6	2.1	1.0	4.8	113.1
59.22		(±3.23E-08)	(±0.8)	(±0.0)	(±0.0)	(±0.0)	(±39.4)	(±39.8)	(±0.2)	(±0.1)	(±0.5)	(±1.0)
59.22	2.79	1.31E-07	15.7	0.0	0.0	0.0	470.8	994.5	2.5	1.3	6.0	118.2
62.01		(±6.05E-08)	(±2.2)	(±0.0)	(±0.0)	(±0.0)	(±79.6)	(±147.3)	(±0.4)	(±0.2)	(±1.0)	(±2.6)
62.01	2.29	4.59E-07	20.8	0.0	0.0	0.0	693.3	1278.0	3.1	1.6	7.5	122.7
64.30		(±6.38E-07)	(±2.9)	(±0.0)	(±0.0)	(±0.0)	(±196.9)	(±90.5)	(±0.6)	(±0.3)	(±1.5)	(±1.1)
64.30	4.76	2.67E-05	27.5	1310.2	47.1	37.6	1629.7	1327.2	0.0	0.0	0.0	121.0
69.06		(±6.19E-05)	(±13.4)	(±216.6)	(±6.7)	(±1.0)	(±1224.6)	(±508.5)	(±0.0)	(±0.0)	(±0.0)	(±8.3)
69.06	5.25	1.31E-04	43.4	1354.7	56.4	38.4	2575.3	1680.2	0.0	0.0	0.0	126.1
74.31		(±1.10E-04)	(±6.6)	(±99.6)	(±7.1)	(±0.8)	(±545.2)	(±159.5)	(±0.0)	(±0.0)	(±0.0)	(±1.9)
74.31	5.09	5.11E-07	23.7	0.0	0.0	0.0	820.4	1433.9	3.9	1.6	7.5	122.9
79.40		(±1.39E-06)	(±3.9)	(±0.0)	(±0.0)	(±0.0)	(±418.0)	(±158.4)	(±0.6)	(±0.3)	(±1.3)	(±2.0)
79.40	4.10	4.80E-08	19.6	0.0	0.0	0.0	514.8	1336.6	2.6	1.1	5.0	121.8
83.50		(±2.35E-08)	(±1.7)	(±0.0)	(±0.0)	(±0.0)	(±81.1)	(±97.8)	(±0.4)	(±0.1)	(±0.7)	(±1.2)
83.50	4.92	6.64E-08	29.6	0.0	0.0	0.0	856.1	2026.7	4.0	1.7	7.7	128.6
88.42		(±3.15E-08)	(±4.9)	(±0.0)	(±0.0)	(±0.0)	(±189.8)	(±299.7)	(±0.9)	(±0.4)	(±1.7)	(±2.5)
88.42	5.90	6.89E-08	22.9	0.0	0.0	0.0	590.7	1561.7	3.0	1.1	5.2	123.5
94.32		(±1.17E-07)	(±4.5)	(±0.0)	(±0.0)	(±0.0)	(±223.8)	(±251.7)	(±1.1)	(±0.4)	(±1.7)	(±2.7)
94.32	5.25	1.24E-05	39.5	1440.3	40.2	35.7	2483.7	1811.9	0.0	0.0	0.0	125.0
99.57		(±7.62E-06)	(±4.5)	(±186.3)	(±3.0)	(±0.8)	(±687.6)	(±227.9)	(±0.0)	(±0.0)	(±0.0)	(±2.5)
99.57	5.58	7.95E-05	50.3	1648.2	48.9	37.1	3145.3	2065.7	0.0	0.0	0.0	127.2
105.15		(±9.59E-05)	(±2.3)	(±166.7)	(±5.4)	(±0.5)	(±404.2)	(±208.9)	(±0.0)	(±0.0)	(±0.0)	(±2.0)
105.15	4.43	8.53E-07	40.3	0.0	0.0	0.0	1360.4	2504.5	6.3	2.0	9.2	129.2
109.58		(±2.81E-06)	(±14.2)	(±0.0)	(±0.0)	(±0.0)	(±659.1)	(±861.0)	(±2.7)	(±0.9)	(±4.3)	(±5.4)



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Project: Fyffe  
 Location:

Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
109.58	6.23	1.63E-08	24.5	0.0	0.0	0.0	477.8	1764.9	2.7	0.8	3.9	124.3
115.81		(±1.08E-08)	(±4.3)	(±0.0)	(±0.0)	(±0.0)	(±190.2)	(±319.5)	(±0.6)	(±0.2)	(±1.0)	(±2.9)
115.81	8.86	9.63E-08	37.6	0.0	0.0	0.0	1057.2	2559.5	5.0	1.5	6.9	129.5
124.67		(±2.26E-07)	(±13.8)	(±0.0)	(±0.0)	(±0.0)	(±633.0)	(±730.0)	(±3.0)	(±0.9)	(±4.3)	(±3.8)
124.67	0.49	3.25E-08	32.8	0.0	0.0	0.0	857.0	2298.9	4.1	1.1	5.2	128.1
125.16		(±4.40E-09)	(±1.7)	(±0.0)	(±0.0)	(±0.0)	(±59.5)	(±112.5)	(±0.3)	(±0.1)	(±0.4)	(±0.9)

Depth values presented in this table are measured from free ground surface



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CPT: CPT-05

Total depth: 124.84 ft, Date: 3/25/2020

Surface Elevation: 56.00 ft

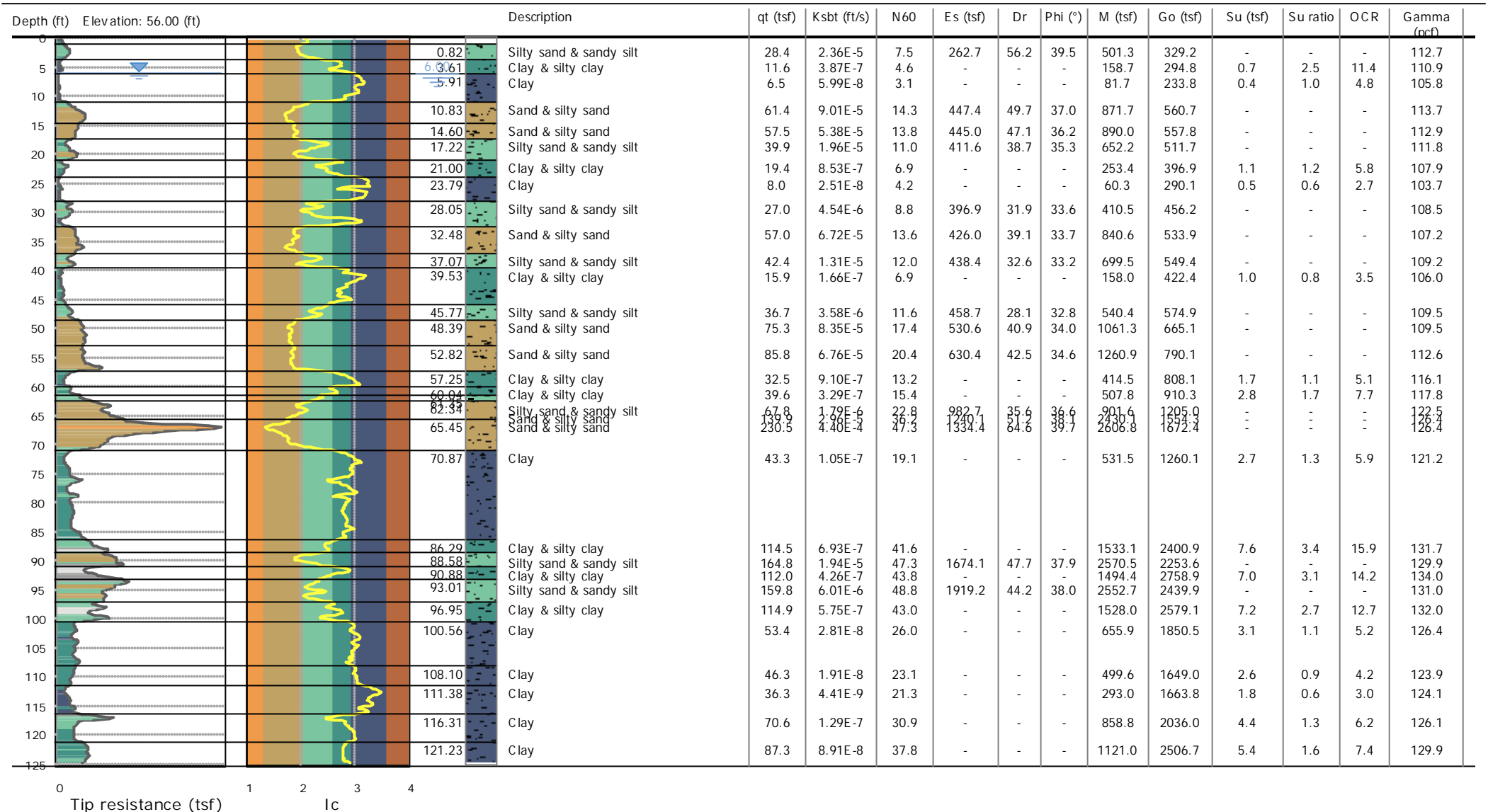
Coords: X:0.00, Y:0.00

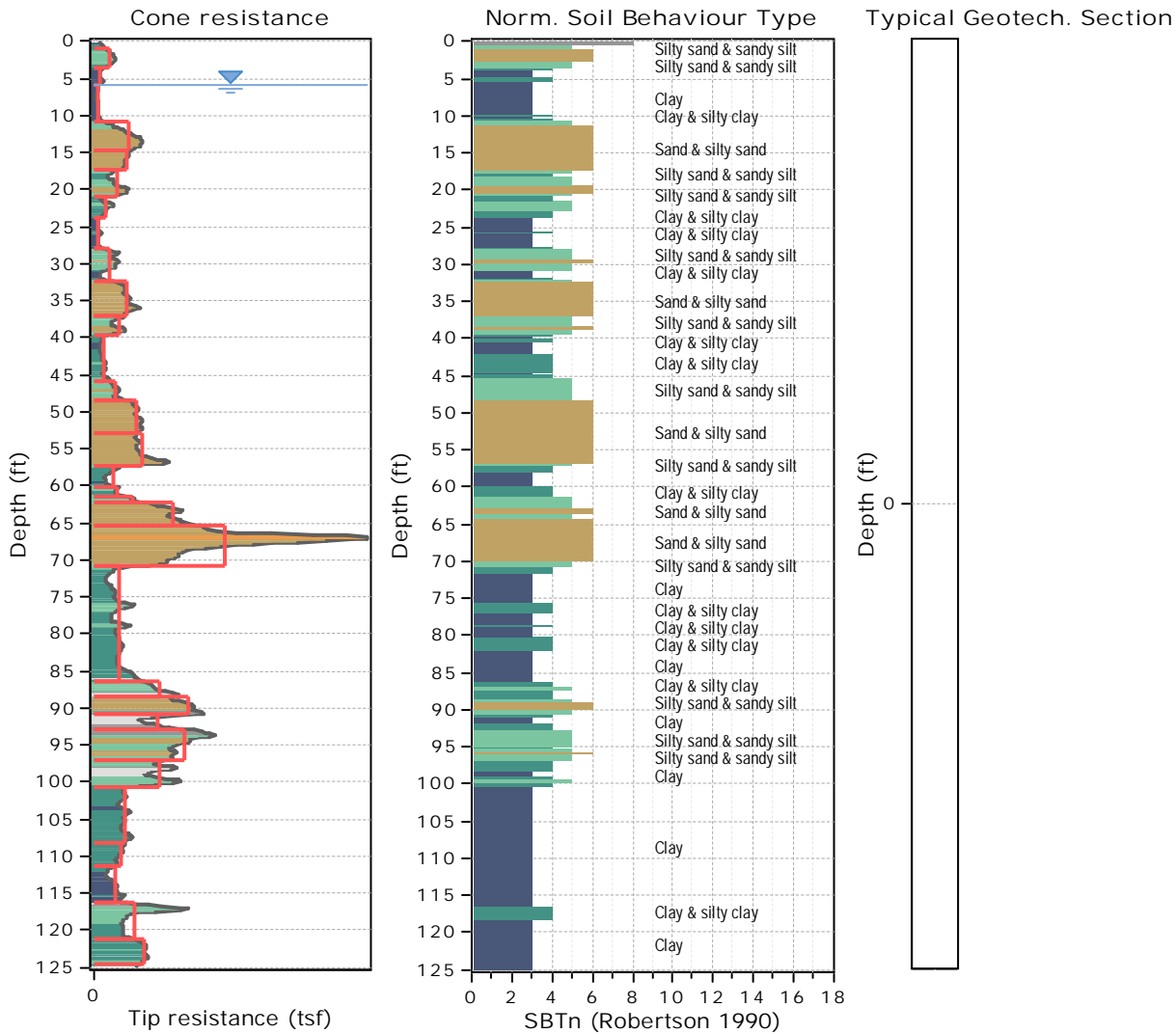
Project: Fyffe

Location:

Cone Type:

Cone Operator:





Tabular results

:: Layer No: 1 ::		
Code: Layer_1 Start depth: 0.82 (ft), End depth: 3.61 (ft)		
Description: Silty sand & sandy silt		
Basic results	Estimation results	
Total cone resistance: 28.38 ±7.27 tsf	Permeability: 2.36E-05 ±1.23E-05 ft/s	Constrained Mod.: 501.35 ±126.82 tsf
Sleeve friction: 0.46 ±0.08 tsf	N <sub>60</sub> : 7.53 ±1.58 blows	Go: 329.19 ±60.95 tsf
Ic: 2.04 ±0.11	Es: 262.65 ±48.63 tsf	Su: 0.00 ±0.00 tsf
SBT <sub>n</sub> : 5	Dr (%): 56.20 ±6.66	Su ratio: 0.00 ±0.00
SBT <sub>n</sub> description: Silty sand & sandy silt	φ (degrees): 39.54 ±1.17 °	O.C.R.: 0.00 ±0.00
	Unit weight: 112.67 ±1.60 pcf	



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Cone Operator:

Project: Fyffe  
Location:

Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
0.82 3.61	2.79	2.36E-05 (±1.23E-05)	7.5 (±1.6)	262.7 (±48.6)	56.2 (±6.7)	39.5 (±1.2)	501.3 (±126.8)	329.2 (±61.0)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	112.7 (±1.6)
3.61 5.91	2.30	3.87E-07 (±5.69E-07)	4.6 (±0.9)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	158.7 (±45.1)	294.8 (±35.3)	0.7 (±0.2)	2.5 (±0.5)	11.4 (±2.4)	110.9 (±1.4)
5.91 10.83	4.92	5.99E-08 (±1.70E-07)	3.1 (±0.8)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	81.7 (±35.6)	233.8 (±29.6)	0.4 (±0.1)	1.0 (±0.2)	4.8 (±0.9)	105.8 (±1.6)
10.83 14.60	3.77	9.01E-05 (±6.26E-05)	14.3 (±3.7)	447.4 (±83.2)	49.7 (±8.1)	37.0 (±1.1)	871.7 (±223.9)	560.7 (±104.3)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	113.7 (±2.5)
14.60 17.22	2.62	5.38E-05 (±1.02E-05)	13.8 (±1.0)	445.0 (±25.8)	47.1 (±2.1)	36.2 (±0.5)	890.0 (±51.7)	557.8 (±32.4)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	112.9 (±1.5)
17.22 21.00	3.78	1.96E-05 (±2.11E-05)	11.0 (±2.1)	411.6 (±43.2)	38.7 (±4.9)	35.3 (±0.7)	652.2 (±246.1)	511.7 (±54.6)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	111.8 (±2.0)
21.00 23.79	2.79	8.53E-07 (±9.44E-07)	6.9 (±1.8)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	253.4 (±101.9)	396.9 (±74.6)	1.1 (±0.3)	1.2 (±0.3)	5.8 (±1.5)	107.9 (±3.0)
23.79 28.05	4.26	2.51E-08 (±4.34E-08)	4.2 (±0.9)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	60.3 (±47.8)	290.1 (±42.4)	0.5 (±0.2)	0.6 (±0.2)	2.7 (±1.0)	103.7 (±2.0)
28.05 32.48	4.43	4.54E-06 (±5.92E-06)	8.8 (±2.5)	396.9 (±30.2)	31.9 (±3.4)	33.6 (±0.5)	410.5 (±271.5)	456.2 (±64.9)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	108.5 (±1.8)
32.48 37.07	4.59	6.72E-05 (±4.62E-05)	13.6 (±1.9)	426.0 (±38.5)	39.1 (±4.0)	33.7 (±0.7)	840.6 (±120.0)	533.9 (±48.3)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	107.2 (±1.6)
37.07 39.53	2.46	1.31E-05 (±1.28E-05)	12.0 (±1.8)	438.4 (±31.1)	32.6 (±4.0)	33.2 (±0.5)	699.5 (±250.2)	549.4 (±39.0)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	109.2 (±1.5)
39.53 45.77	6.24	1.66E-07 (±3.33E-07)	6.9 (±1.5)	0.0 (±0.0)	0.0 (±0.0)	0.0 (±0.0)	158.0 (±95.0)	422.4 (±56.8)	1.0 (±0.4)	0.8 (±0.2)	3.5 (±1.0)	106.0 (±1.9)





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CPT: CPT-05  
Total depth: 124.84 ft, Date: 3/25/2020  
Surface Elevation: 56.00 ft  
Coords: X:0.00, Y:0.00  
Cone Type:  
Cone Operator:

Project: Fyffe  
Location:

Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
45.77	2.62	3.58E-06	11.6	458.7	28.1	32.8	540.4	574.9	0.0	0.0	0.0	109.5
48.39		(±2.96E-06)	(±1.1)	(±23.6)	(±2.5)	(±0.4)	(±200.8)	(±29.5)	(±0.0)	(±0.0)	(±0.0)	(±1.2)
48.39	4.43	8.35E-05	17.4	530.6	40.9	34.0	1061.3	665.1	0.0	0.0	0.0	109.5
52.82		(±2.96E-05)	(±1.4)	(±27.4)	(±2.6)	(±0.5)	(±54.7)	(±34.3)	(±0.0)	(±0.0)	(±0.0)	(±1.0)
52.82	4.43	6.76E-05	20.4	630.4	42.5	34.6	1260.9	790.1	0.0	0.0	0.0	112.6
57.25		(±1.63E-05)	(±4.1)	(±145.0)	(±3.8)	(±1.2)	(±289.9)	(±181.7)	(±0.0)	(±0.0)	(±0.0)	(±4.5)
57.25	2.79	9.10E-07	13.2	0.0	0.0	0.0	414.5	808.1	1.7	1.1	5.1	116.1
60.04		(±2.95E-06)	(±4.3)	(±0.0)	(±0.0)	(±0.0)	(±392.4)	(±155.4)	(±0.8)	(±0.5)	(±2.2)	(±3.1)
60.04	1.31	3.29E-07	15.4	0.0	0.0	0.0	507.8	910.3	2.8	1.7	7.7	117.8
61.35		(±1.51E-07)	(±0.7)	(±0.0)	(±0.0)	(±0.0)	(±31.1)	(±52.2)	(±0.3)	(±0.1)	(±0.5)	(±1.1)
61.35	0.99	1.79E-06	22.8	982.7	35.6	36.6	901.6	1205.0	0.0	0.0	0.0	122.5
62.34		(±1.32E-06)	(±3.4)	(±79.2)	(±3.2)	(±0.4)	(±218.5)	(±118.9)	(±0.0)	(±0.0)	(±0.0)	(±1.6)
62.34	3.11	2.96E-05	36.2	1240.1	51.2	38.1	2430.1	1554.3	0.0	0.0	0.0	126.4
65.45		(±2.33E-05)	(±3.5)	(±80.4)	(±4.4)	(±0.5)	(±318.0)	(±100.8)	(±0.0)	(±0.0)	(±0.0)	(±1.1)
65.45	5.42	4.40E-04	47.3	1334.4	64.6	39.7	2606.8	1672.4	0.0	0.0	0.0	126.4
70.87		(±6.63E-04)	(±17.2)	(±321.7)	(±18.3)	(±3.0)	(±737.6)	(±403.2)	(±0.0)	(±0.0)	(±0.0)	(±4.3)
70.87	15.42	1.05E-07	19.1	0.0	0.0	0.0	531.5	1260.1	2.7	1.3	5.9	121.2
86.29		(±1.71E-07)	(±5.2)	(±0.0)	(±0.0)	(±0.0)	(±213.0)	(±339.9)	(±0.9)	(±0.4)	(±2.0)	(±4.3)
86.29	2.29	6.93E-07	41.6	0.0	0.0	0.0	1533.1	2400.9	7.6	3.4	15.9	131.7
88.58		(±3.02E-07)	(±7.1)	(±0.0)	(±0.0)	(±0.0)	(±308.5)	(±413.2)	(±1.6)	(±0.8)	(±3.6)	(±2.7)
88.58	2.30	1.94E-05	47.3	1674.1	47.7	37.9	2570.5	2253.6	0.0	0.0	0.0	129.9
90.88		(±1.99E-05)	(±7.5)	(±444.1)	(±2.9)	(±1.3)	(±434.9)	(±609.4)	(±0.0)	(±0.0)	(±0.0)	(±4.6)
90.88	2.13	4.26E-07	43.8	0.0	0.0	0.0	1494.4	2758.9	7.0	3.1	14.2	134.0
93.01		(±4.87E-07)	(±6.7)	(±0.0)	(±0.0)	(±0.0)	(±434.7)	(±176.6)	(±2.4)	(±1.0)	(±4.8)	(±1.0)



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Summary table of mean values

From depth To depth (ft)	Thickness (ft)	Permeability (ft/s)	SPT <sub>N60</sub> (blows/ft)	E <sub>s</sub> (tsf)	D <sub>r</sub> (%)	Friction angle	Constrained modulus, M (tsf)	Shear modulus, G <sub>0</sub> (tsf)	Undrained strength, S <sub>u</sub> (tsf)	Undrained strength ratio	OCR	Unit weight (pcf)
93.01	3.94	6.01E-06	48.8	1919.2	44.2	38.0	2552.7	2439.9	0.0	0.0	0.0	131.0
96.95		(±5.09E-06)	(±8.8)	(±460.9)	(±3.8)	(±1.6)	(±587.1)	(±552.5)	(±0.0)	(±0.0)	(±0.0)	(±4.0)
96.95	3.61	5.75E-07	43.0	0.0	0.0	0.0	1528.0	2579.1	7.2	2.7	12.7	132.0
100.56		(±5.43E-07)	(±5.7)	(±0.0)	(±0.0)	(±0.0)	(±329.9)	(±254.7)	(±1.6)	(±0.7)	(±3.0)	(±1.8)
100.56	7.54	2.81E-08	26.0	0.0	0.0	0.0	655.9	1850.5	3.1	1.1	5.2	126.4
108.10		(±1.24E-08)	(±2.5)	(±0.0)	(±0.0)	(±0.0)	(±99.2)	(±186.4)	(±0.4)	(±0.1)	(±0.7)	(±1.8)
108.10	3.28	1.91E-08	23.1	0.0	0.0	0.0	499.6	1649.0	2.6	0.9	4.2	123.9
111.38		(±4.67E-09)	(±2.7)	(±0.0)	(±0.0)	(±0.0)	(±138.8)	(±202.3)	(±0.4)	(±0.1)	(±0.7)	(±2.3)
111.38	4.93	4.41E-09	21.3	0.0	0.0	0.0	293.0	1663.8	1.8	0.6	3.0	124.1
116.31		(±3.11E-09)	(±4.8)	(±0.0)	(±0.0)	(±0.0)	(±176.6)	(±404.0)	(±0.6)	(±0.2)	(±1.0)	(±4.4)
116.31	4.92	1.29E-07	30.9	0.0	0.0	0.0	858.8	2036.0	4.4	1.3	6.2	126.1
121.23		(±2.32E-07)	(±10.2)	(±0.0)	(±0.0)	(±0.0)	(±490.9)	(±528.5)	(±2.4)	(±0.8)	(±3.5)	(±4.2)
121.23	3.44	8.91E-08	37.8	0.0	0.0	0.0	1121.0	2506.7	5.4	1.6	7.4	129.9
124.67		(±1.34E-08)	(±2.1)	(±0.0)	(±0.0)	(±0.0)	(±82.8)	(±122.2)	(±0.4)	(±0.1)	(±0.5)	(±0.8)

Depth values presented in this table are measured from free ground surface