

APPENDIX A8 – Soils Description Tables

GRANULAR SOILS (Sands and Gravels)

Description	Relative Density D_r (%)	SPT N value, N_{SPT}
Very Loose	0 – 15	0 - 4
Loose	15 – 35	4 - 10
Medium Dense	35 – 65	10 - 30
Dense	65 – 85	30 - 50
Very Dense	>85	>50

COHESIVE SOILS (Clays and Silts)

Term based on measurement	Undrained Shear Strength Classification, s_u (kPa)
Extremely low	<10
Very low	10 - 20
Low	20 - 40
Medium	40 - 75
High	75 - 150
Very high	150 - 300
Extremely high	>300

APPENDIX A9 – Site Map and Pictures from Site Works



APPENDIX B

Cone Penetration Measured Parameters and Geotechnical Derived Parameters

PointID

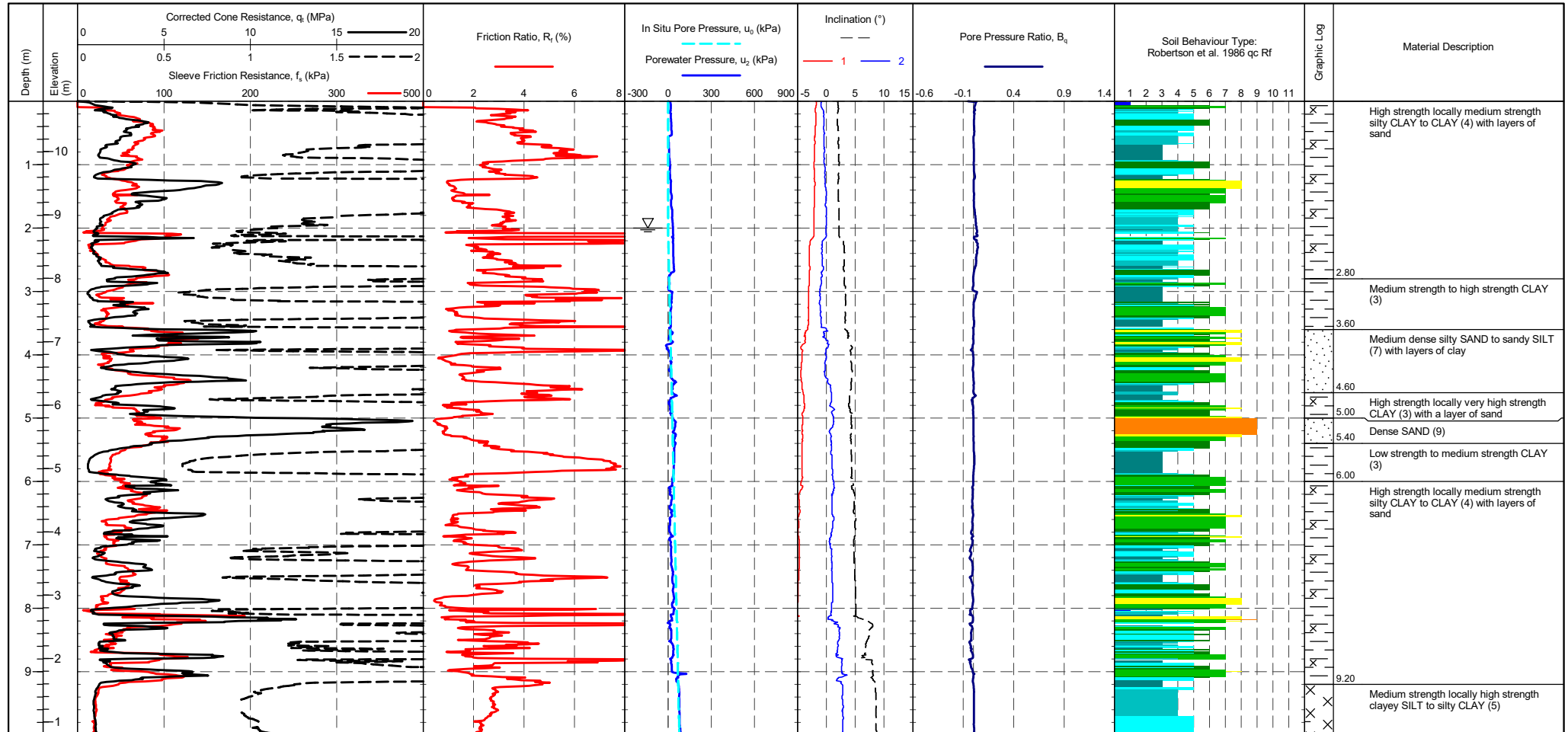
CPT101

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.477	0.457	0.019384	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0840	0.0847	-0.000699	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00820	0.00422	-0.012423	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (i)	-1.84	-1.88	0.03279		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (i)	-0.903	-0.639	-0.264317		12 - SAND to clayey SAND	10 - Gravelly SAND to SAND

PointID

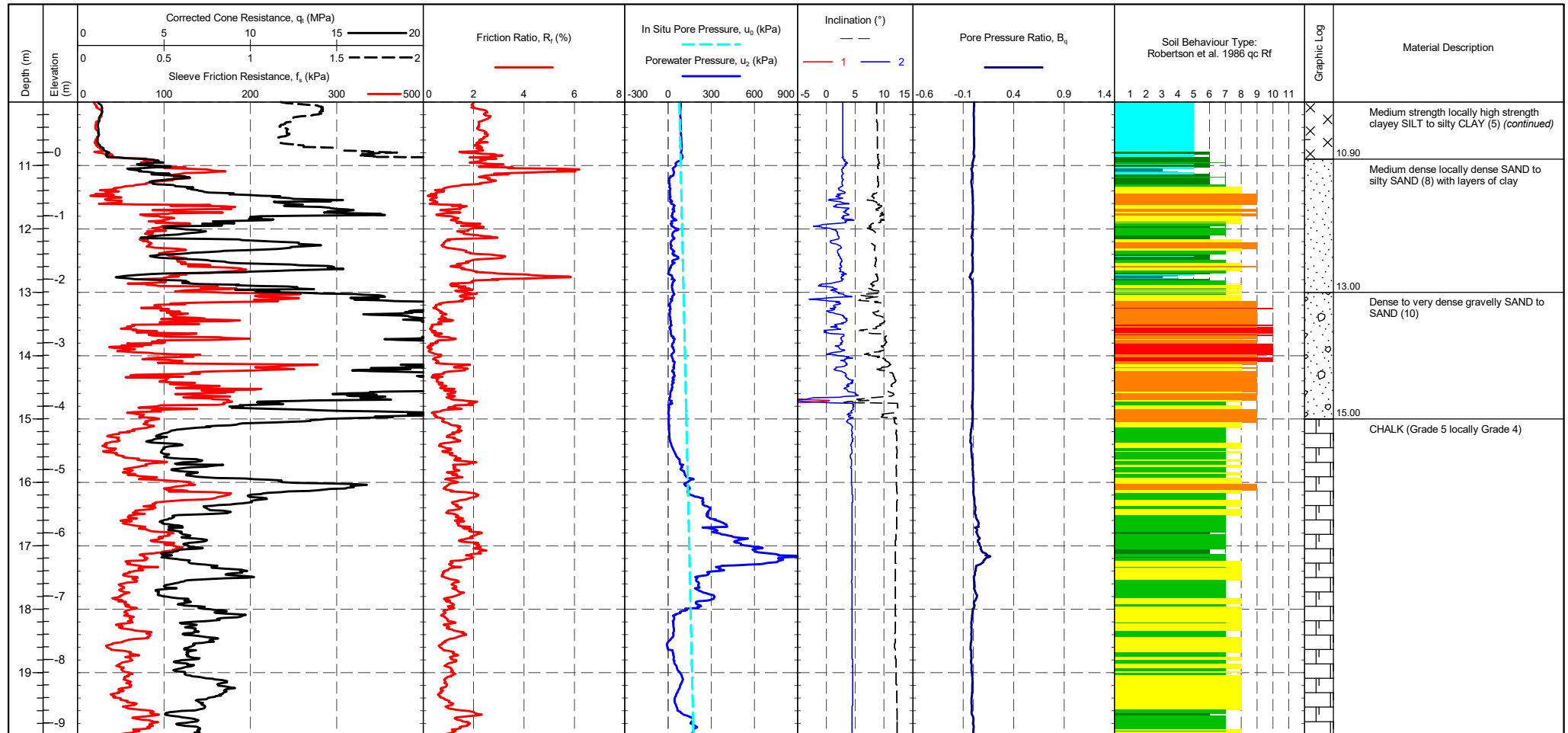
CPT101

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PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

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CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2	CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf				Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND		
CONE MODEL : Subtraction		RIG : CPT 022	Tip (MPa)	0.477	0.457	0.019384	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND		
CONE AREA : 15cm²		OPERATOR : AL	Sleeve (kPa)	0.0840	0.0847	-0.000699	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained		
CONE AREA RATIO : 0.75		FRICTION REDUCER : None	u2 (kPa)	-0.00820	0.00422	-0.012423	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND		
FILTER POSITION : u2		WEATHER : Overcast & Mild	Inclinometer 1 (°)	-1.84	-1.88	0.03279					
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (°)	-0.903	-0.639	-0.264317					

PointID

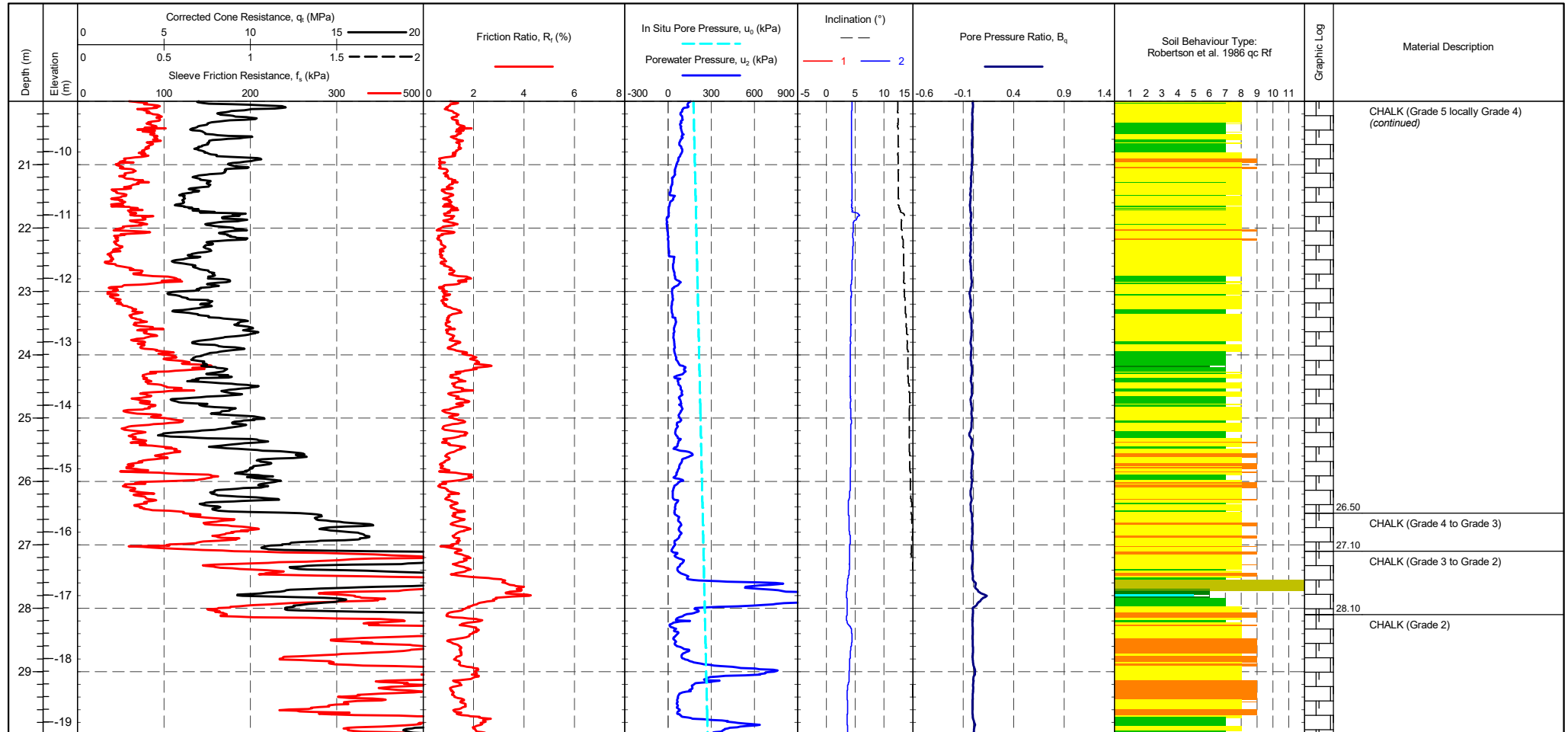
CPT101

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PROJECT No. : 1210220

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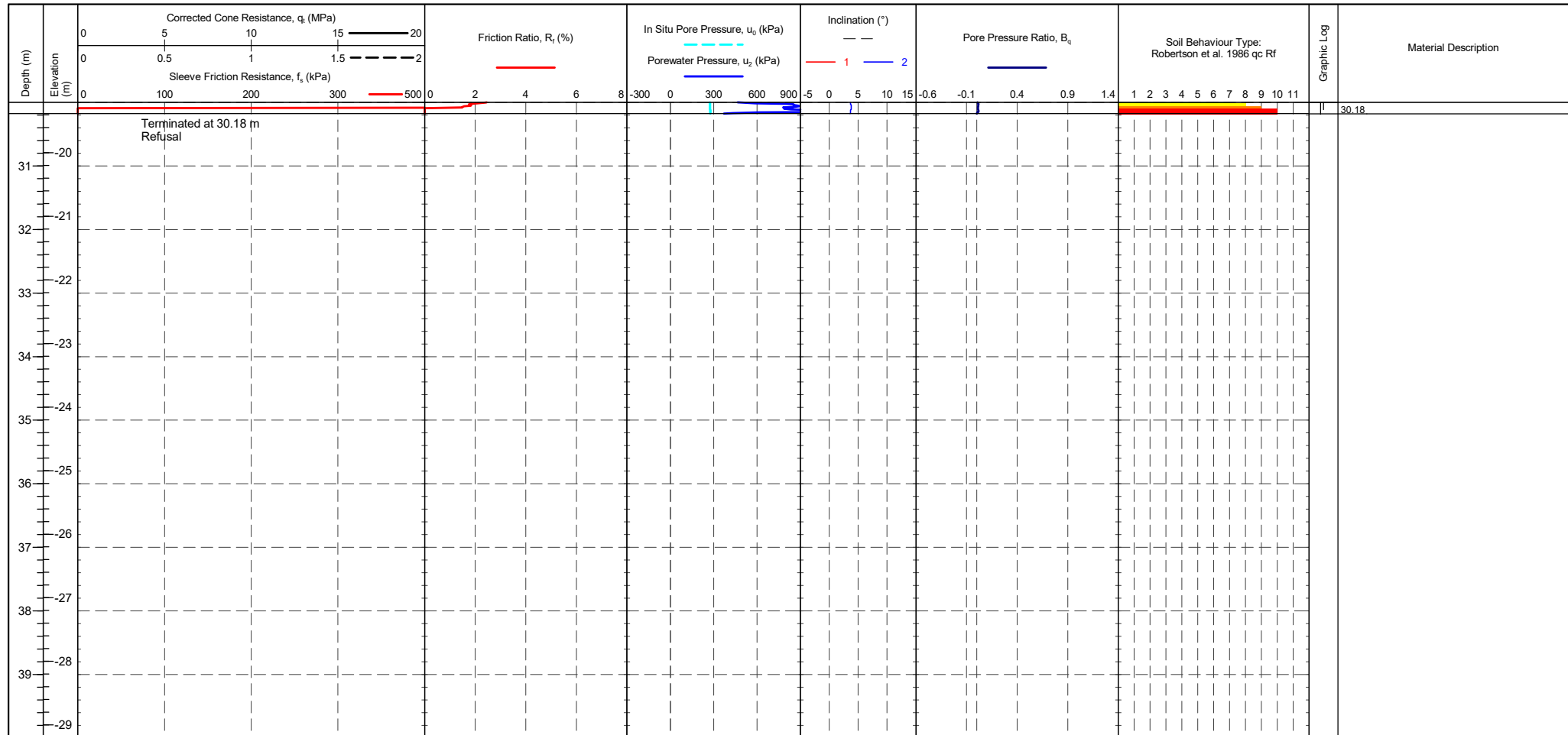
SHEET : 3 OF 4
STATUS : Final
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CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.477	0.457	0.019384	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0840	0.0847	-0.000699	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	WEATHER : Overcast & Mild	u2 (kPa)	-0.00820	0.00422	-0.012423	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 1 ($^\circ$)	-1.84	-1.88	0.03279		9 - SAND	
FILTER TYPE : HDPE		Inclinometer 2 ($^\circ$)	-0.903	-0.639	-0.264317		10 - Gravelly SAND to SAND	
							11 - Very stiff fine grained	
							12 - SAND to clayey SAND	

PointID	CPT101
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CLIENT : Delta Simons PROJECT : Brockhampton LOCATION : Brockhampton PROJECT No. : 1210220	EASTING : 469953.9 m NORTHING : 105598.5 m ELEVATION : 10.79 m OD CHECKED BY : LD TERMINATION REASON : Refusal	Remark: Test refused on total pressure.	SHEET : 4 OF 4 STATUS : Final TEST DATE : 29/03/2021 PLOT DATE : 25/05/2021 METHOD : ISO 22476-1:2012
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CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2	CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf						Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND				
CONE MODEL : Subtraction		RIG : CPT 022	Tip (MPa)	0.477	0.457	0.019384	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND				
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CONE AREA RATIO : 0.75		FRICITION REDUCER : None	u2 (kPa)	-0.00820	0.00422	-0.012423	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND				
FILTER POSITION : u2		WEATHER : Overcast & Mild	Inclinometer 1 (°)	-1.84	-1.88	0.03279							
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (°)	-0.903	-0.639	-0.264317							

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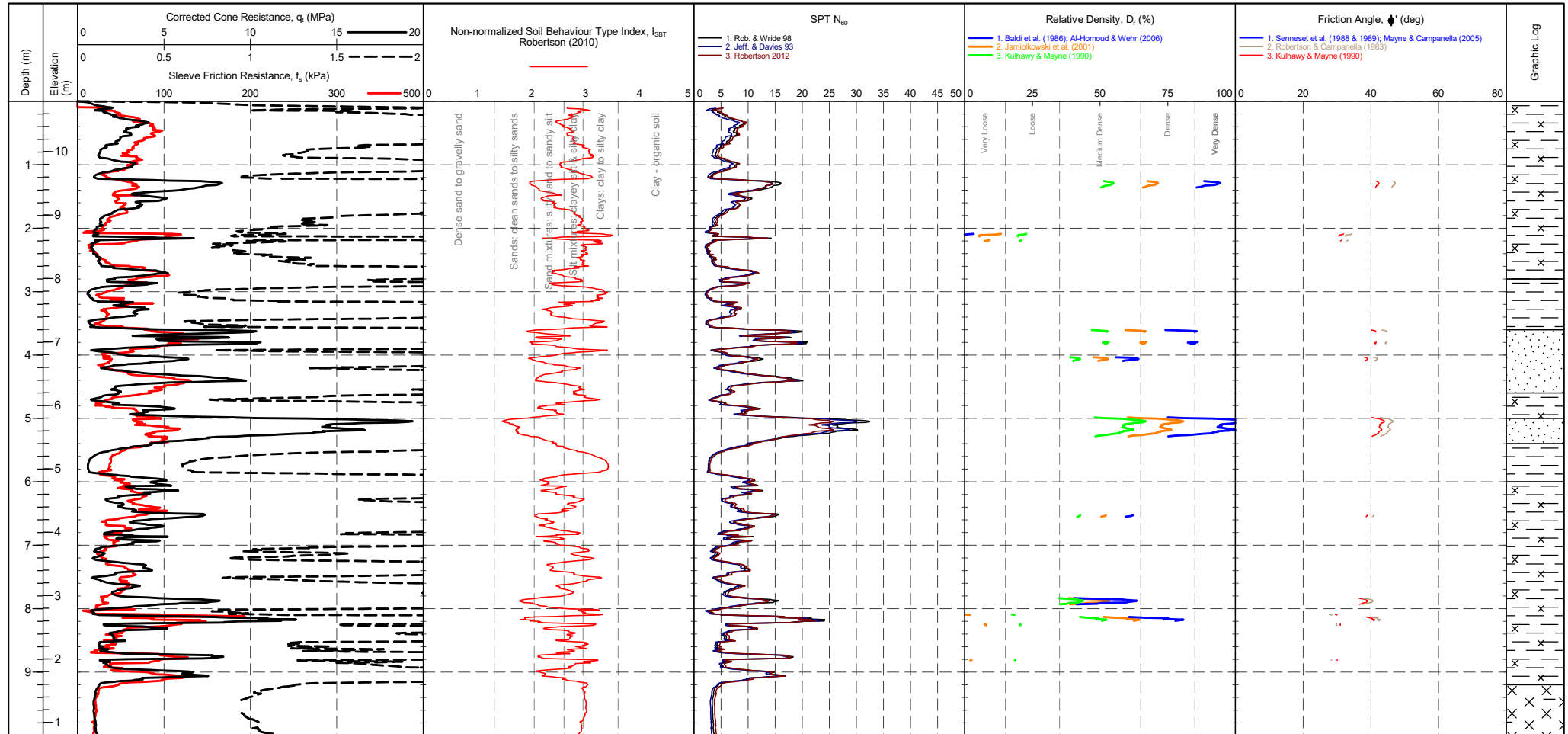
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CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

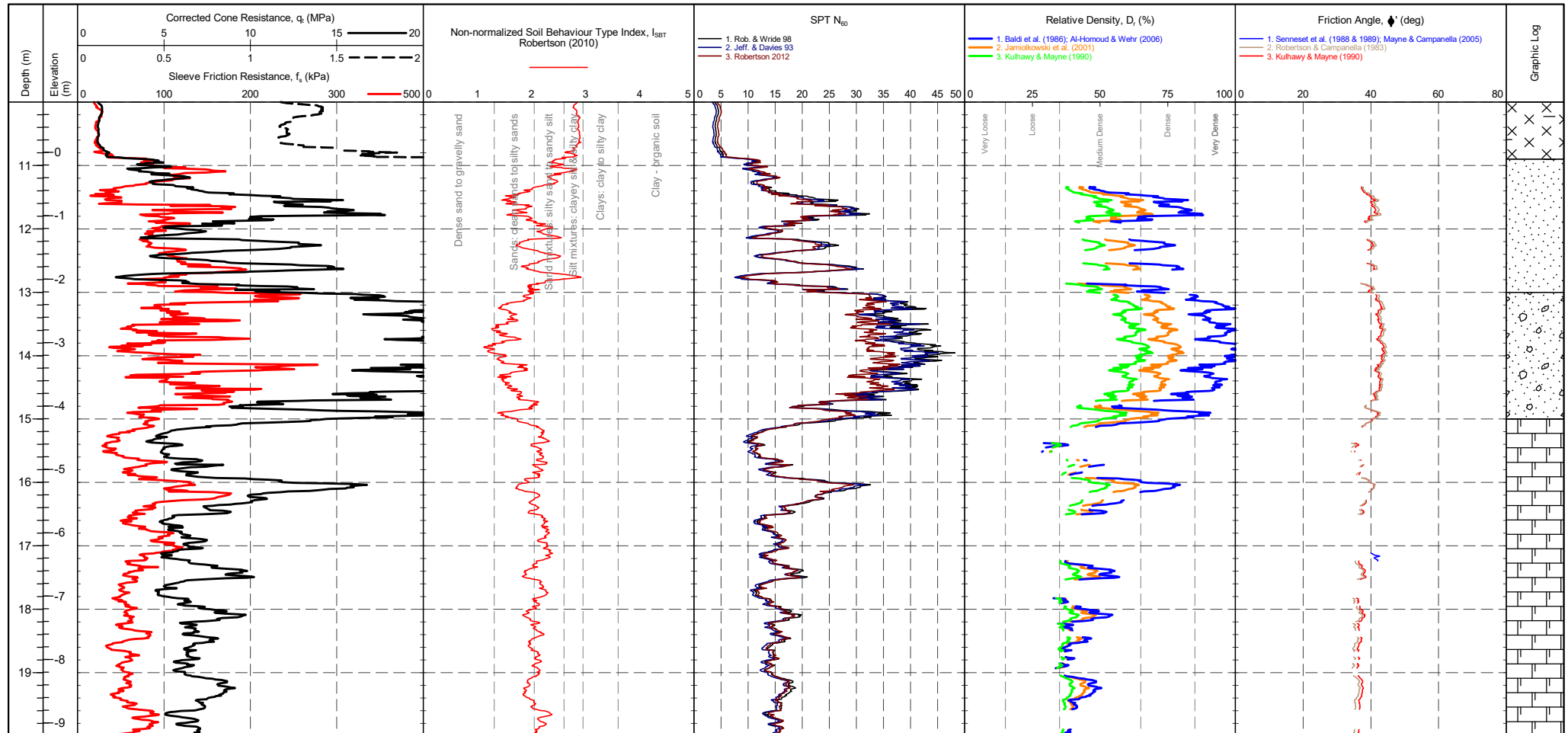
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CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
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Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

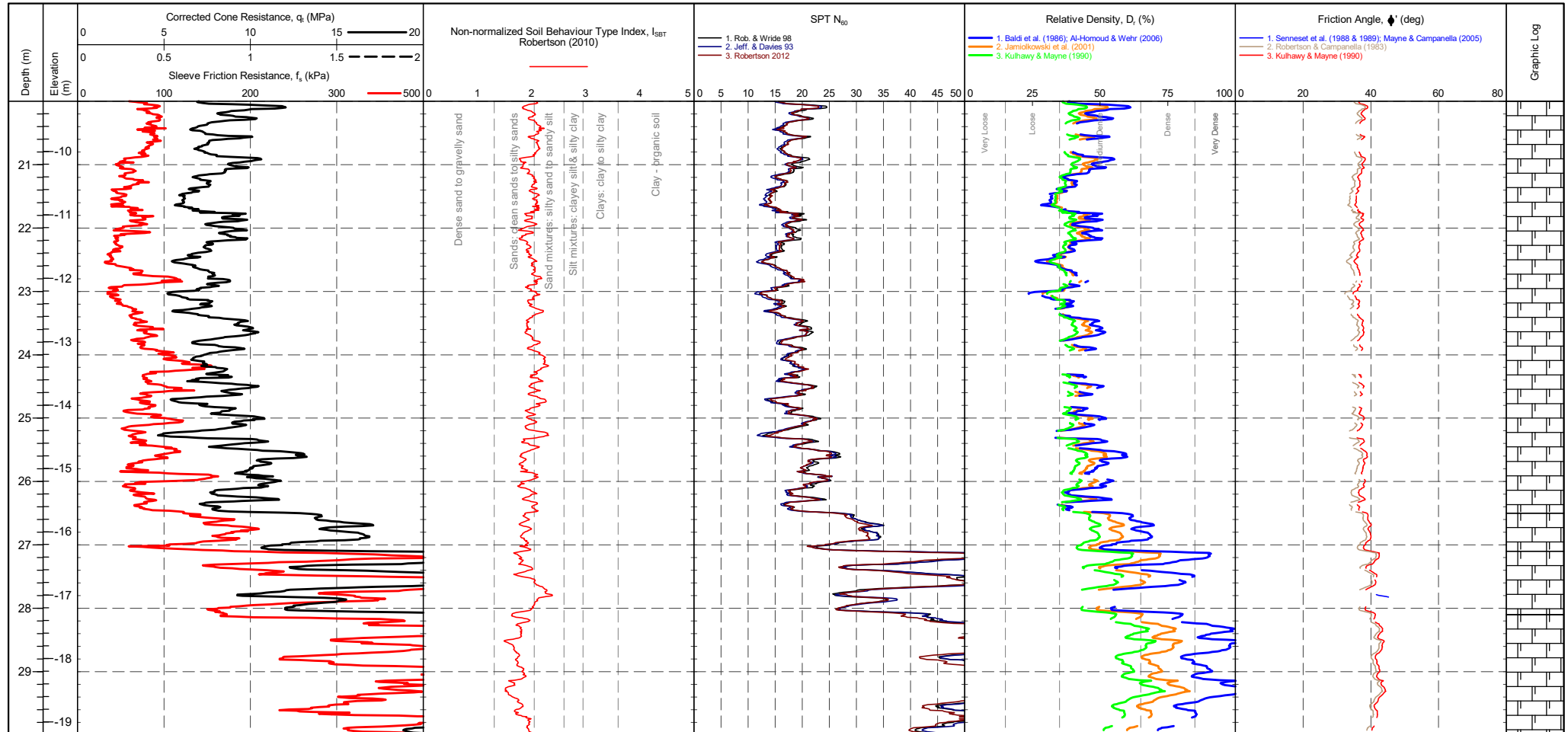
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CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES
Transducer Pre Post Difference
Tip (MPa) 0.477 0.457 0.019384
Sleeve (kPa) 0.0840 0.0847 -0.000699
u2 (kPa) -0.00820 0.00422 -0.012423
Inclinometer 1 (°) -1.84 -1.88 0.03279
Inclinometer 2 (°) -0.903 -0.639 -0.264317

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Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

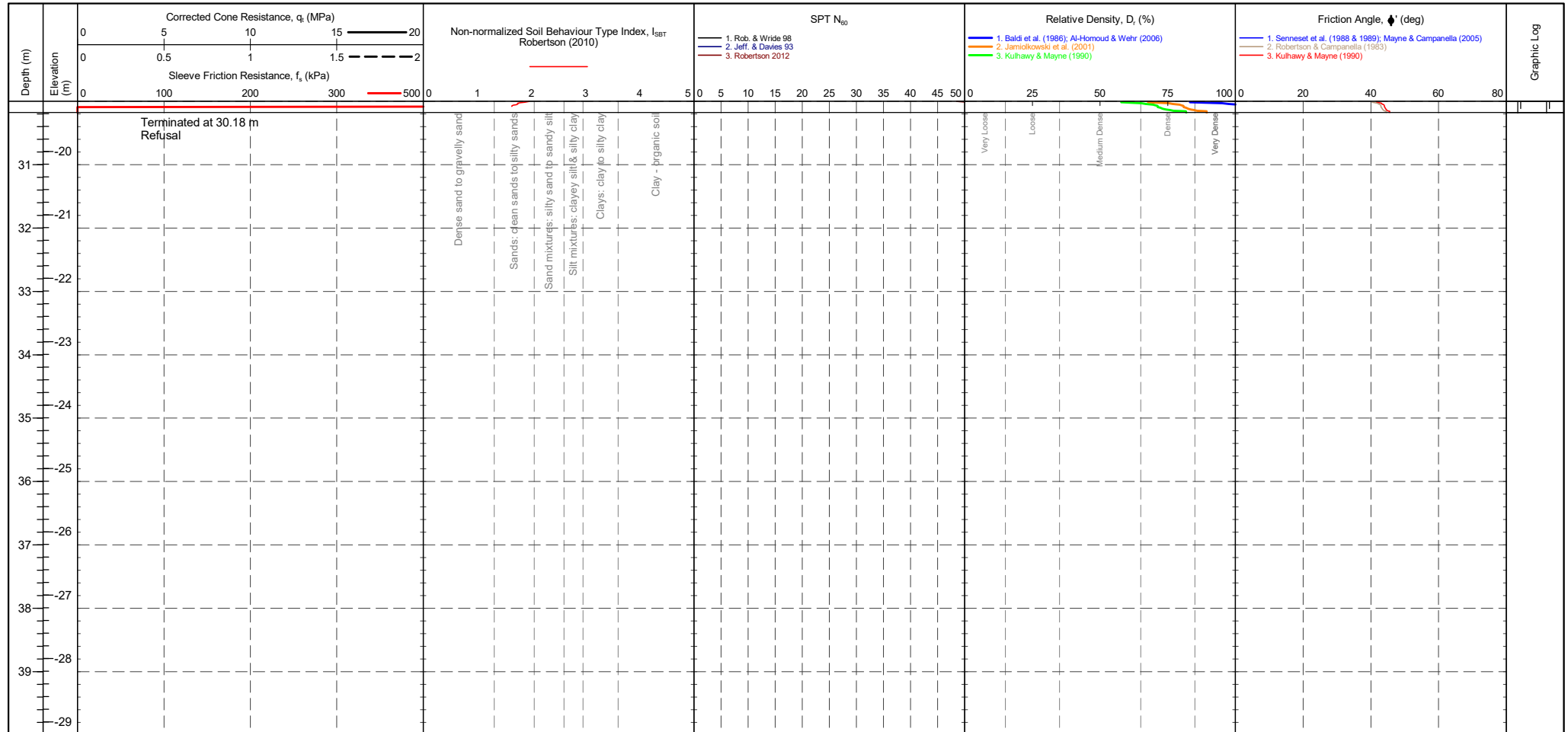
CPT101

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METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (")	-1.84	-1.88	0.03279
Inclinometer 2 (")	-0.903	-0.639	-0.264317

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Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
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Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

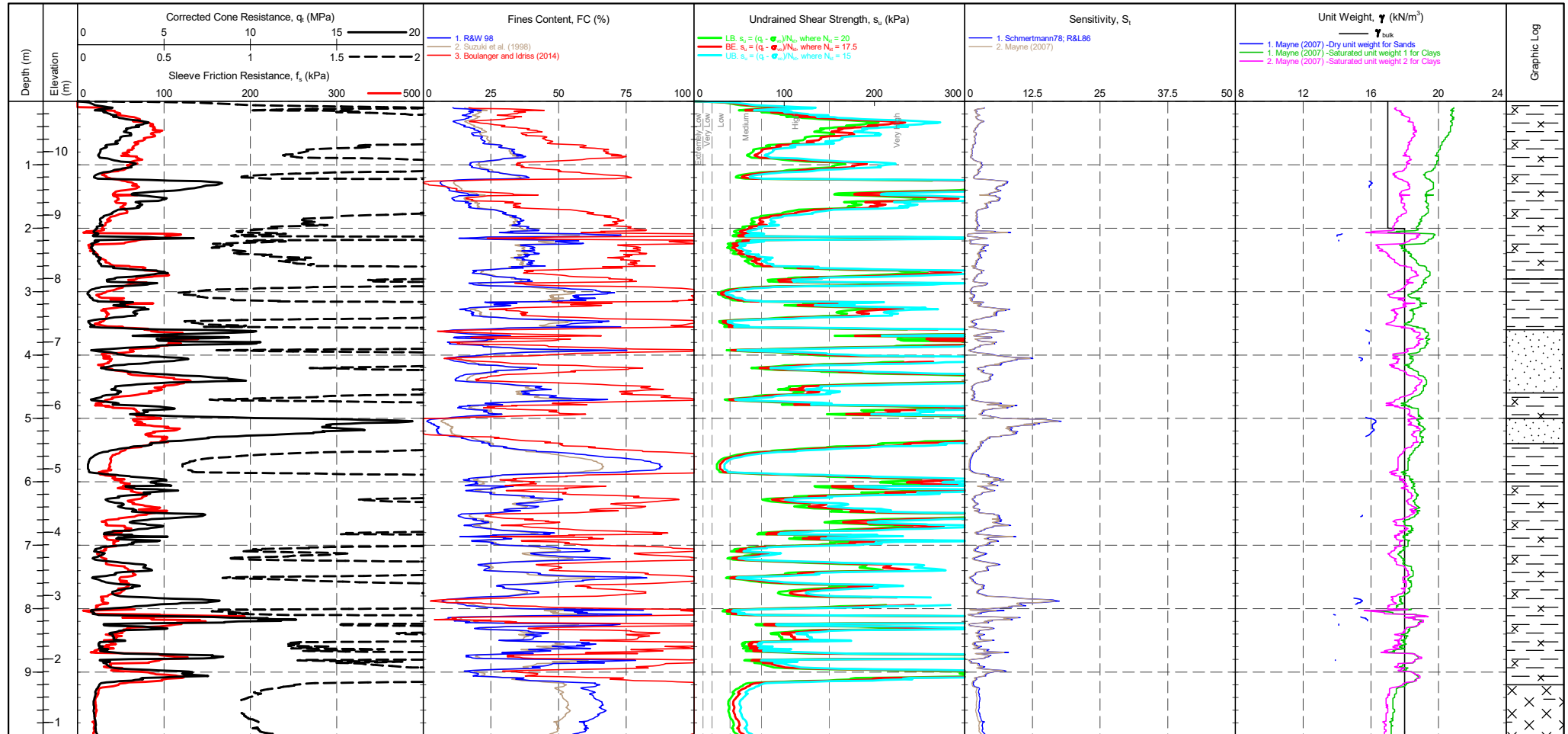
CPT101

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CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.477 0.457 0.019384
Sleeve (kPa) 0.0840 0.0847 -0.000699
u2 (kPa) -0.00820 0.00422 -0.012423
Inclinometer 1 (°) -1.84 -1.88 0.03279
Inclinometer 2 (°) -0.903 -0.639 -0.264317

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

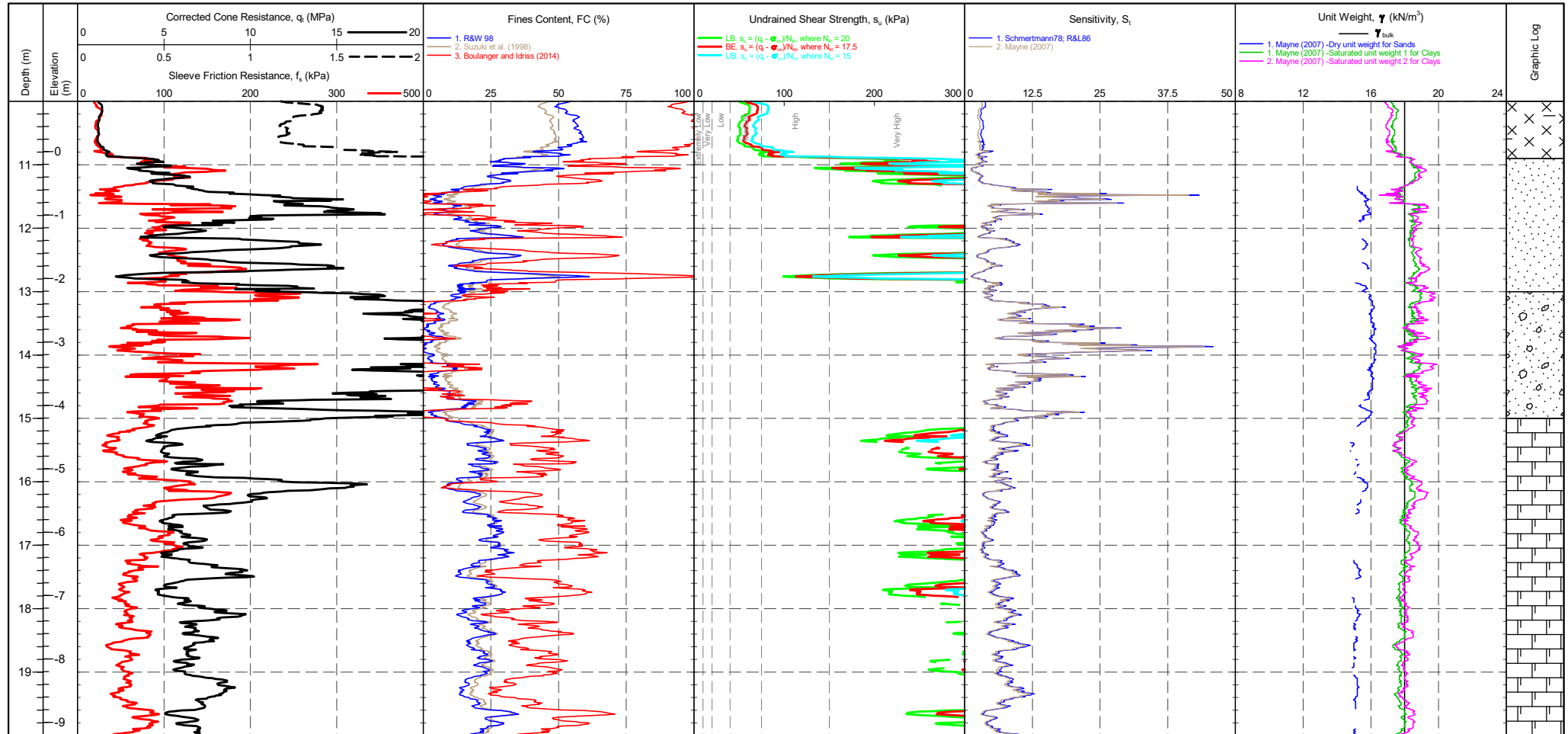
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CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

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Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
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Inclinometer 1 (°)	-1.84	-1.88	0.03279
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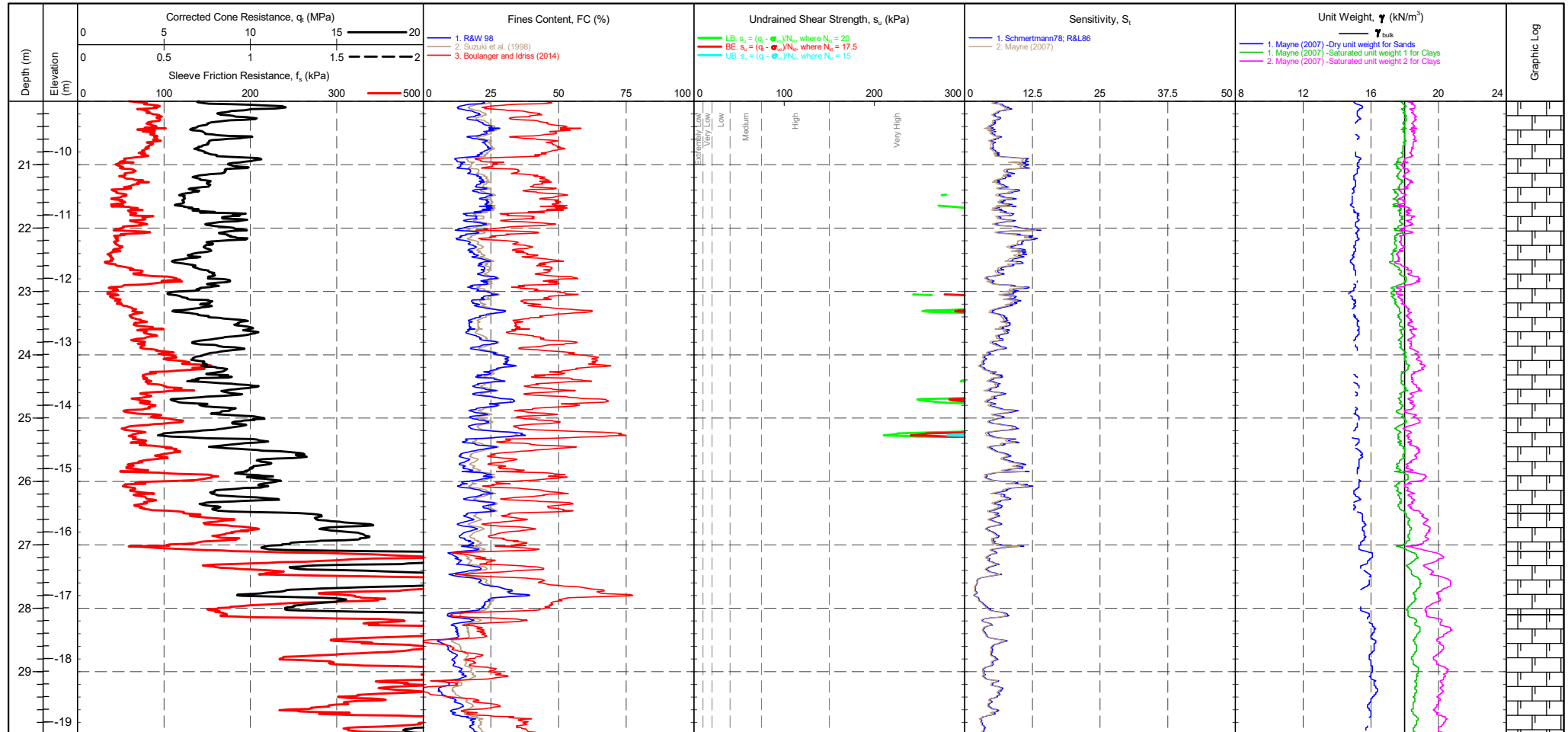
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FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
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WEATHER : Overcast & Mild

Transducer Pre Post Difference
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Sleeve (kPa) 0.0840 0.0847 -0.000699
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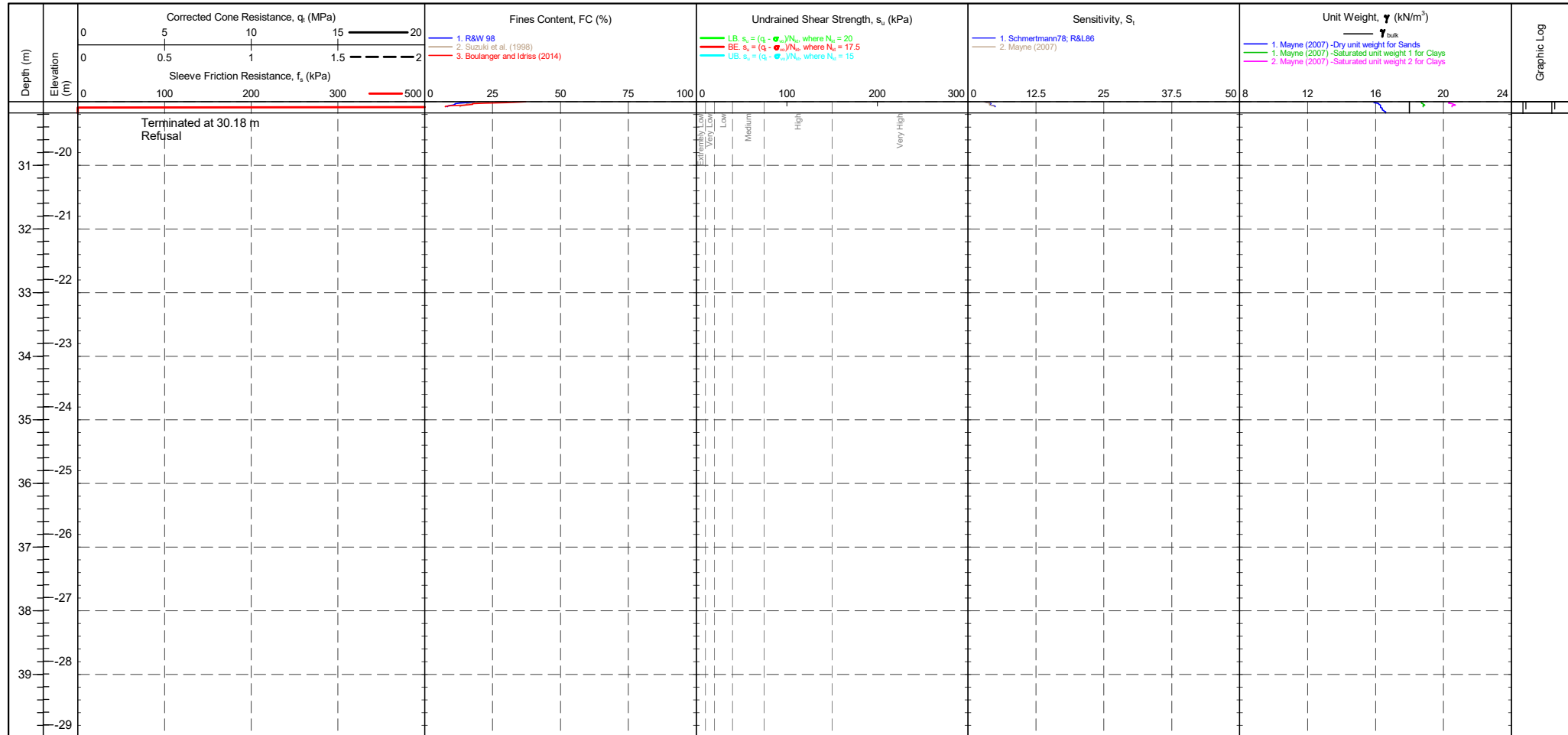
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FILTER TYPE : HDPE

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OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

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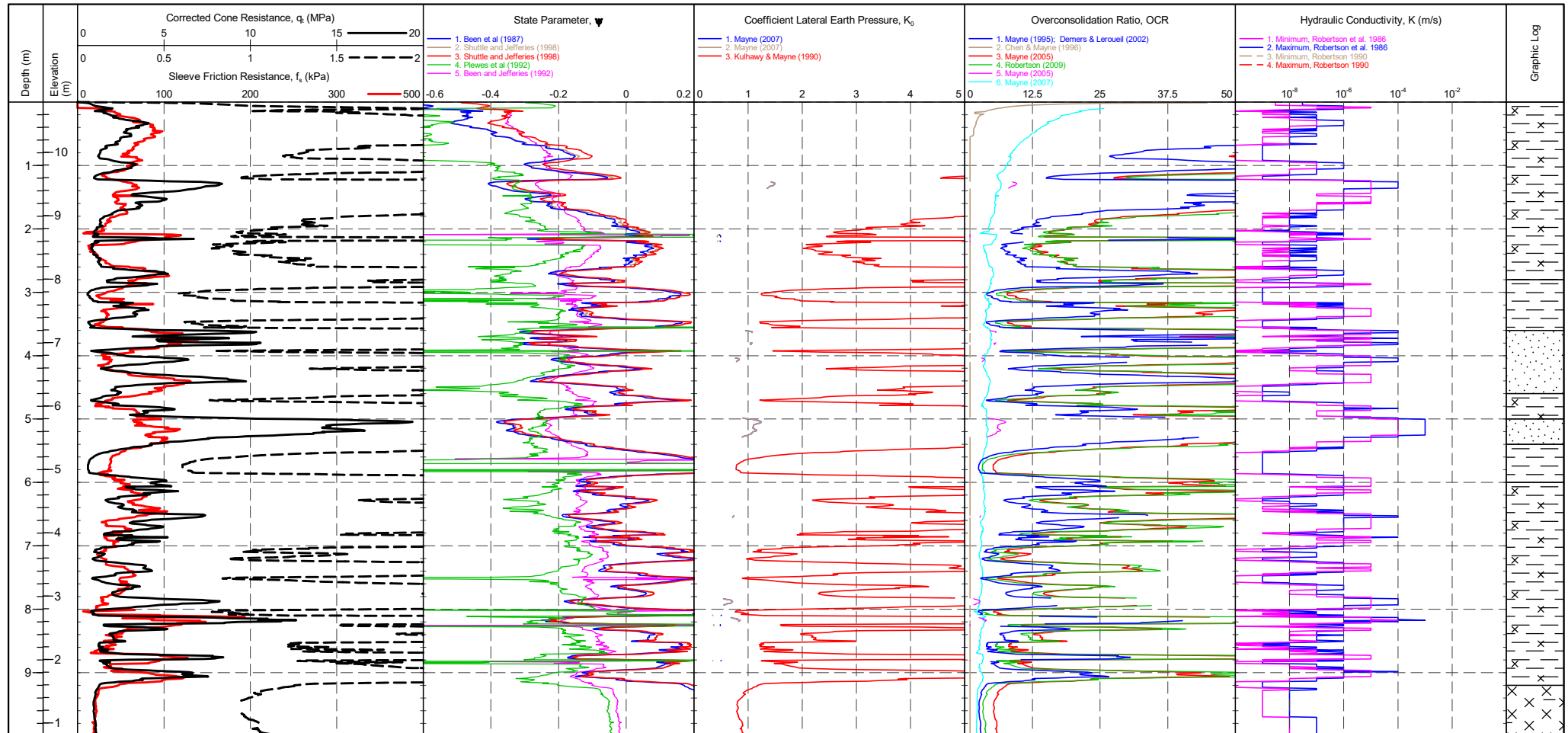
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PROJECT No. : 1210220

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TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.477 0.457 0.019384
Sleeve (kPa) 0.0840 0.0847 -0.000699
u2 (kPa) -0.00820 0.00422 -0.012423
Inclinometer 1 (°) -1.84 -1.88 0.03279
Inclinometer 2 (°) -0.903 -0.639 -0.264317

CPTU ZERO VALUES

Groundwater Level

Dissipation Test

PointID

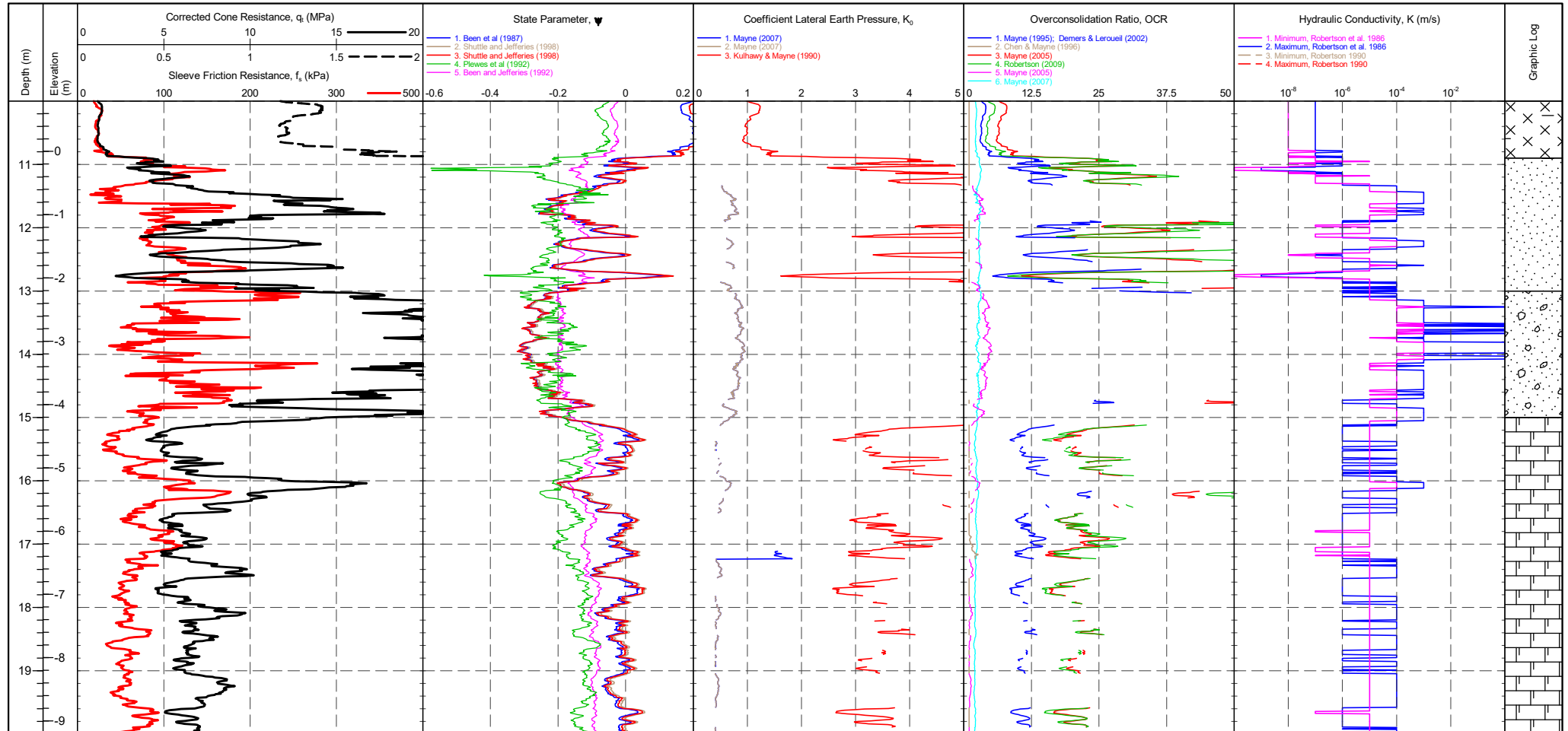
CPT101

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

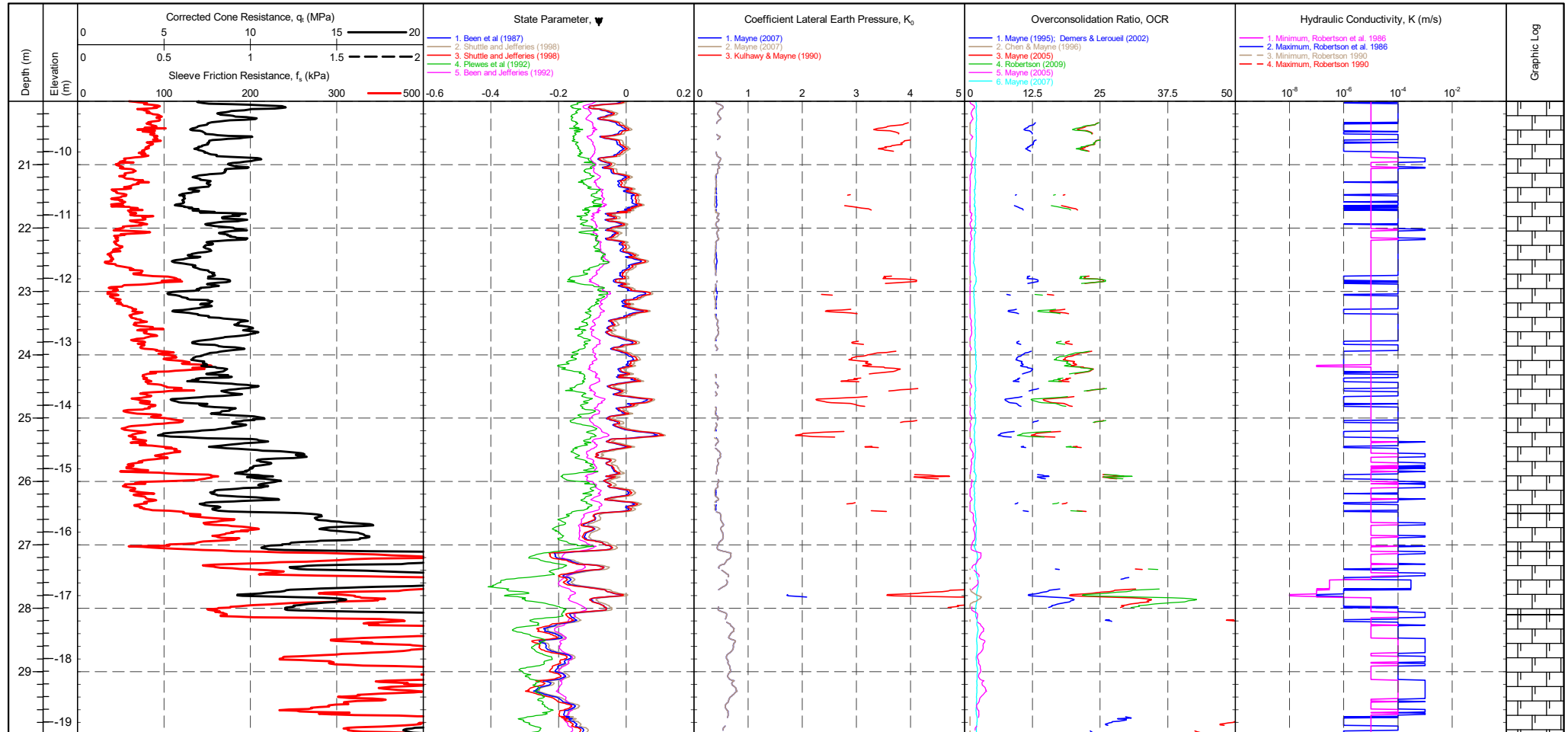
CPT101

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

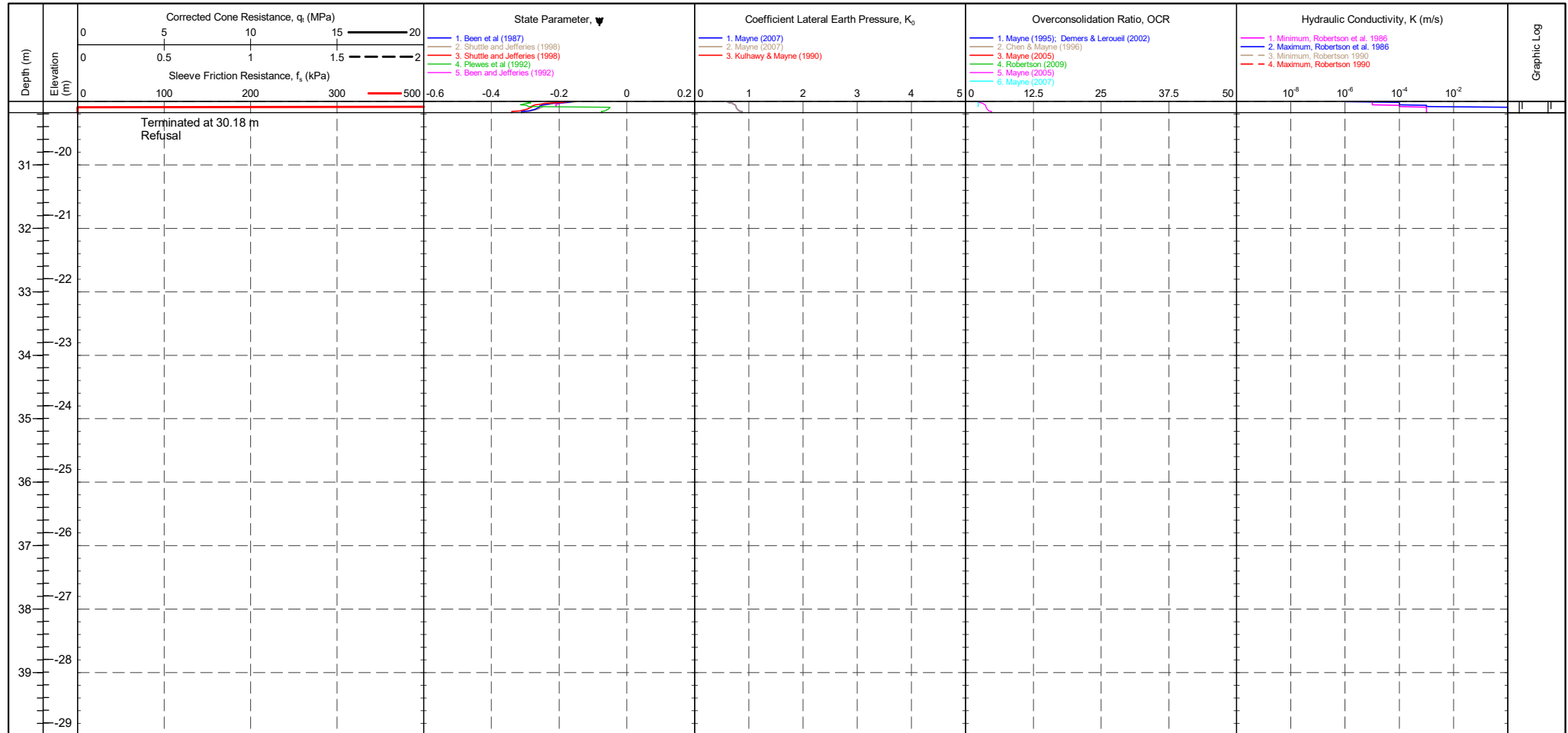
CPT101

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

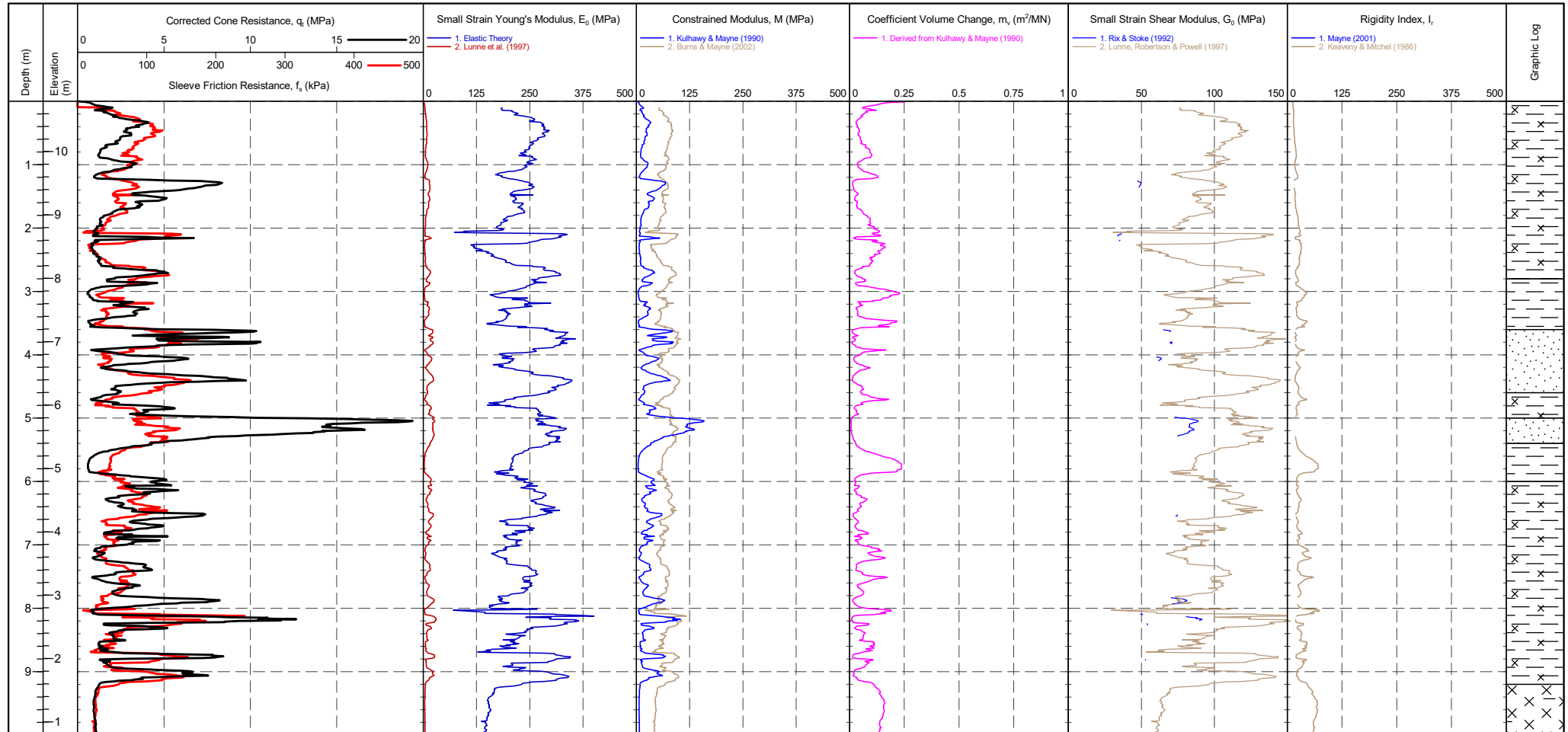
CPT101

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

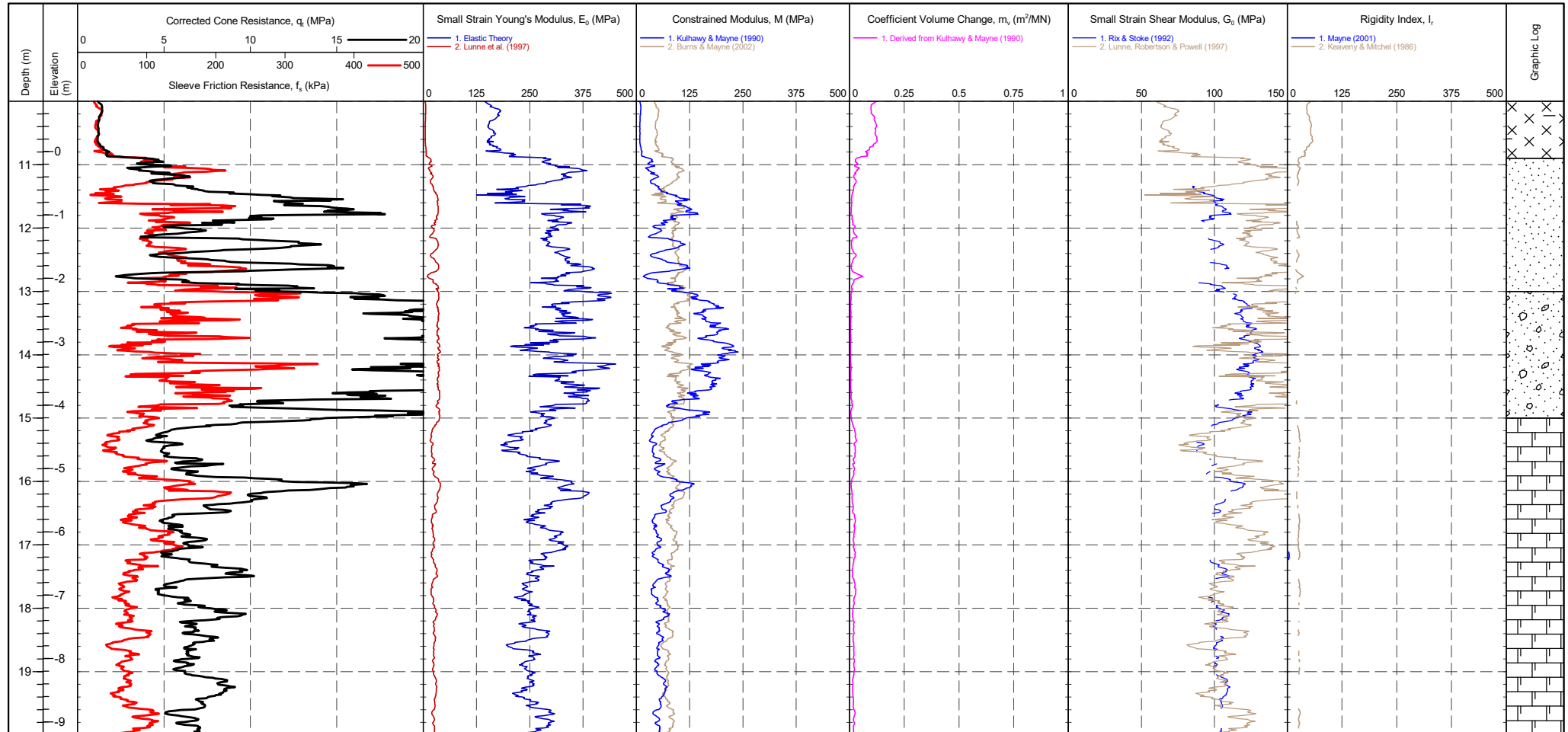
CPT101

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

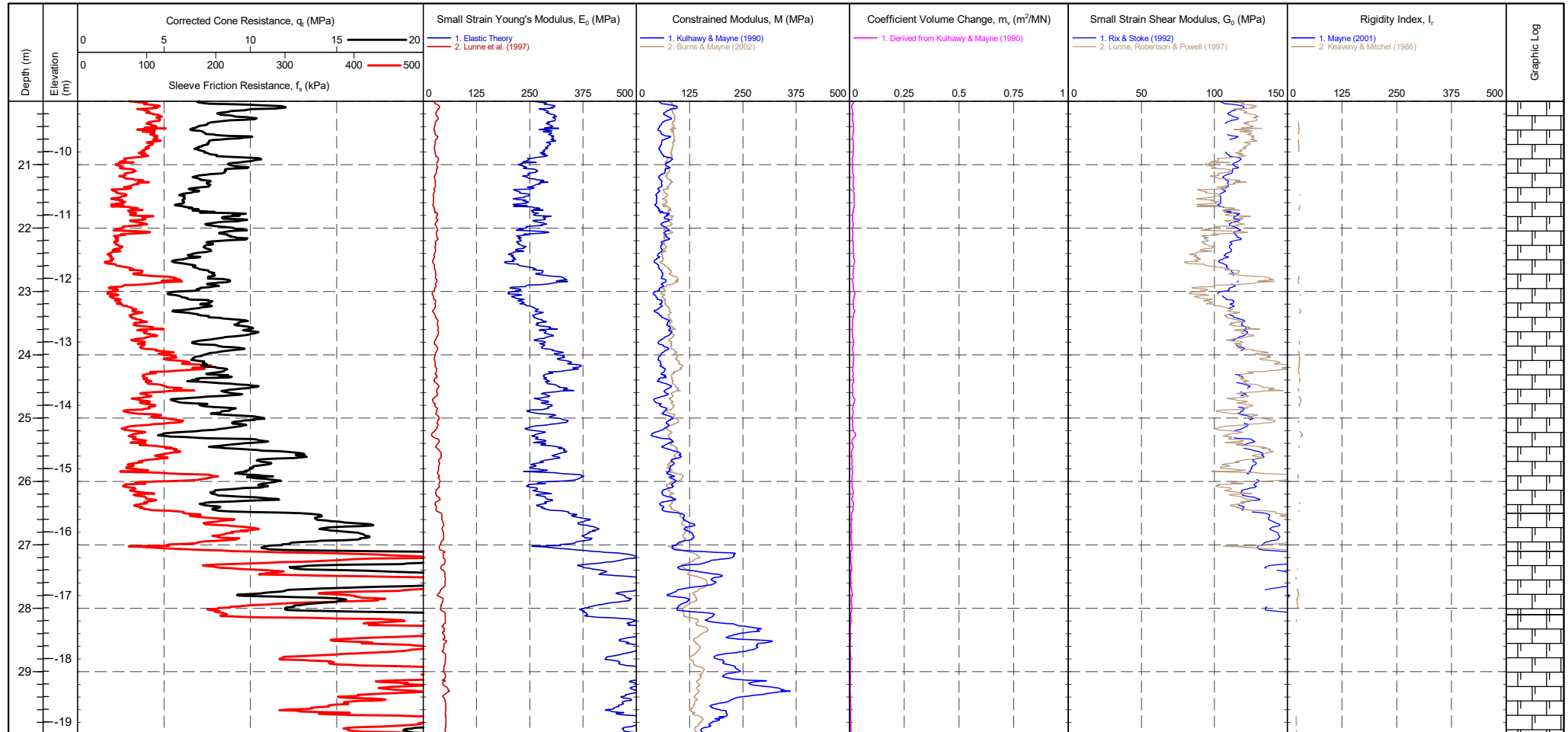
CPT101

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

PointID

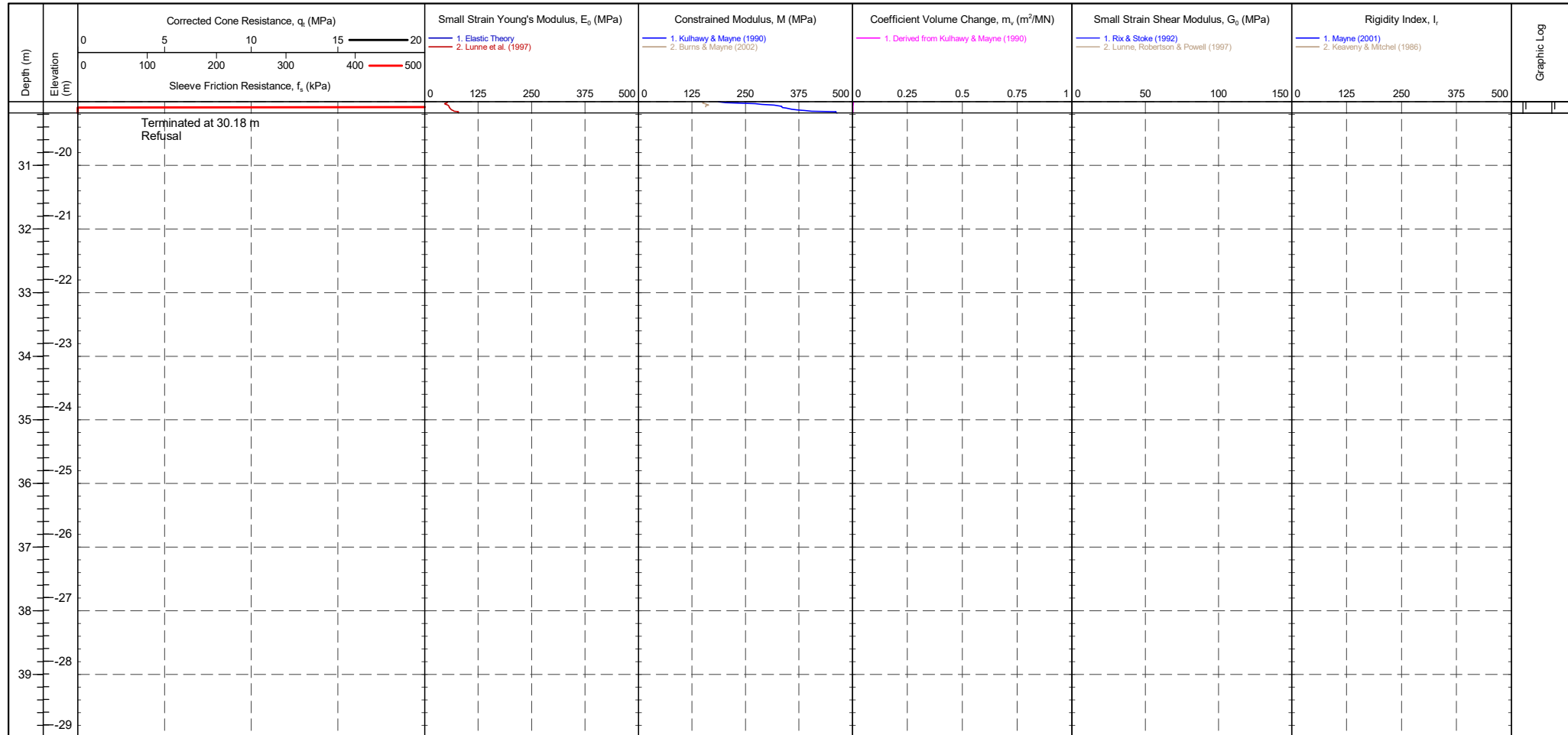
CPT101

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469953.9 m
NORTHING : 105598.5 m
ELEVATION : 10.79 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : $15cm^2$
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

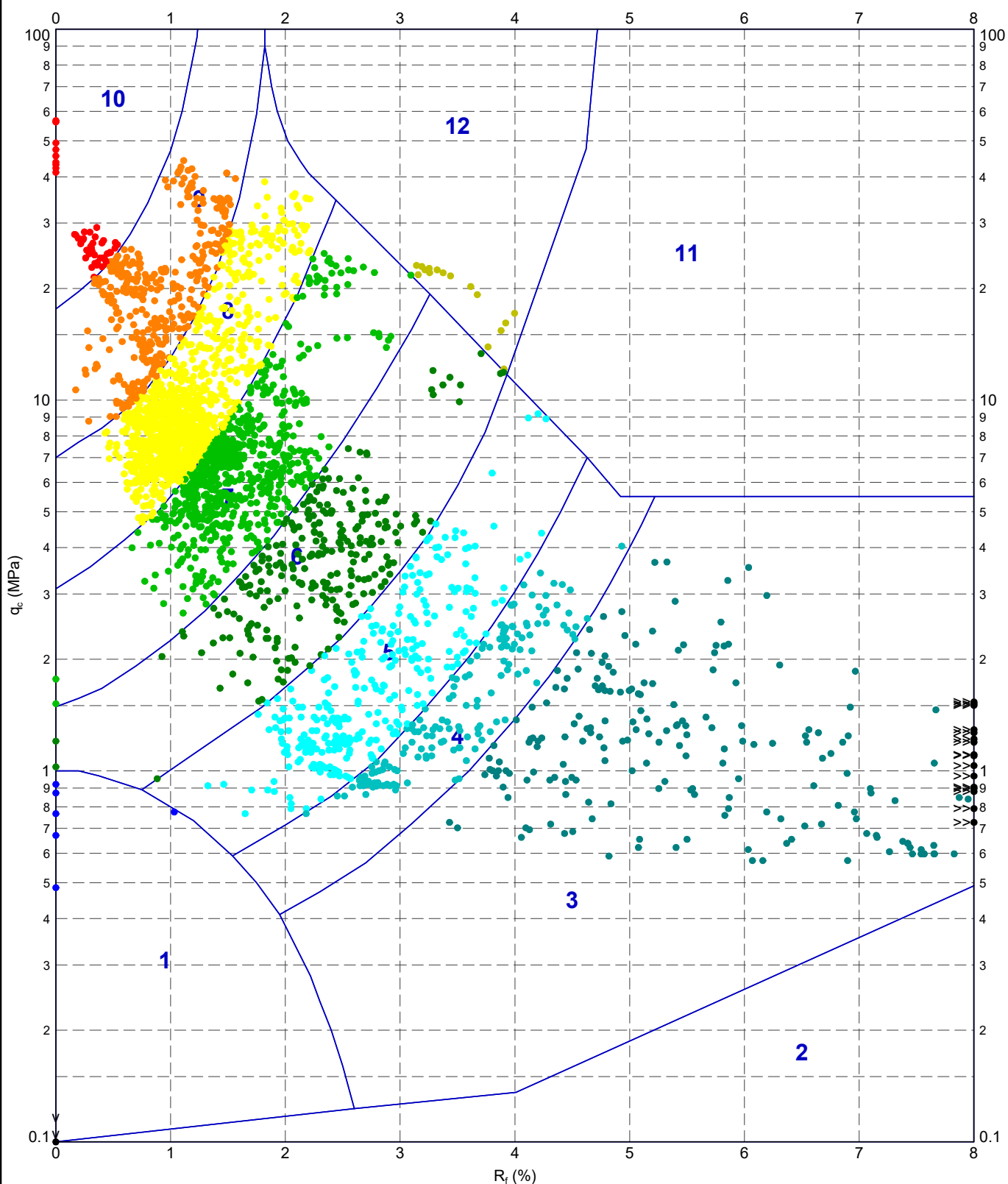
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.457	0.019384
Sleeve (kPa)	0.0840	0.0847	-0.000699
u2 (kPa)	-0.00820	0.00422	-0.012423
Inclinometer 1 (°)	-1.84	-1.88	0.03279
Inclinometer 2 (°)	-0.903	-0.639	-0.264317

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LIB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF AMP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 09:44 10:02:00.04 Datag Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT101

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

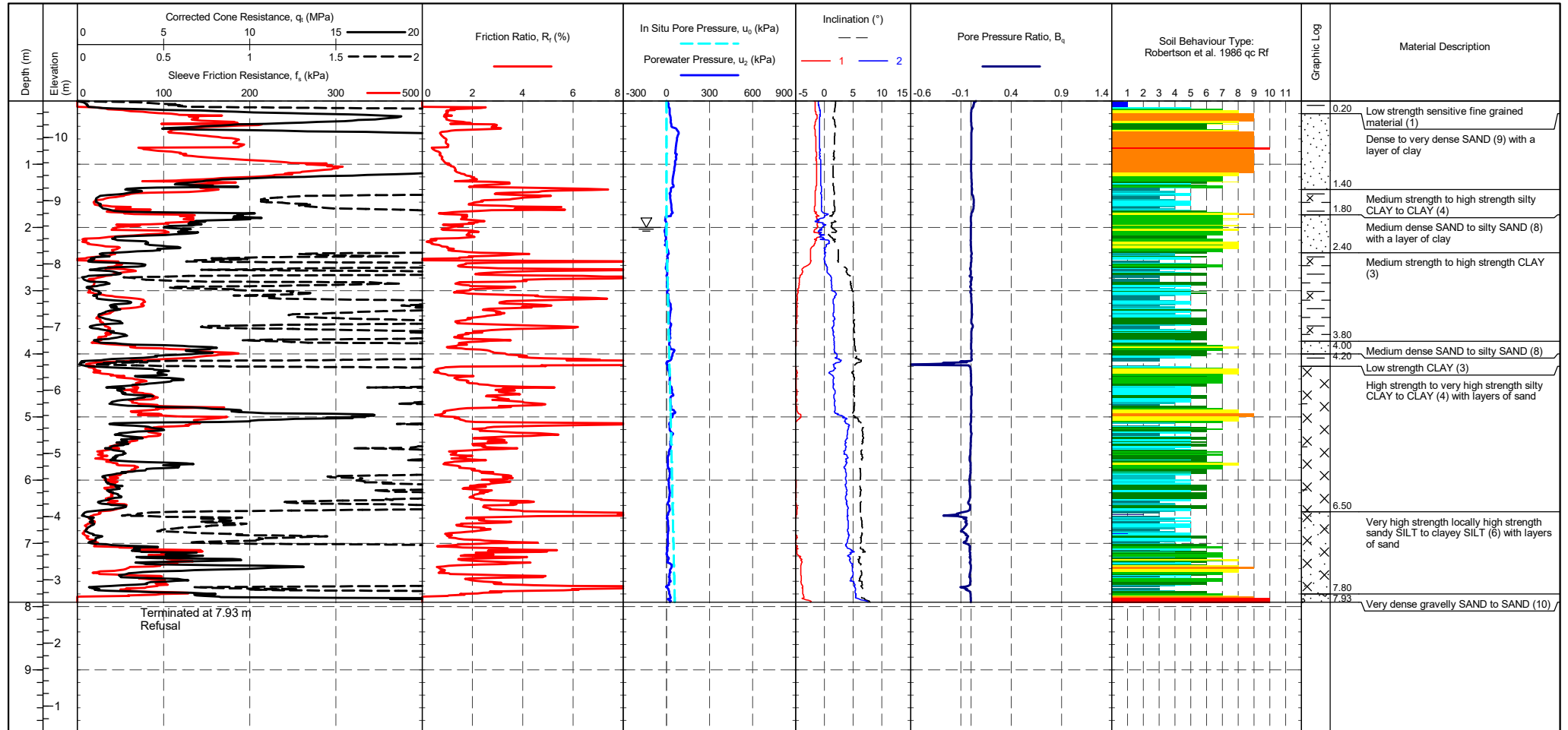
CPT103

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469997.8 m
NORTHING : 105696.1 m
ELEVATION : 10.58 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.468	0.460	0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0848	0.0851	-0.000269	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u_2 (kPa)	-0.00943	-0.00492	-0.00451	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (i)	-1.84	-1.76	-0.081968		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (i)	-0.954	-0.852	-0.102787		10 - Gravelly SAND to SAND	12 - SAND to clayey SAND

PointID

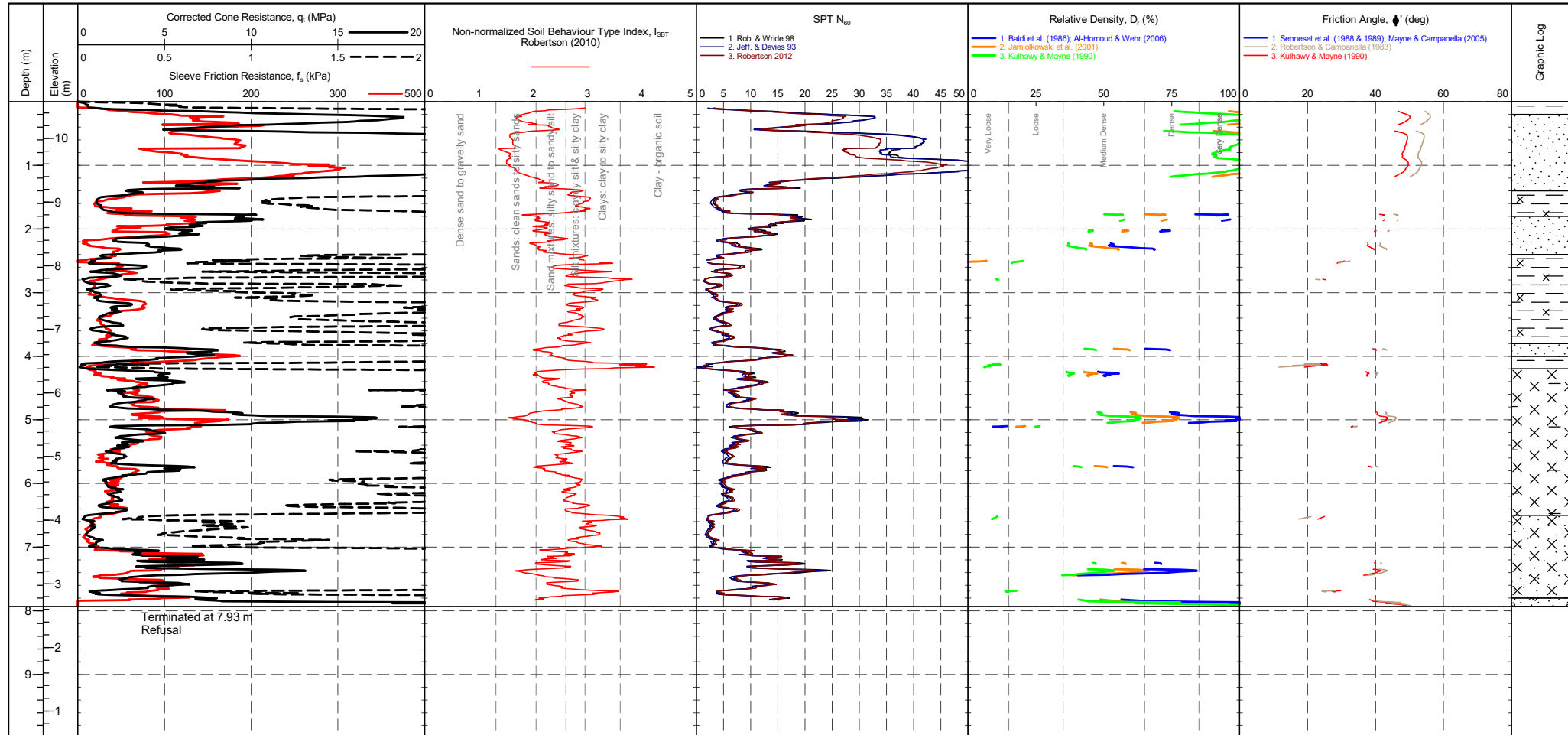
CPT103

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469997.8 m
NORTHING : 105696.1 m
ELEVATION : 10.58 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.460	0.008077
Sleeve (kPa)	0.0848	0.0851	-0.000269
u2 (kPa)	-0.00943	-0.00492	-0.00451
Inclinometer 1 (°)	-1.84	-1.76	-0.081968
Inclinometer 2 (°)	-0.954	-0.852	-0.102787

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

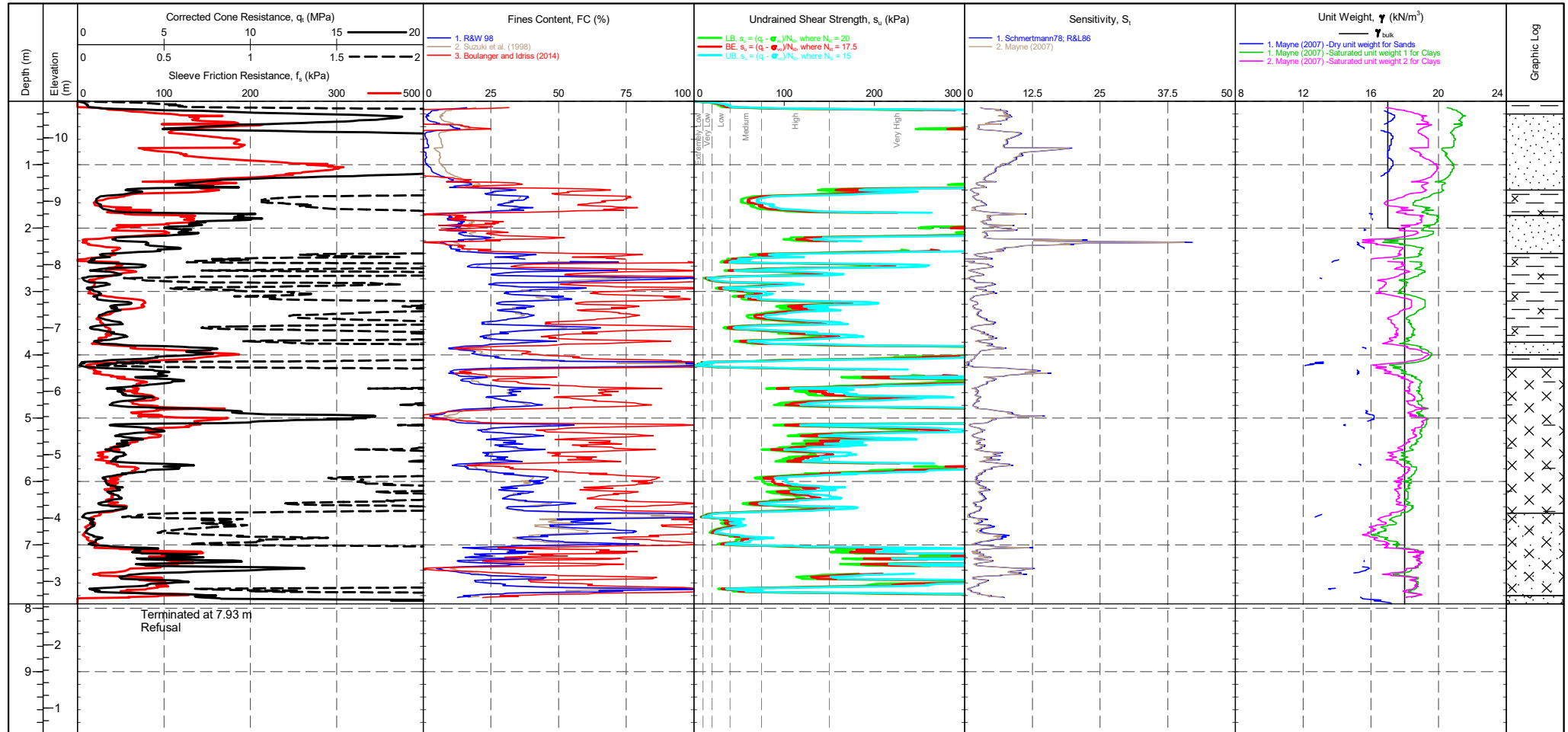
CPT103

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469997.8 m
NORTHING : 105696.1 m
ELEVATION : 10.58 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.468 0.460 0.008077
Sleeve (kPa) 0.0848 0.0851 -0.000269
u2 (kPa) -0.00943 -0.00492 -0.00451
Inclinometer 1 (°) -1.84 -1.76 -0.081968
Inclinometer 2 (°) -0.954 -0.852 -0.102787

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

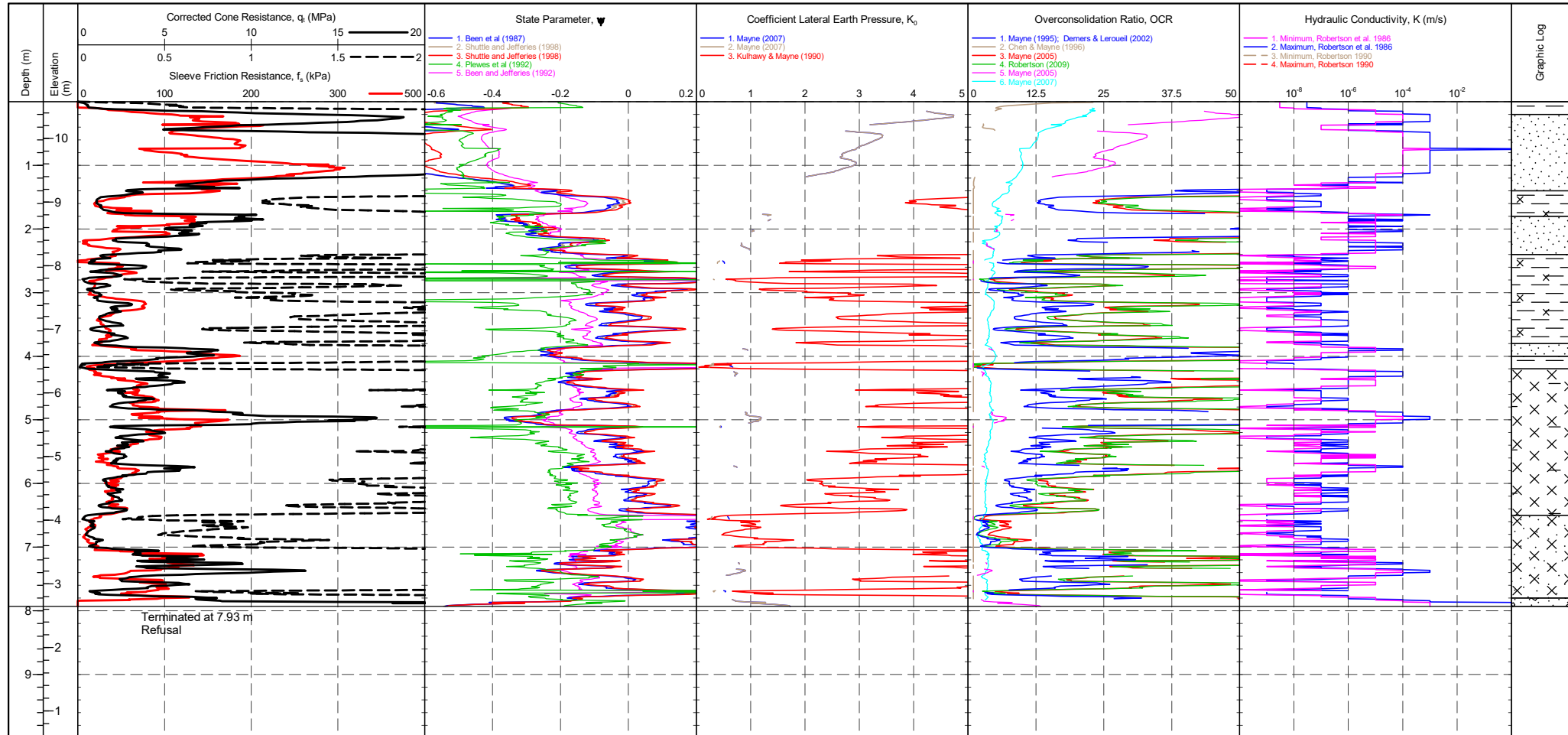
CPT103

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469997.8 m
NORTHING : 105696.1 m
ELEVATION : 10.58 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.460	0.008077
Sleeve (kPa)	0.0848	0.0851	-0.000269
u2 (kPa)	-0.00943	-0.00492	-0.00451
Inclinometer 1 (°)	-1.84	-1.76	-0.081968
Inclinometer 2 (°)	-0.954	-0.852	-0.102787

Groundwater Level
Dissipation Test

PointID

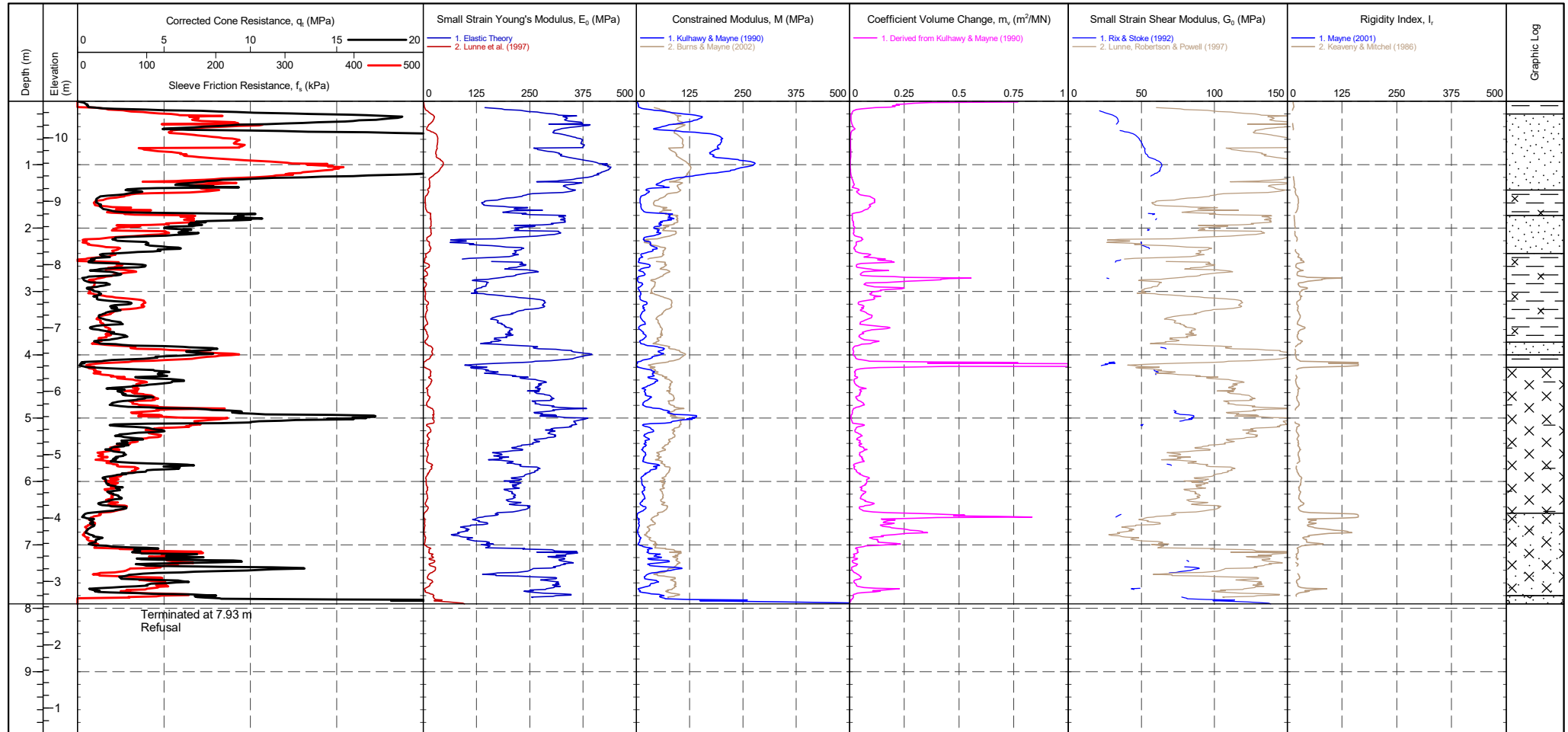
CPT103

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 469997.8 m
NORTHING : 105696.1 m
ELEVATION : 10.58 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

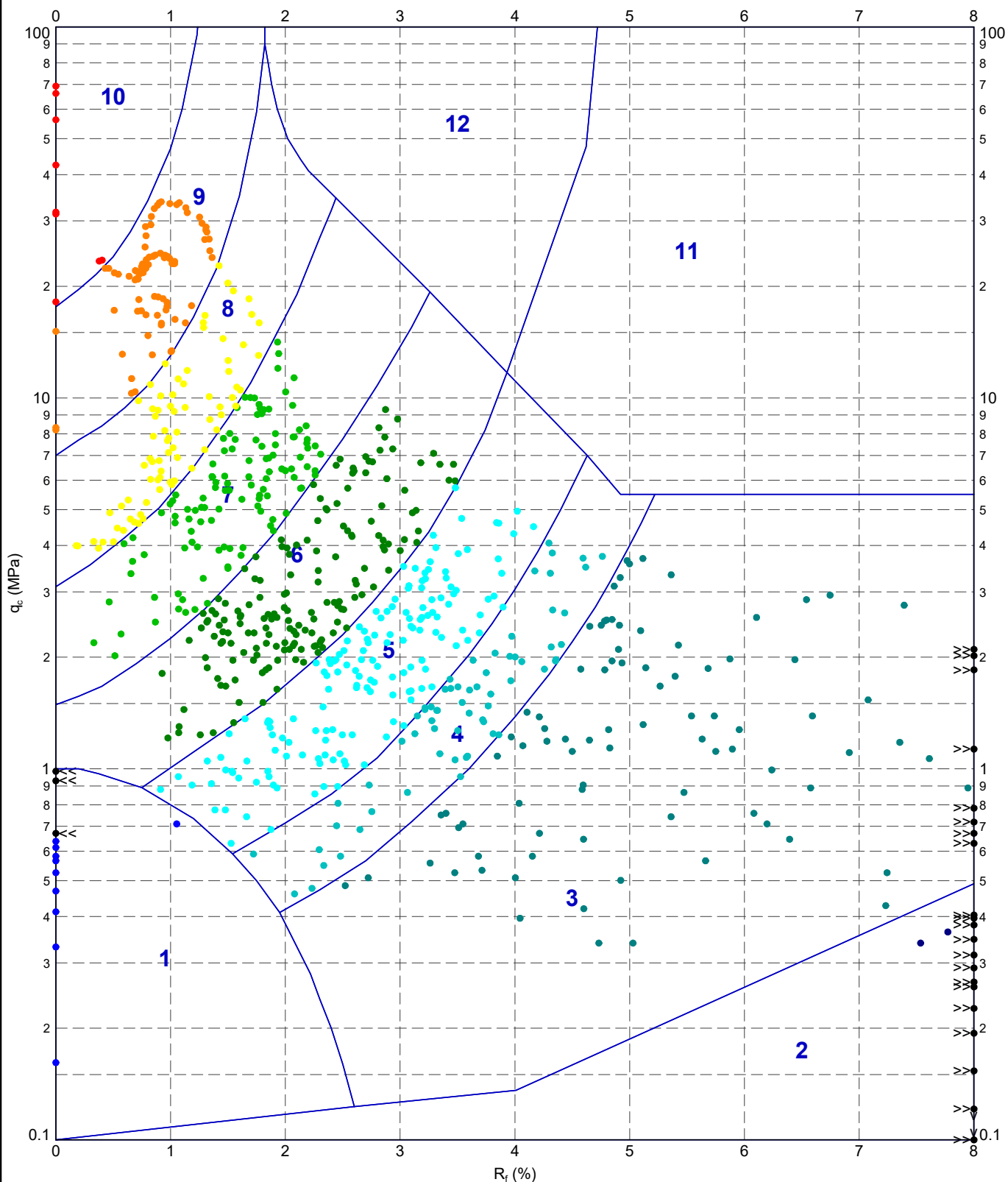
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.468	0.460	0.008077
Sleeve (kPa)	0.0848	0.0851	-0.000269
u2 (kPa)	-0.00943	-0.00492	-0.00451
Inclinometer 1 (°)	-1.84	-1.76	-0.081968
Inclinometer 2 (°)	-0.954	-0.852	-0.102787

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 09:46 10:02:00.04 Datag Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT103

DRAWN	DATE	25/05/2021
CHECKED	DATE	25/05/2021
SCALE	Not To Scale	
PROJECT No	FIGURE No	A4
1210220		

PointID

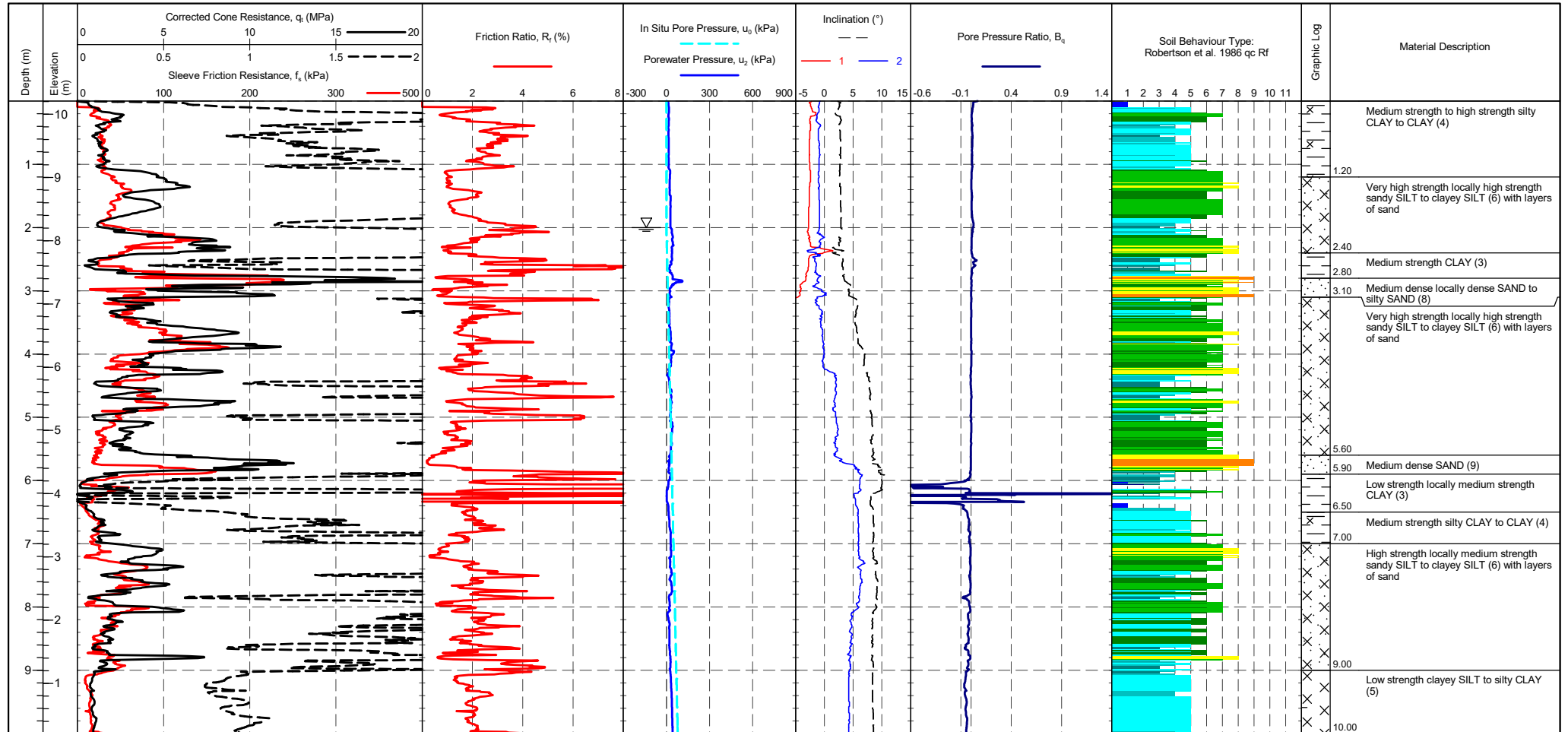
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 $q_c R_f$			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.430	0.428	0.002423	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0835	0.0843	-0.000806	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00845	0.00820	-0.016646	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-2.28	-2.20	-0.087433		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.742	-0.852	0.110132		10 - Gravelly SAND to SAND	
									12 - SAND to clayey SAND	

PointID

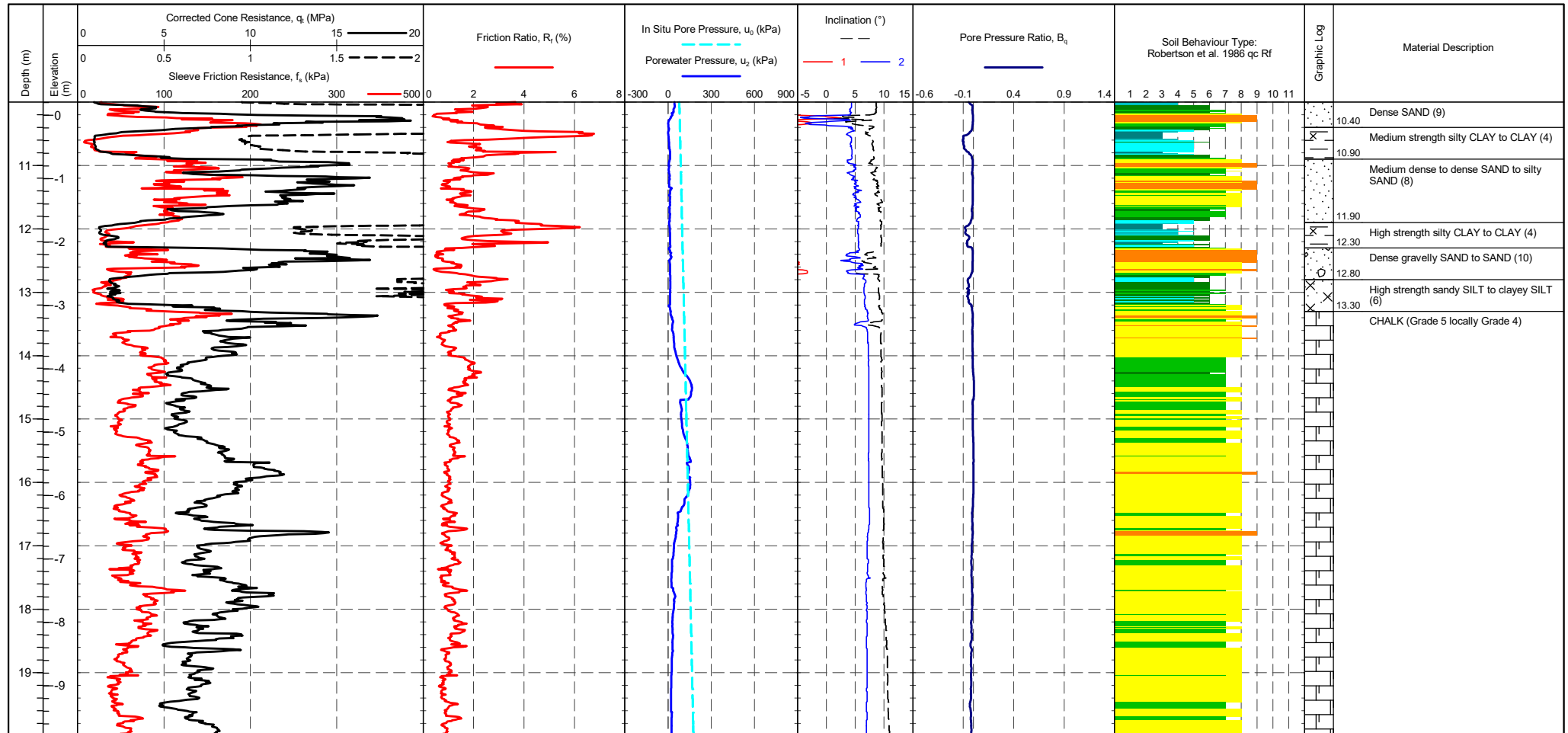
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.430	0.428	0.002423	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0835	0.0843	-0.000806	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00845	0.00820	-0.016646	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-2.28	-2.20	-0.087433				
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.742	-0.852	0.110132				

PointID

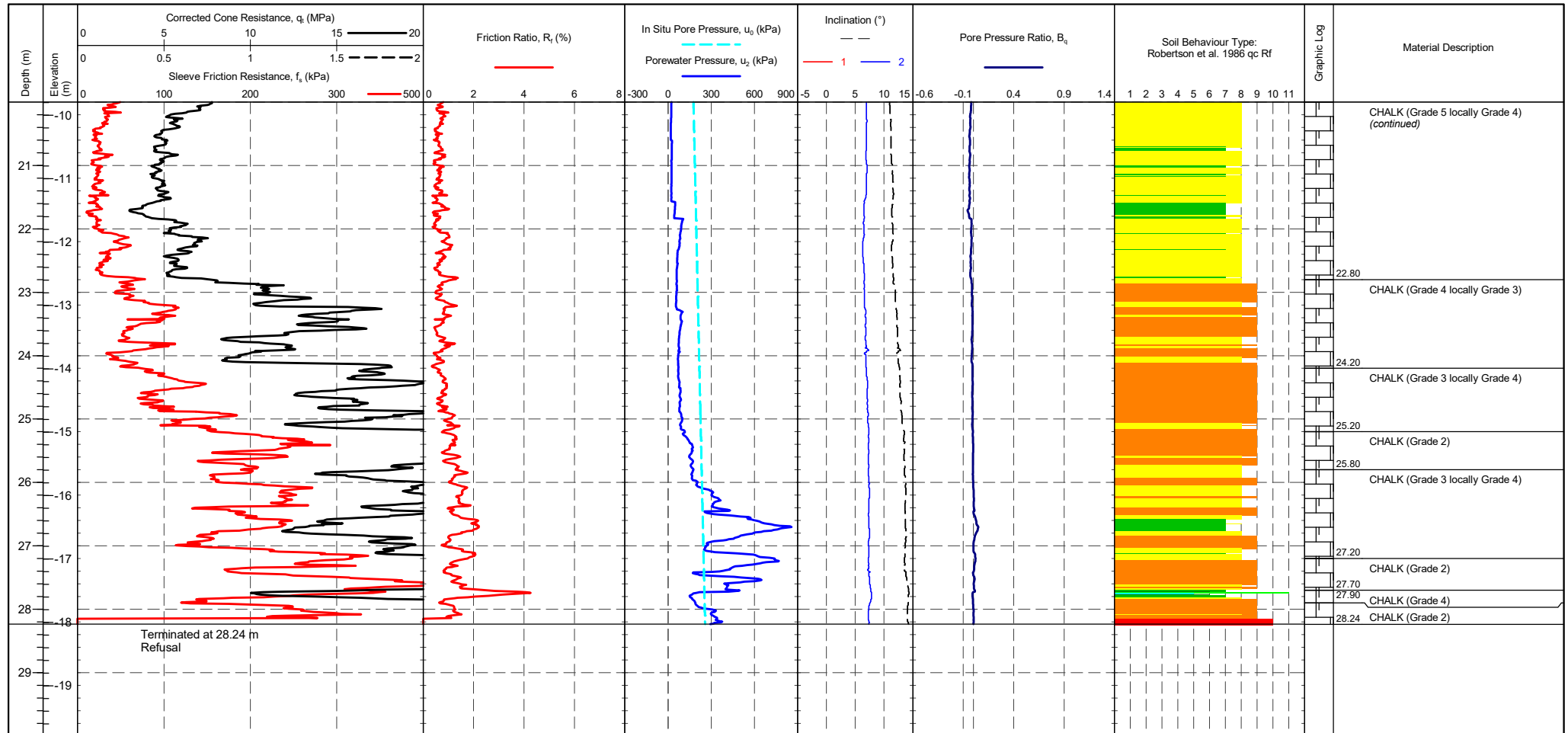
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf						Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	RIG : CPT 022	OPERATOR : AL	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND			
CONE MODEL : Subtraction	WEATHER : Overcast & Mild	GROUNDWATER DEPTH : Assumed for calculation purposes	FRICITION REDUCER : None	Tip (MPa)	0.430	0.428	0.002423	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND			
CONE AREA : 15cm ²				Sleeve (kPa)	0.0835	0.0843	-0.000806	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained			
CONE AREA RATIO : 0.75				u2 (kPa)	-0.00845	0.00820	-0.016646	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND			
FILTER POSITION : u2				Inclinometer 1 (°)	-2.28	-2.20	-0.087433						
FILTER TYPE : HDPE				Inclinometer 2 (°)	-0.742	-0.852	0.110132						

PointID

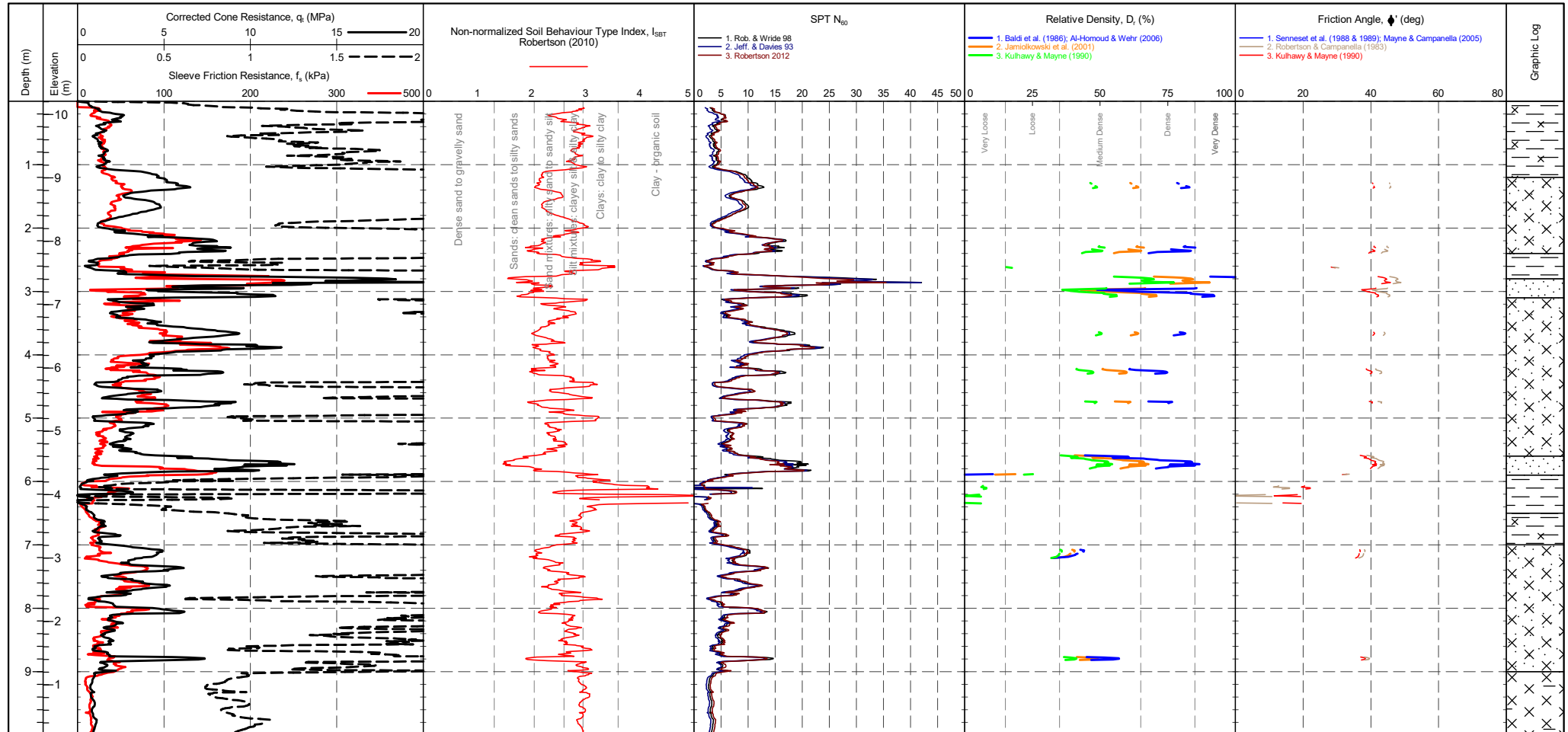
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

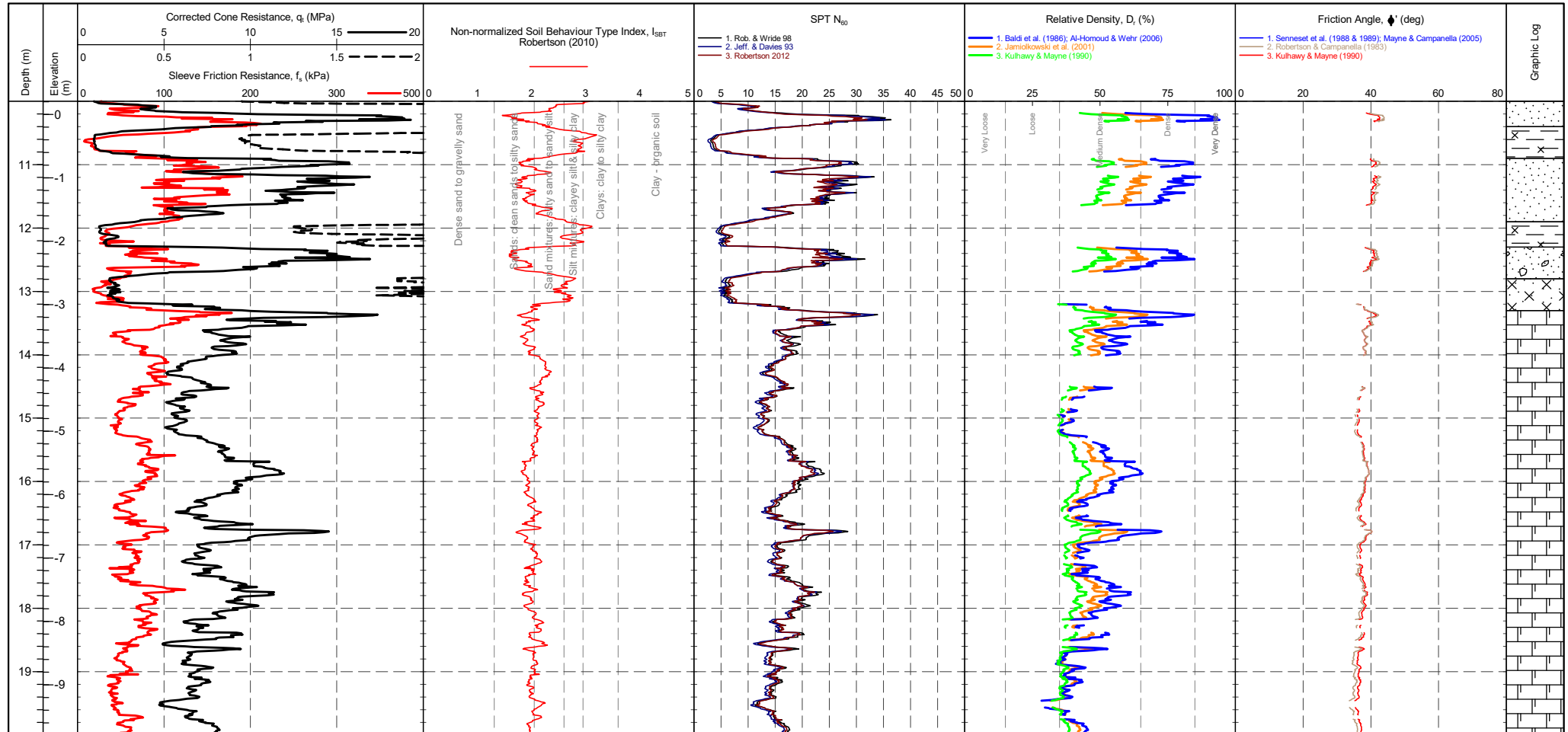
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.430 0.428 0.002423
Sleeve (kPa) 0.0835 0.0843 -0.000806
u2 (kPa) -0.00845 0.00820 -0.016646
Inclinometer 1 (°) -2.28 -2.20 -0.087433
Inclinometer 2 (°) -0.742 -0.852 0.110132

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

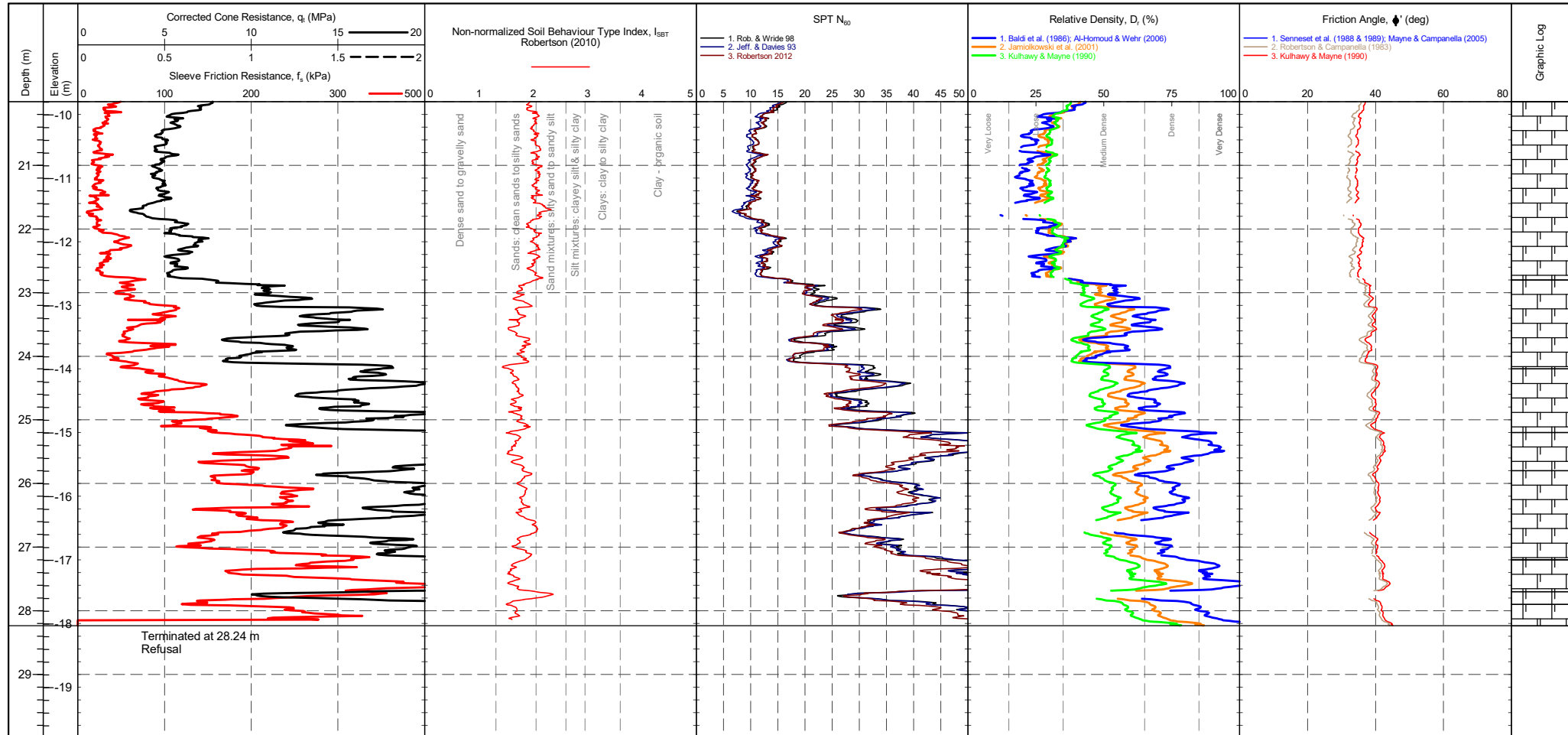
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (")	-2.28	-2.20	-0.087433
Inclinometer 2 (")	-0.742	-0.852	0.110132

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

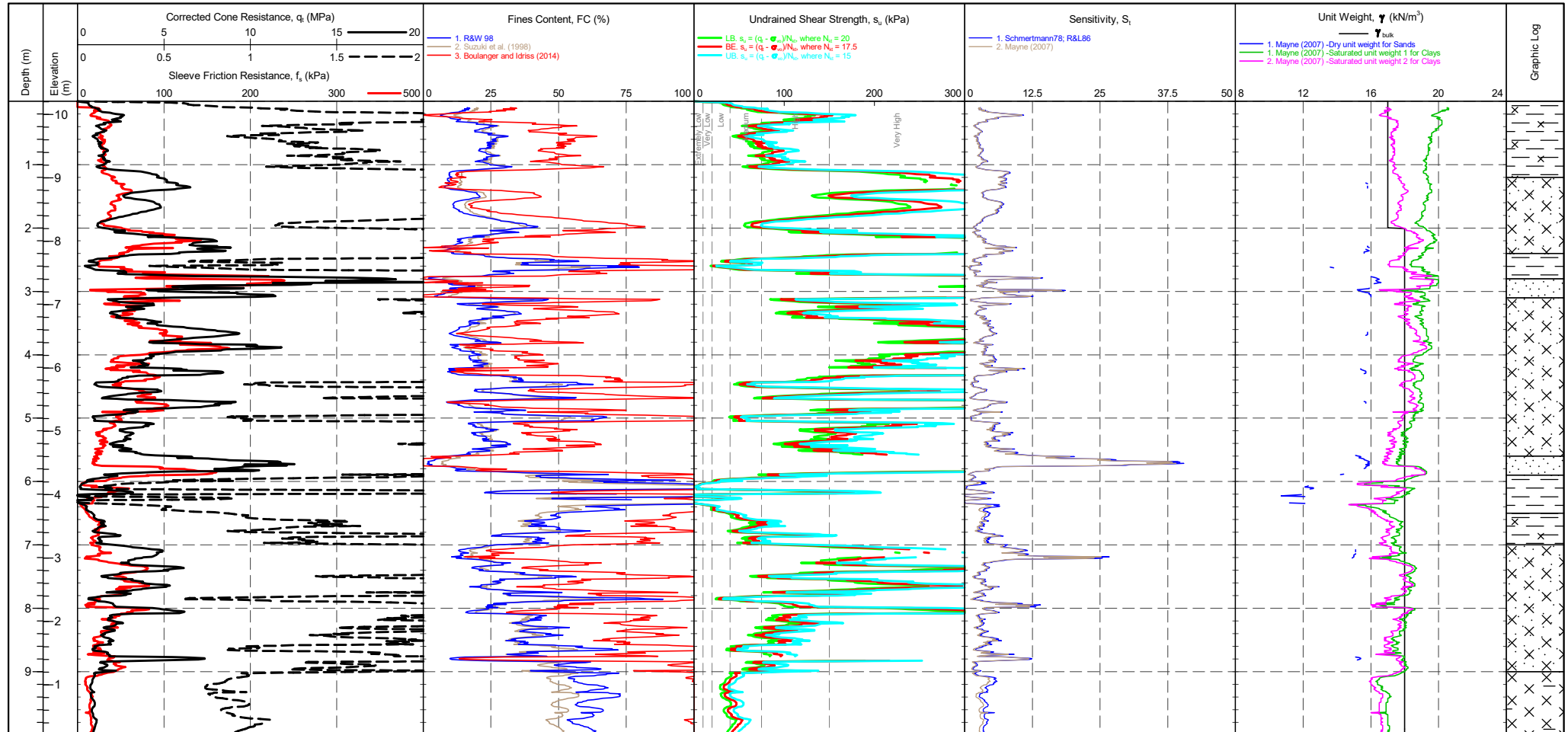
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.430 0.428 0.002423
Sleeve (kPa) 0.0835 0.0843 -0.000806
u2 (kPa) -0.00845 0.00820 -0.016646
Inclinometer 1 (°) -2.28 -2.20 -0.087433
Inclinometer 2 (°) -0.742 -0.852 0.110132

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

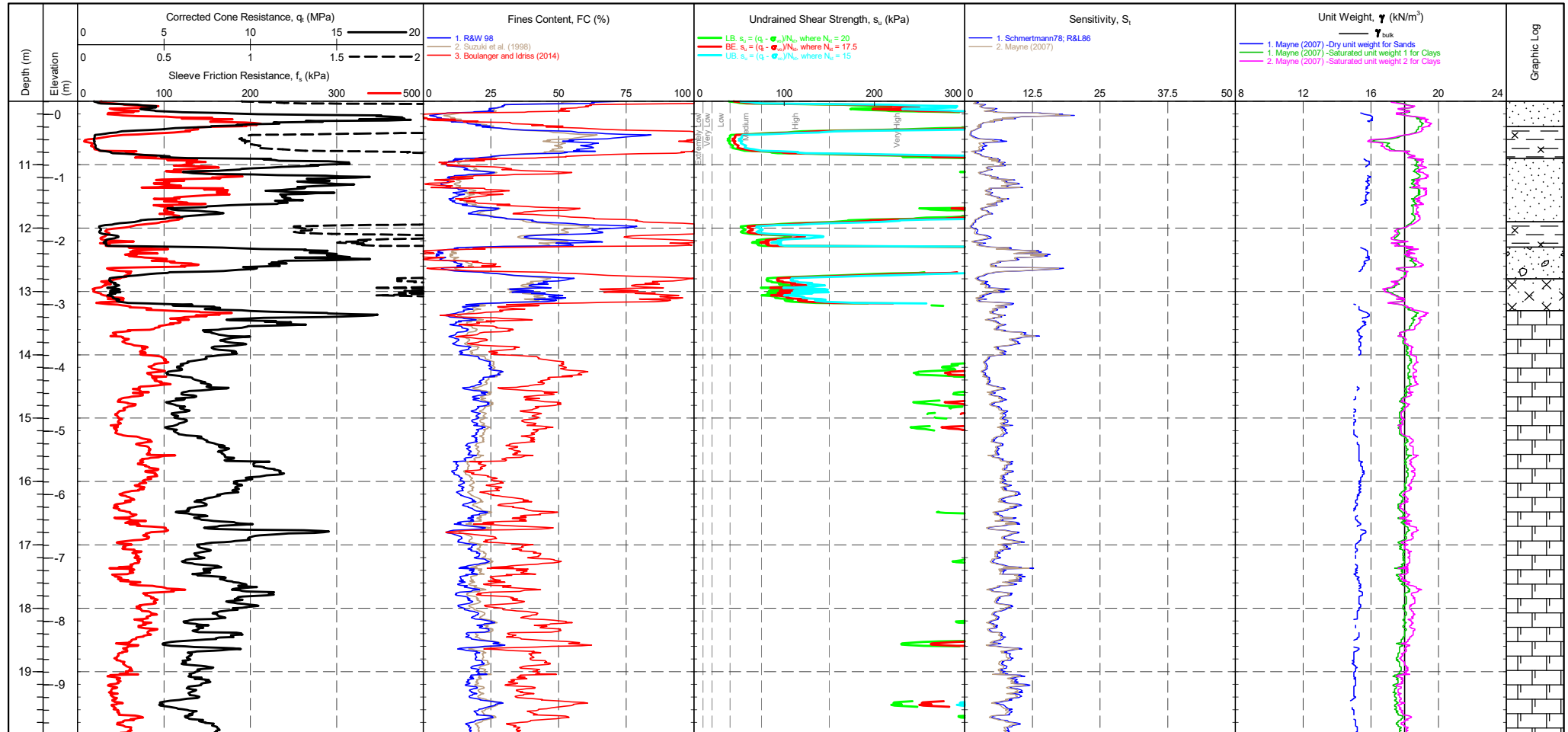
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.430 0.428 0.002423
Sleeve (kPa) 0.0835 0.0843 -0.000806
u2 (kPa) -0.00845 0.00820 -0.016646
Inclinometer 1 (°) -2.28 -2.20 -0.087433
Inclinometer 2 (°) -0.742 -0.852 0.110132

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

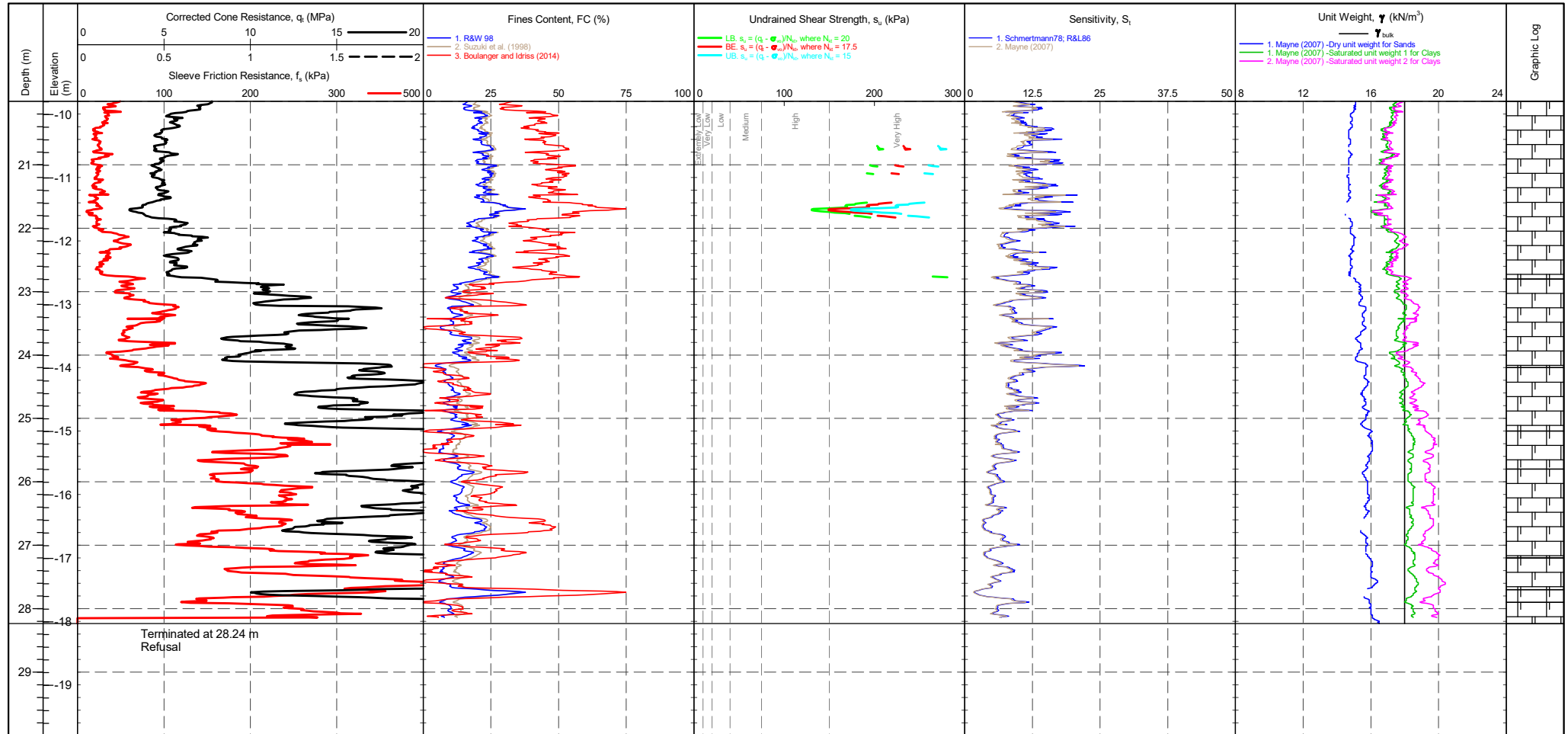
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.430 0.428 0.002423
Sleeve (kPa) 0.0835 0.0843 -0.000806
u2 (kPa) -0.00845 0.00820 -0.016646
Inclinometer 1 (°) -2.28 -2.20 -0.087433
Inclinometer 2 (°) -0.742 -0.852 0.110132

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

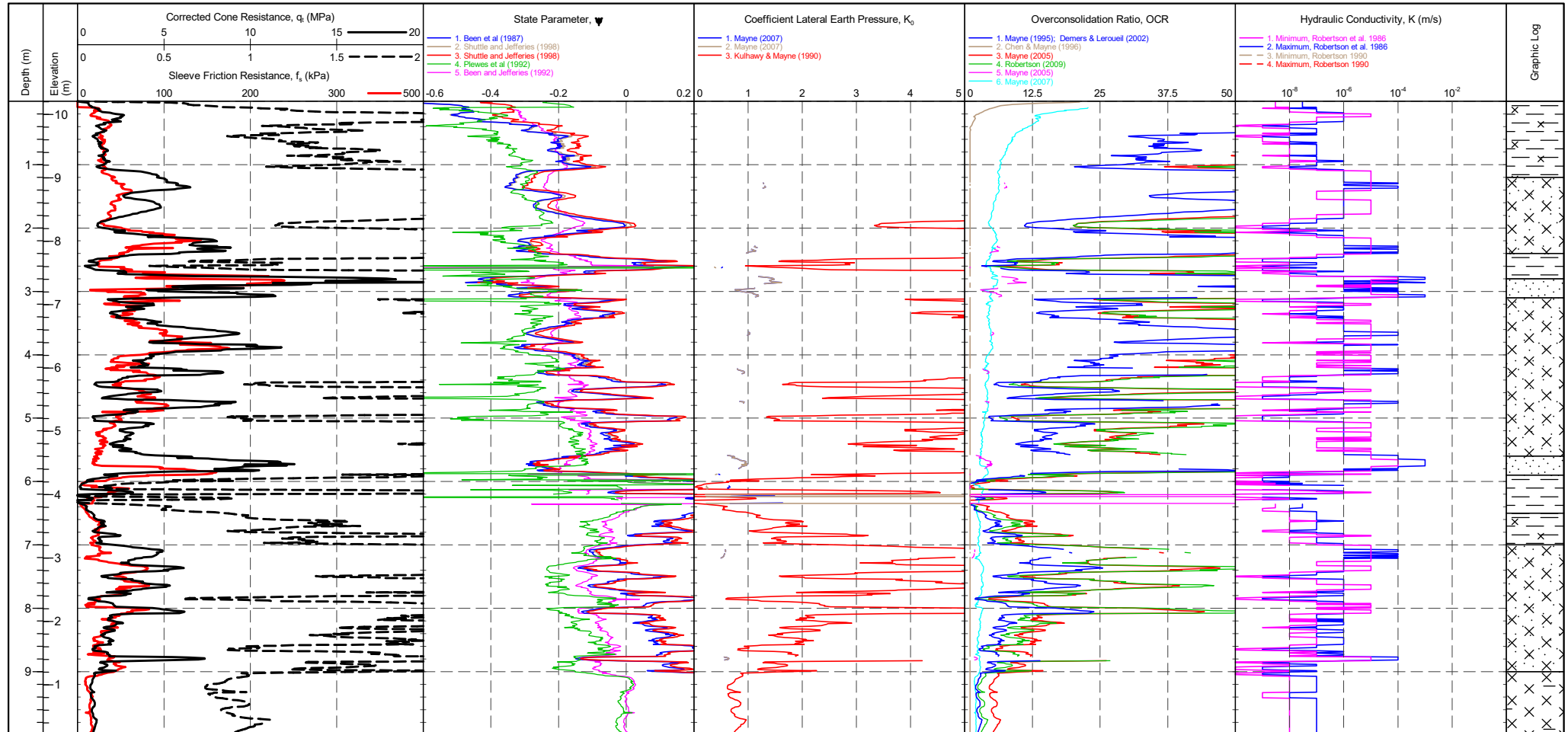
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

PointID

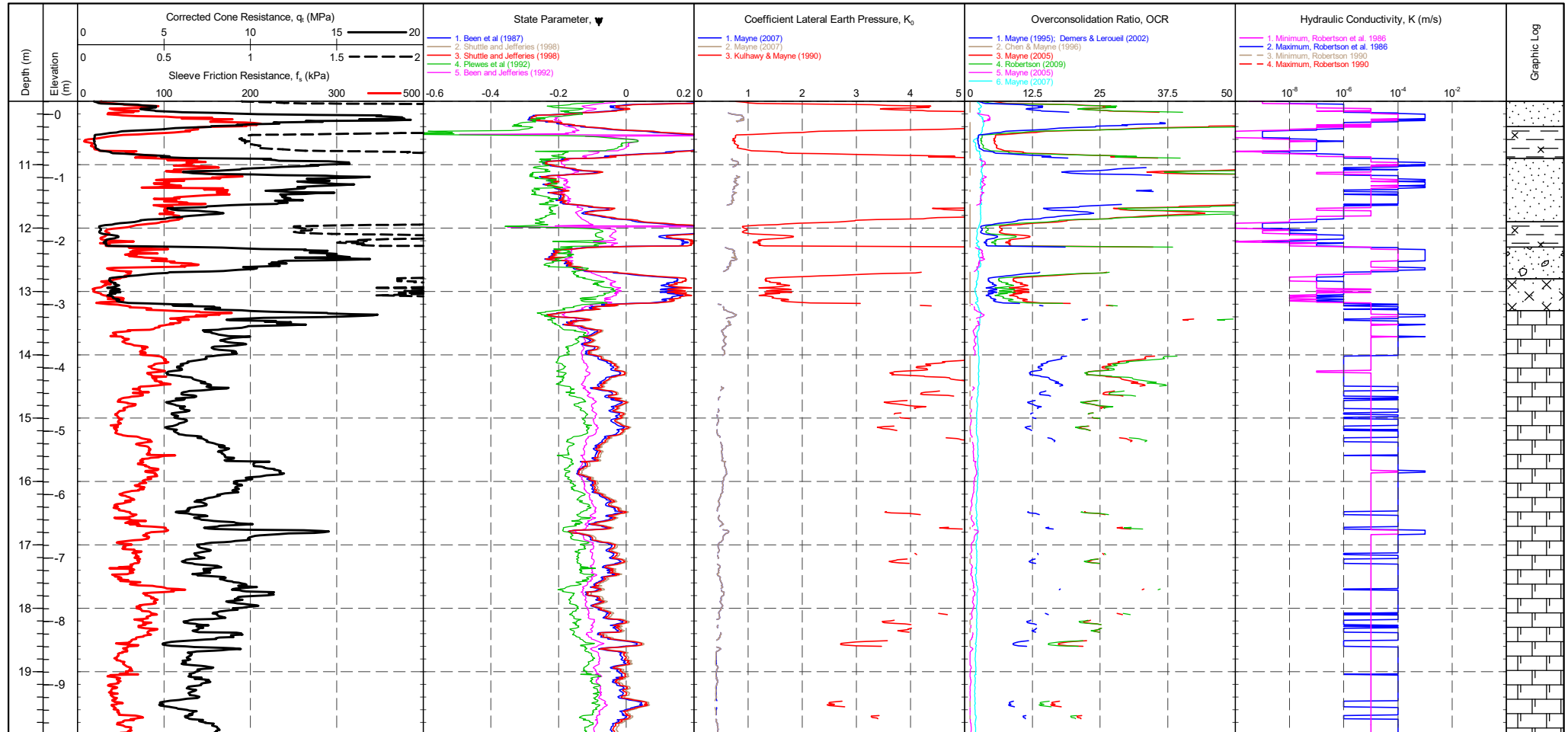
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

PointID

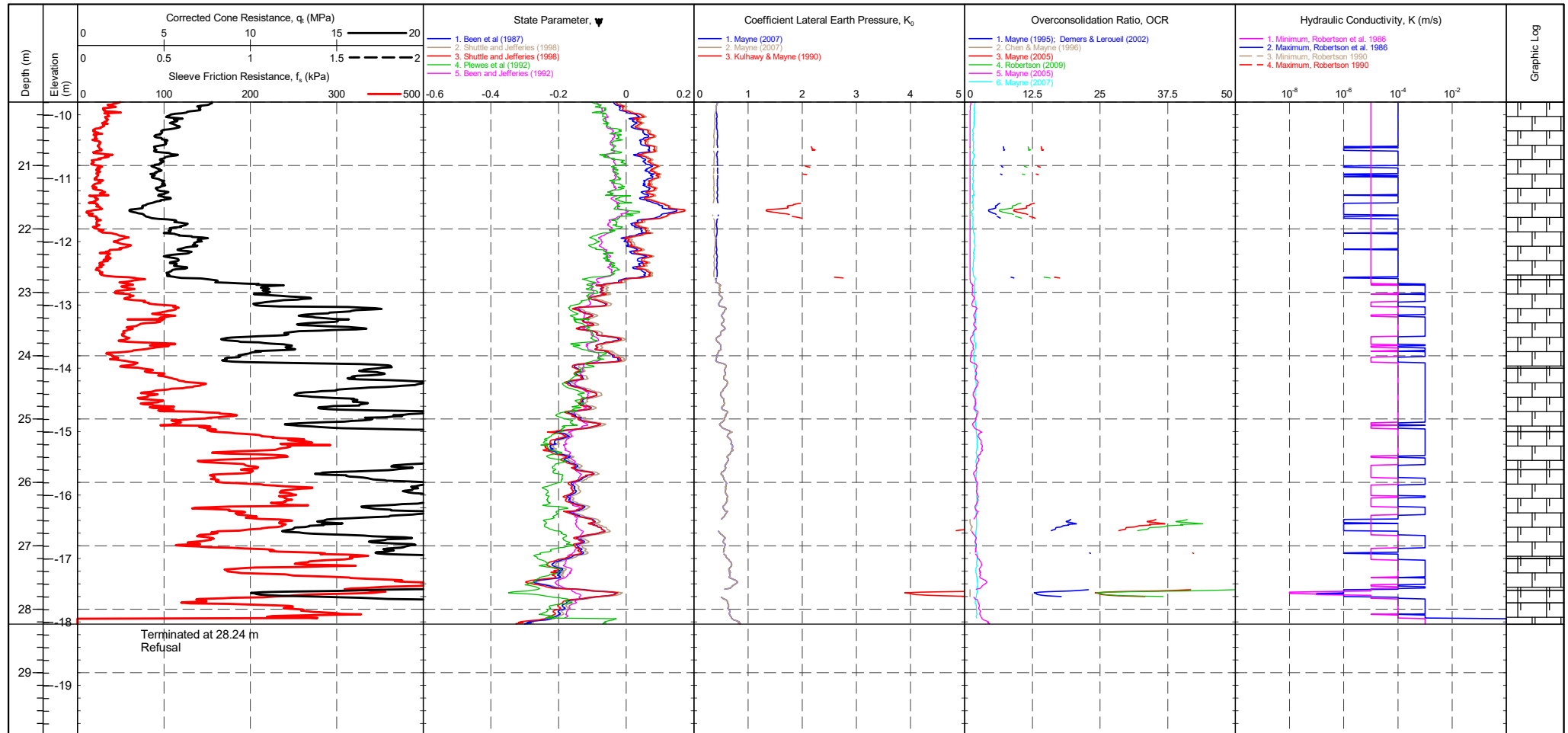
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

PointID

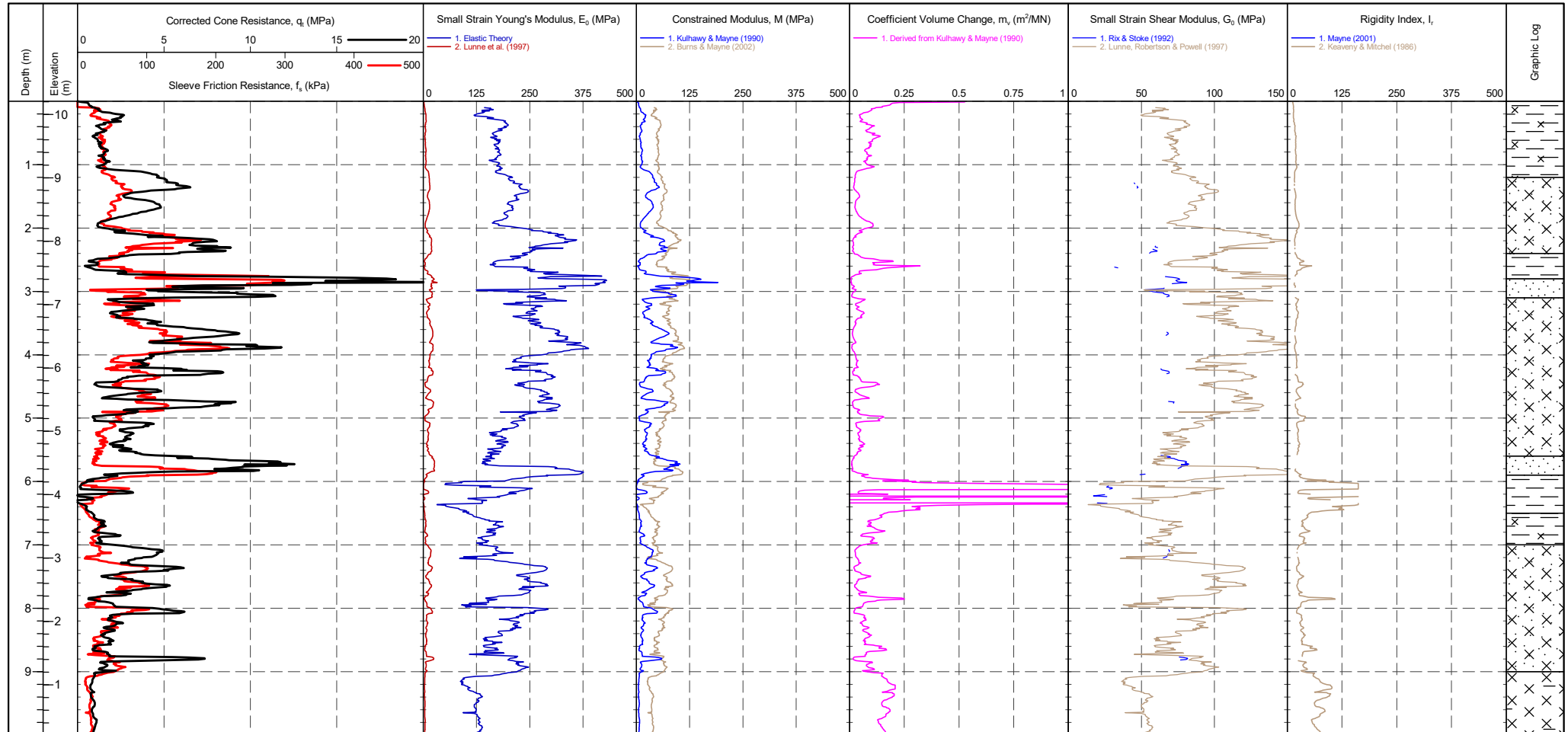
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

PointID

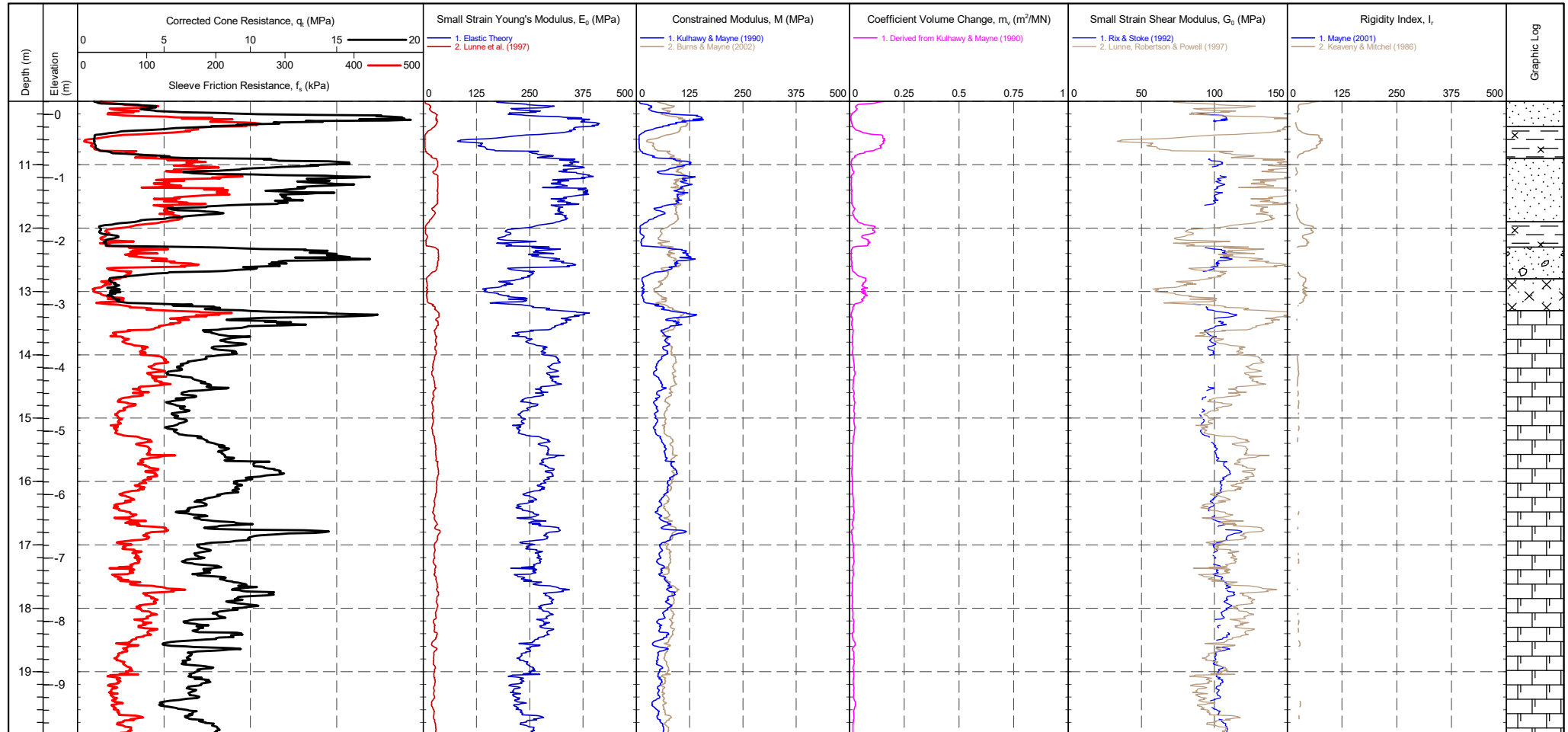
CPT104

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

PointID

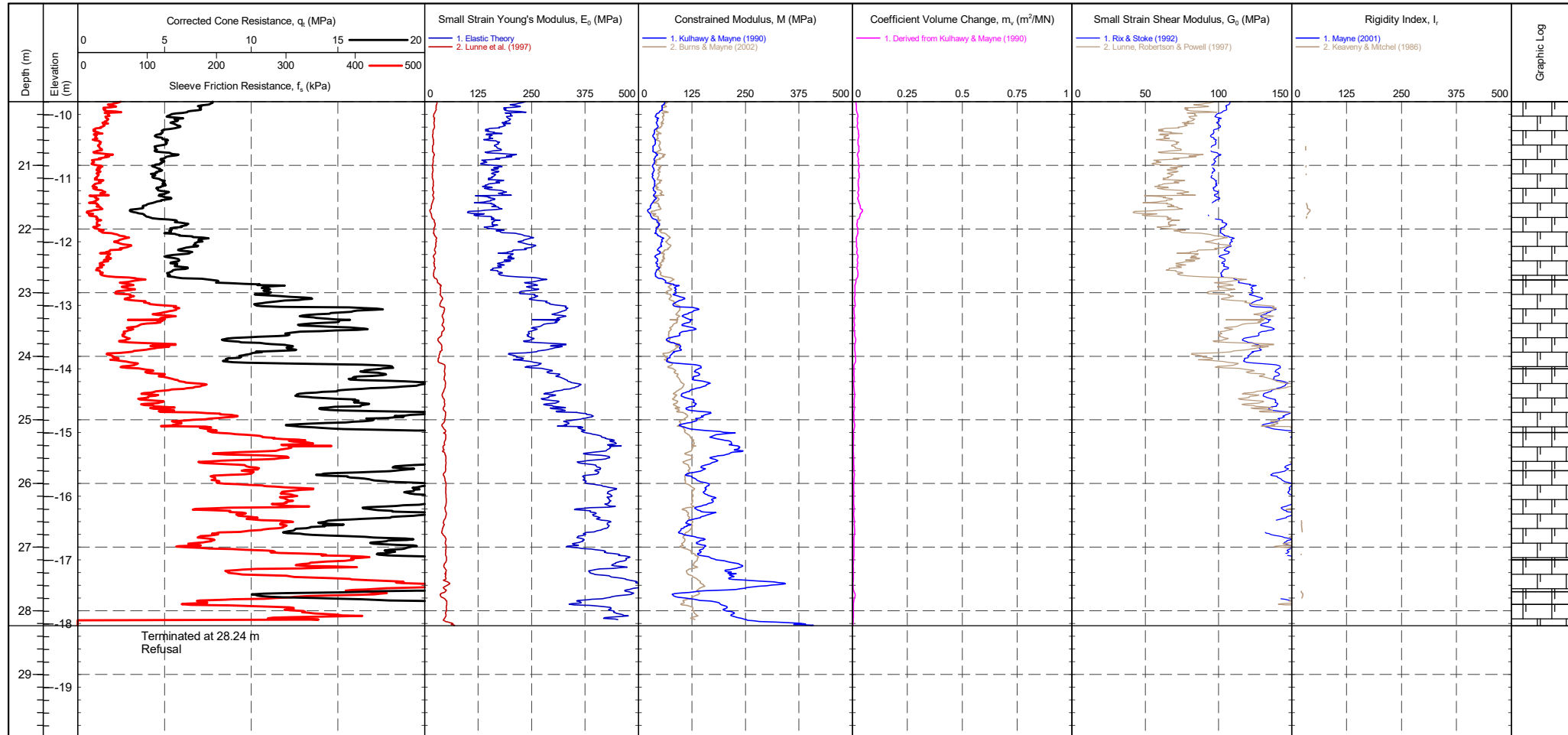
CPT104

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470090.2 m
NORTHING : 105680.5 m
ELEVATION : 10.21 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

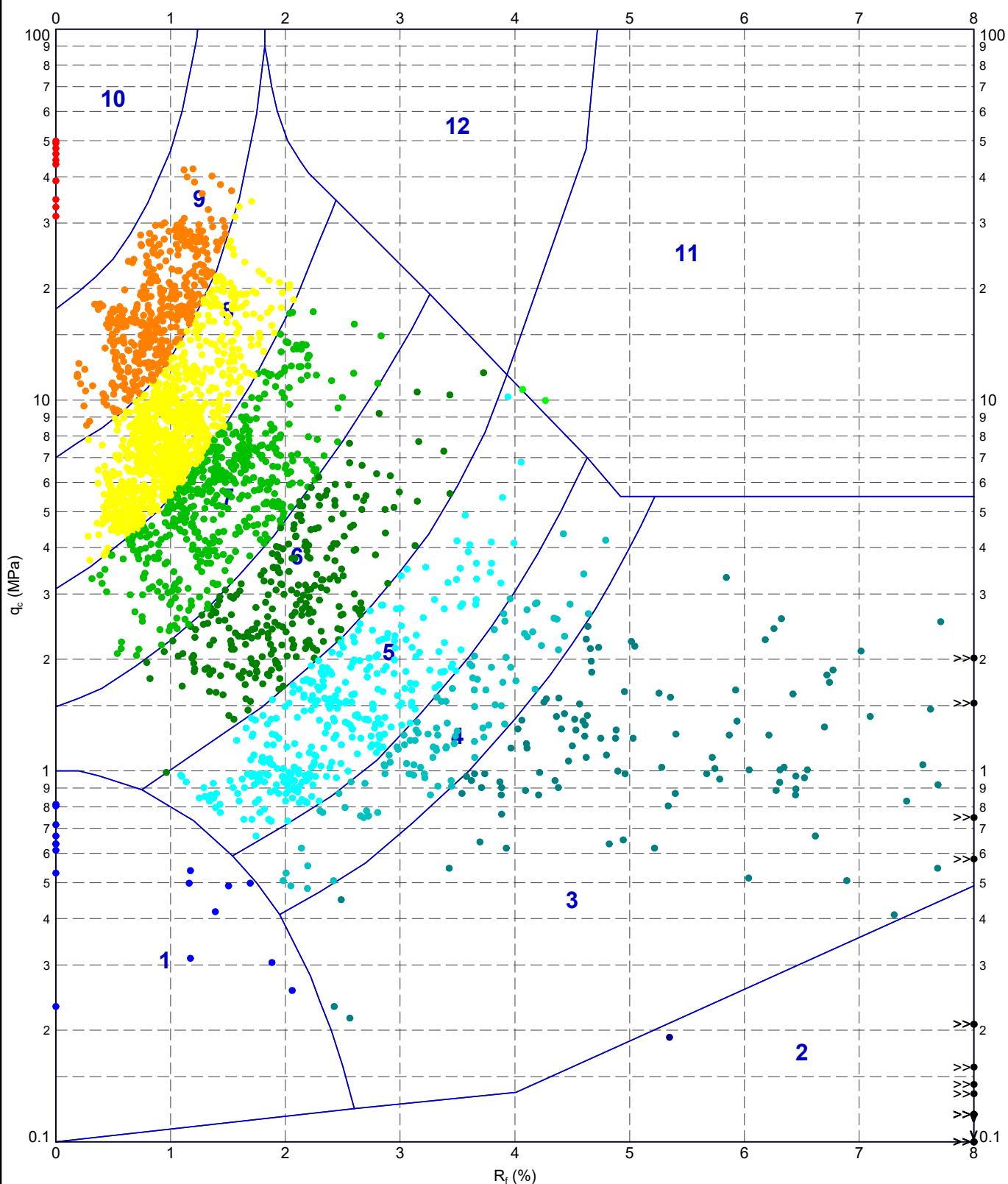
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.430	0.428	0.002423
Sleeve (kPa)	0.0835	0.0843	-0.000806
u2 (kPa)	-0.00845	0.00820	-0.016646
Inclinometer 1 (°)	-2.28	-2.20	-0.087433
Inclinometer 2 (°)	-0.742	-0.852	0.110132

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS GPJ <<DrawingFile>> 25/05/2021 09:51 10:02:00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT104

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

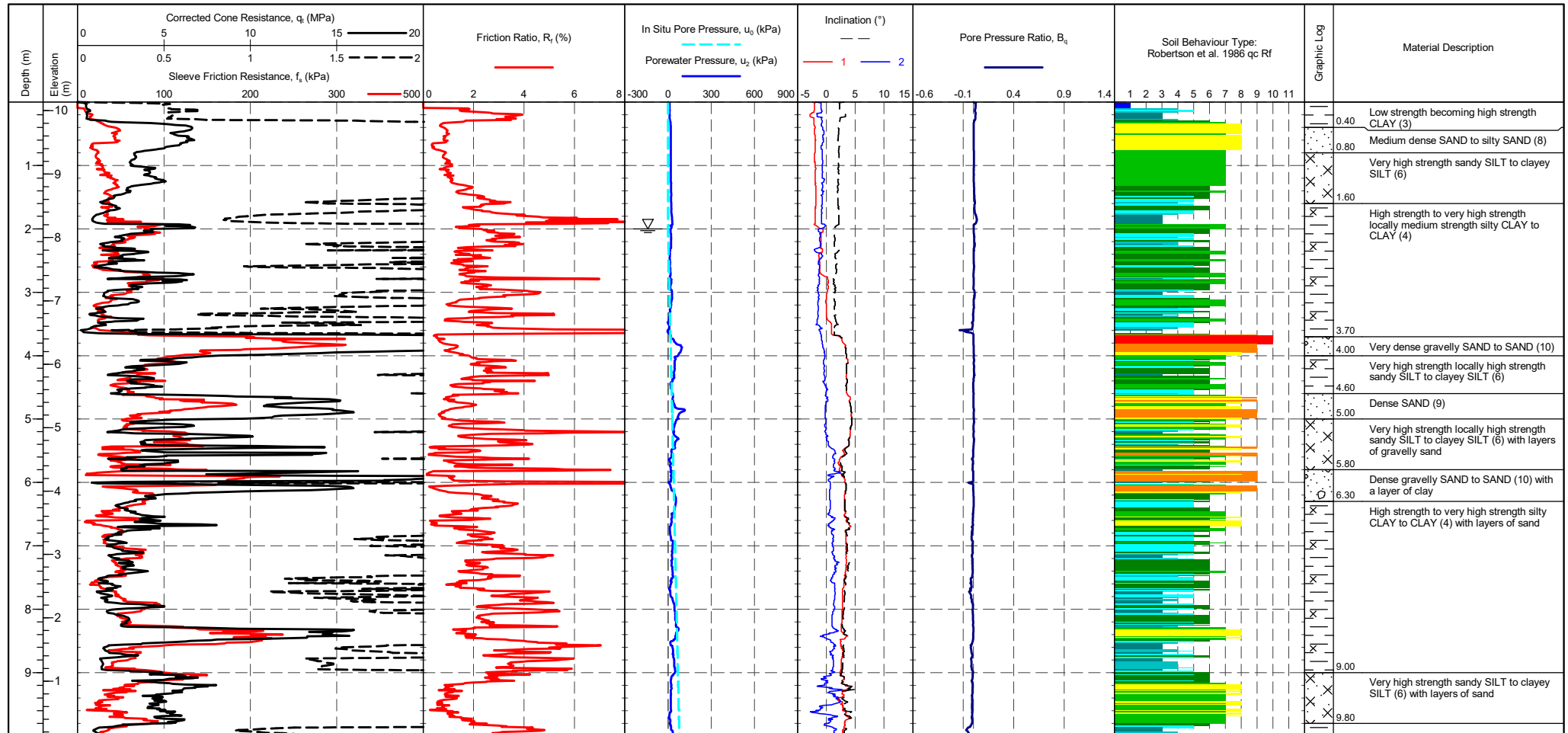
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf						Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	RIG : CPT 022	OPERATOR : AL	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND			
CONE MODEL : Subtraction	FRICITION REDUCER : None	WEATHER : Overcast & Mild	GROUNDWATER DEPTH : Assumed for calculation purposes	Tip (MPa)	0.462	0.428	0.033924	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND			
CONE AREA : 15cm ²	WEATHER : Overcast & Mild			Sleeve (kPa)	0.0847	0.0838	0.000914	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained			
CONE AREA RATIO : 0.75				u2 (kPa)	-0.00656	-0.00328	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND			
FILTER POSITION : u2				Inclinometer 1 (°)	-2.41	-1.95	-0.460577						
FILTER TYPE : HDPE				Inclinometer 2 (°)	-1.92	-1.27	-0.64978						

PointID

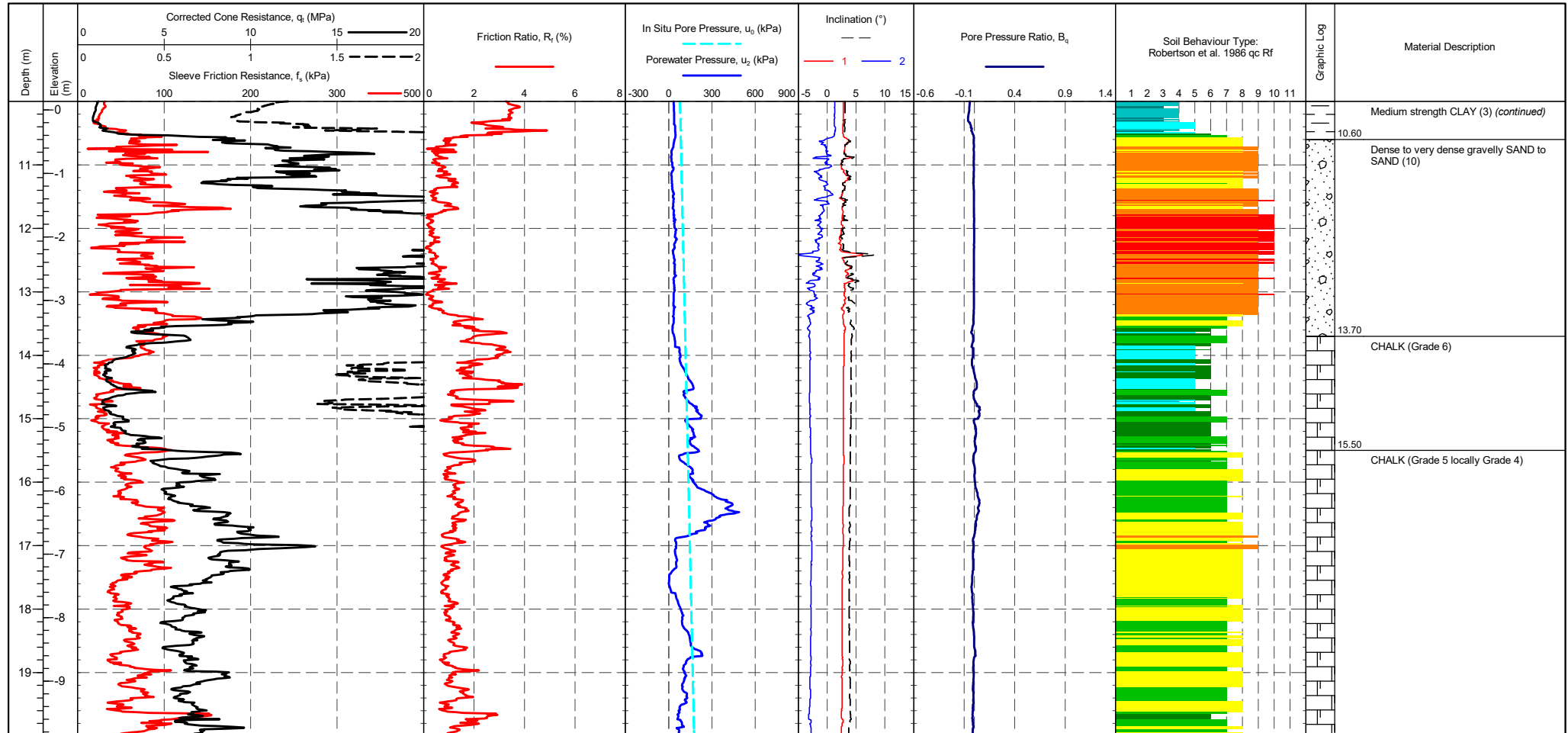
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.462	0.428	0.033924	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0847	0.0838	0.000914	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	FRICITION REDUCER : None	u_2 (kPa)	-0.00656	-0.00328	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (i)	-2.41	-1.95	-0.460577		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (i)	-1.92	-1.27	-0.64978		10 - Gravelly SAND to SAND	12 - SAND to clayey SAND

PointID

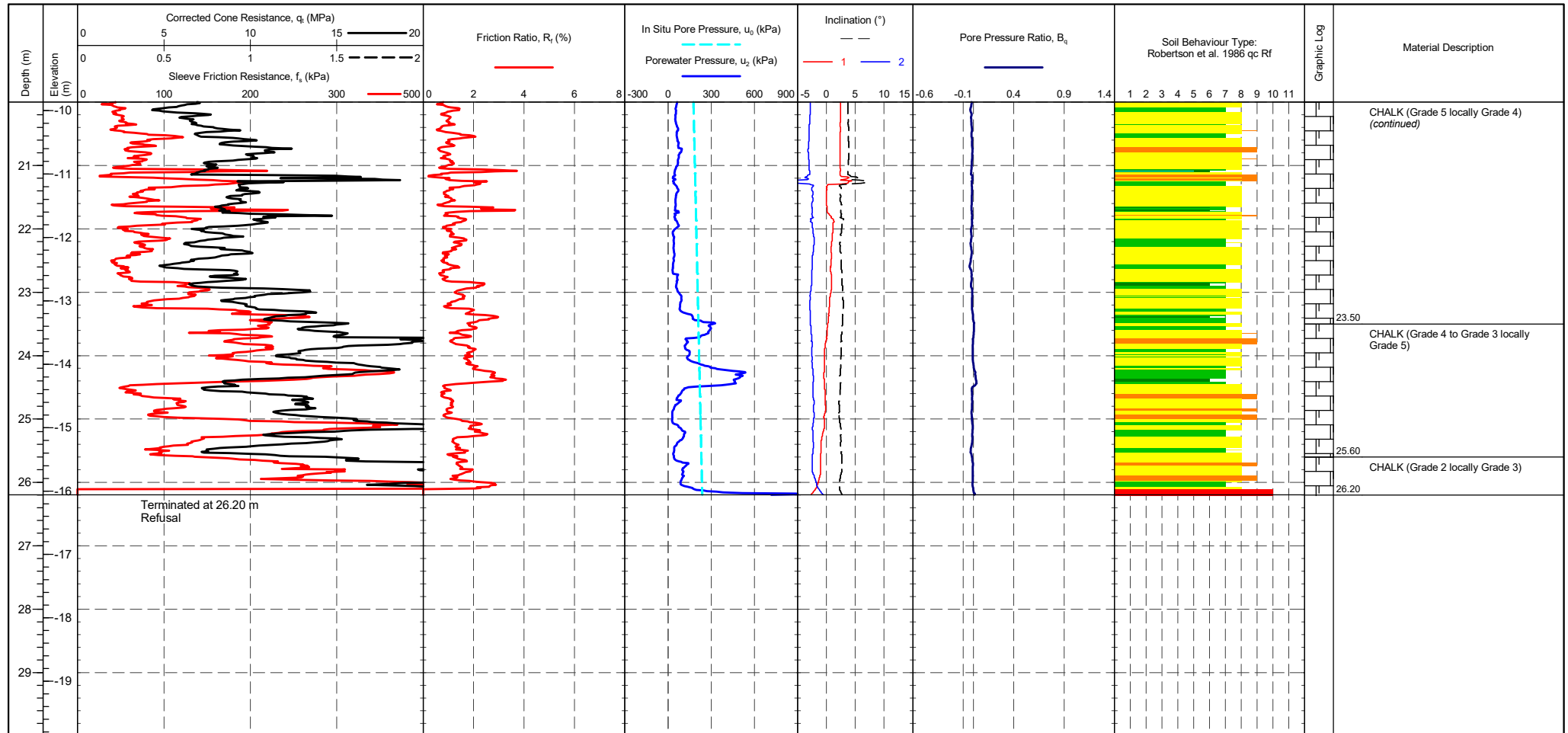
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.462	0.428	0.033924	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0847	0.0838	0.000914	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00656	-0.00328	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-2.41	-1.95	-0.460577		9 - SAND	10 - Gravely SAND to SAND 11 - Very stiff fine grained 12 - SAND to clayey SAND
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-1.92	-1.27	-0.64978			

PointID

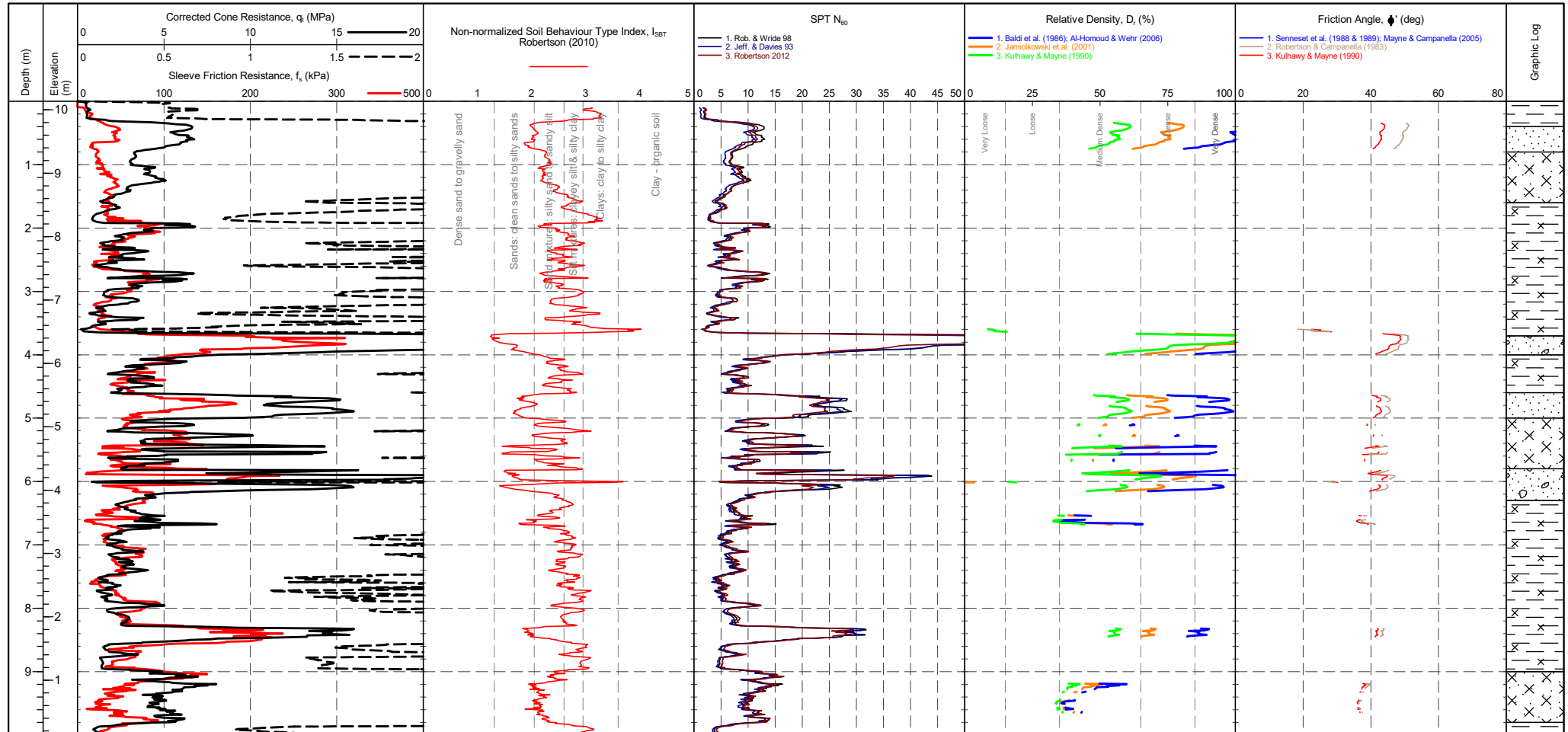
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

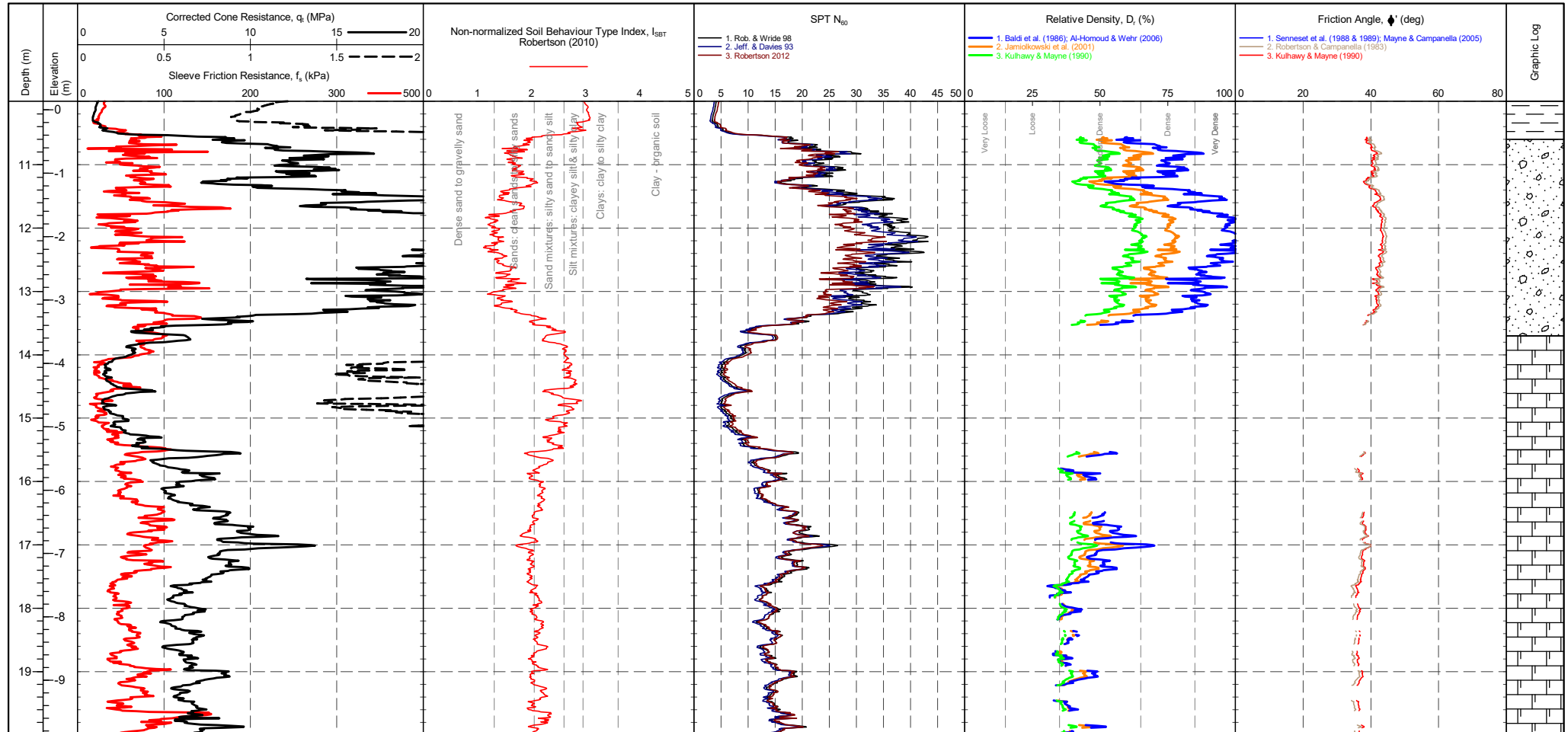
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES
Transducer Pre Post Difference
Tip (MPa) 0.462 0.428 0.033924
Sleeve (kPa) 0.0847 0.0838 0.000914
u2 (kPa) -0.00656 -0.00328 -0.00328
Inclinometer 1 (°) -2.41 -1.95 -0.460577
Inclinometer 2 (°) -1.92 -1.27 -0.64978

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density Dr (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level

Dissipation Test

PointID

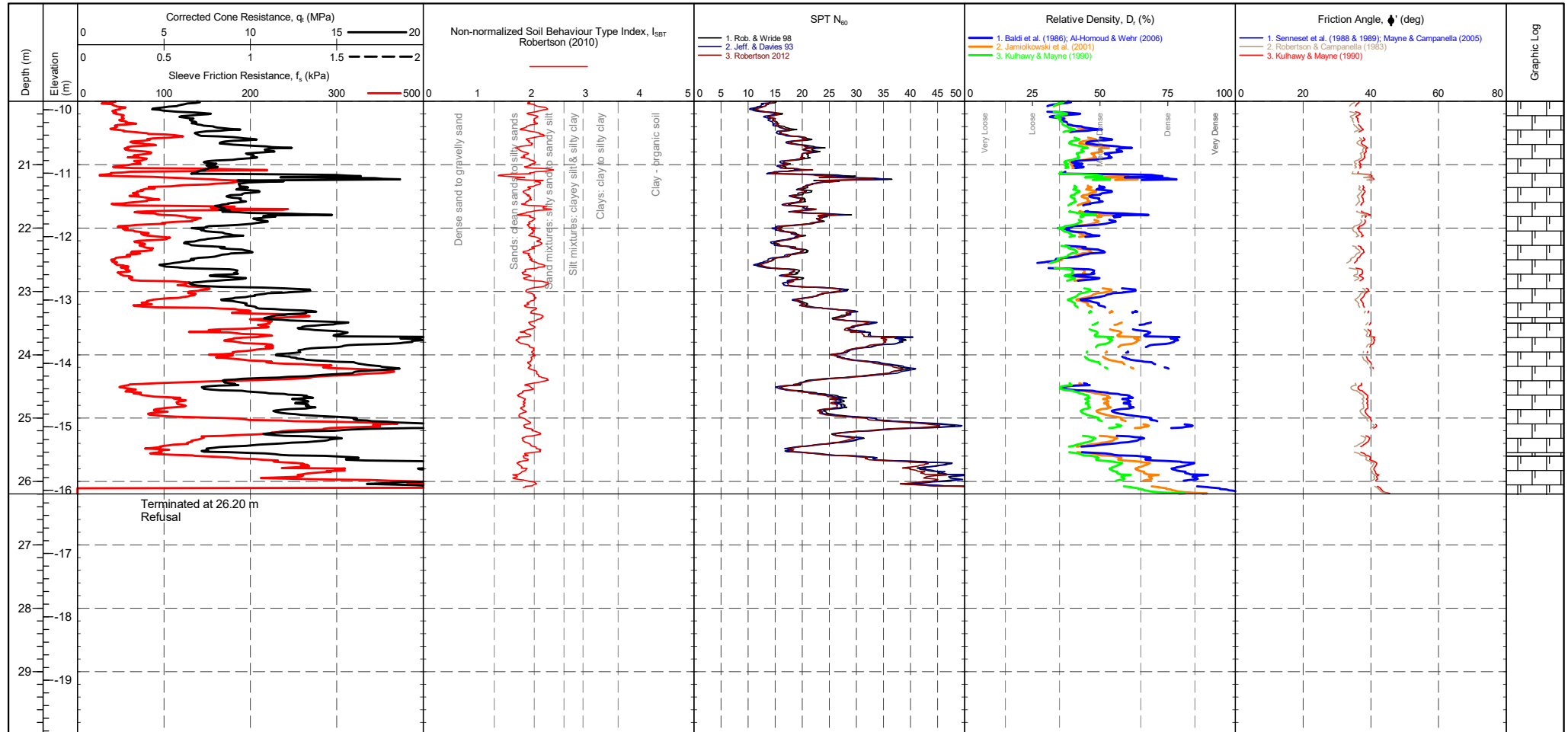
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

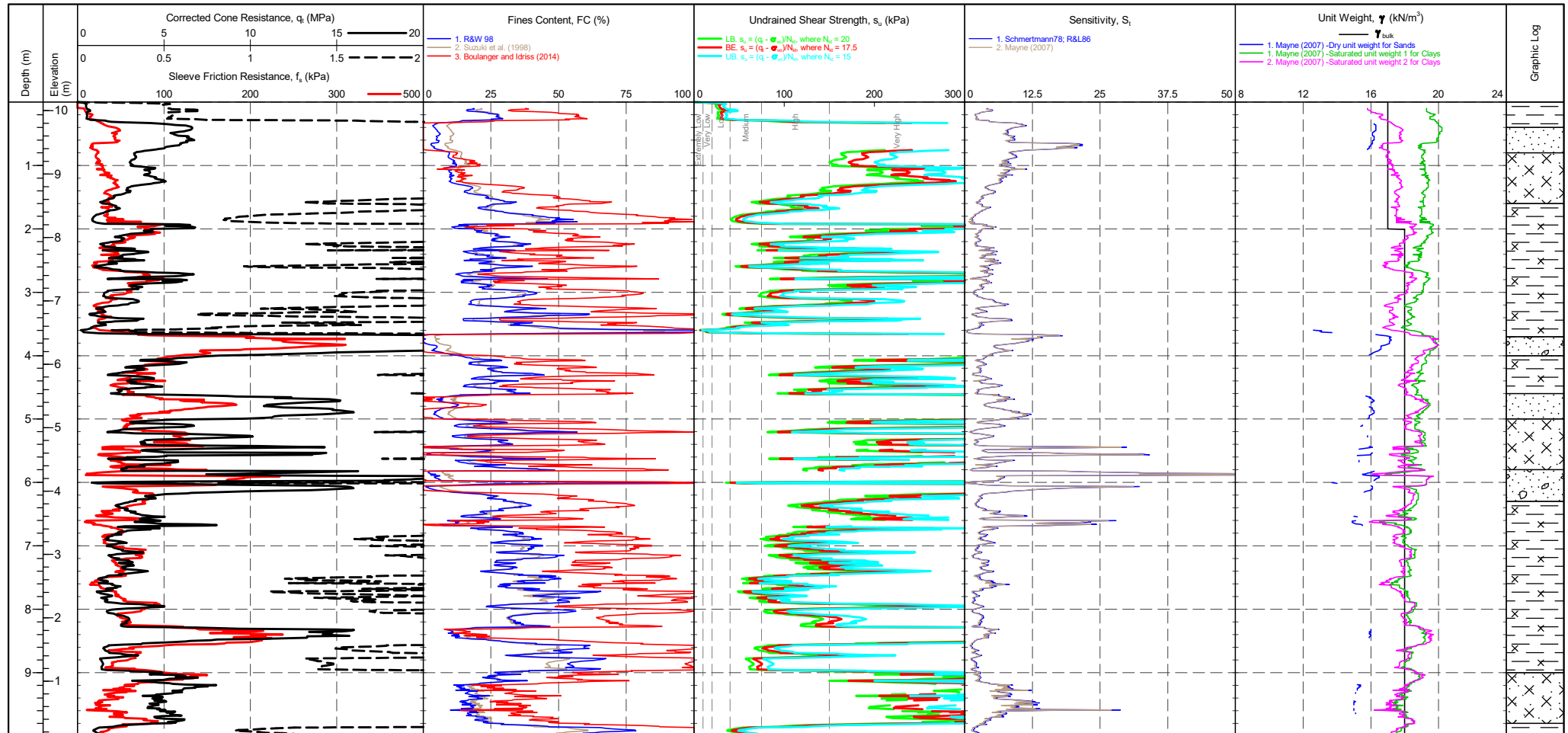
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.462 0.428 0.033924
Sleeve (kPa) 0.0847 0.0838 0.000914
u2 (kPa) -0.00656 -0.00328 -0.00328
Inclinometer 1 (°) -2.41 -1.95 -0.460577
Inclinometer 2 (°) -1.92 -1.27 -0.64978

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

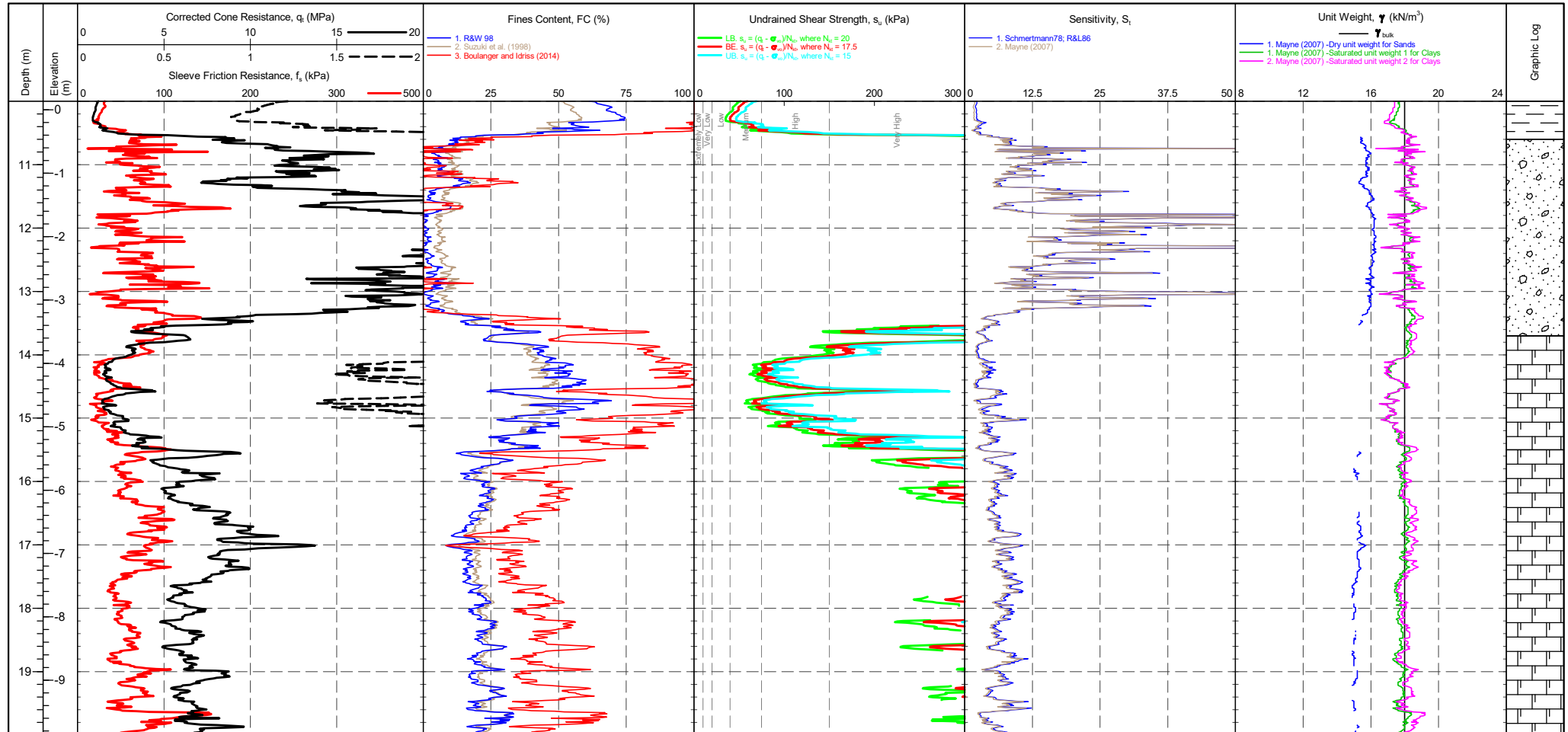
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

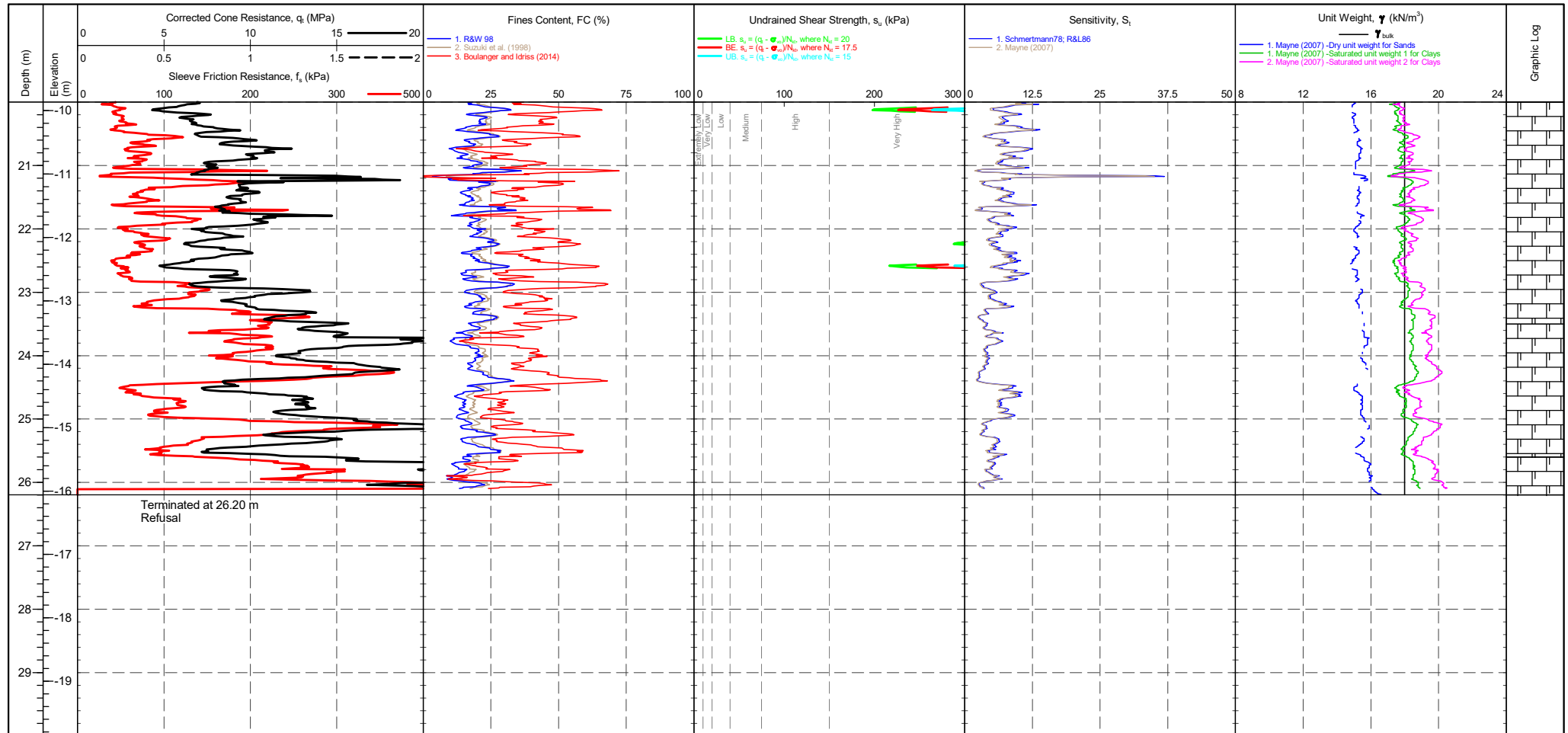
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

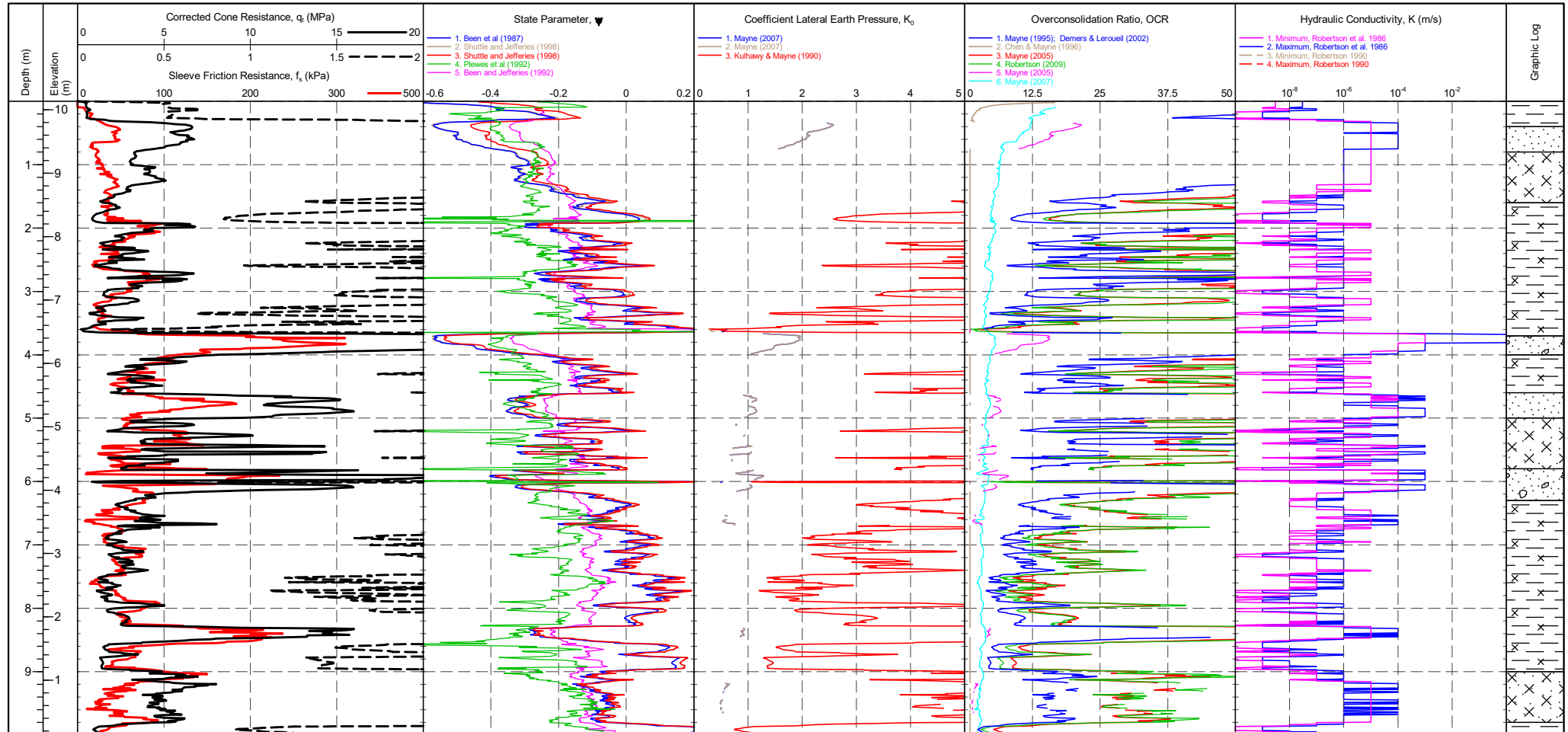
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

PointID

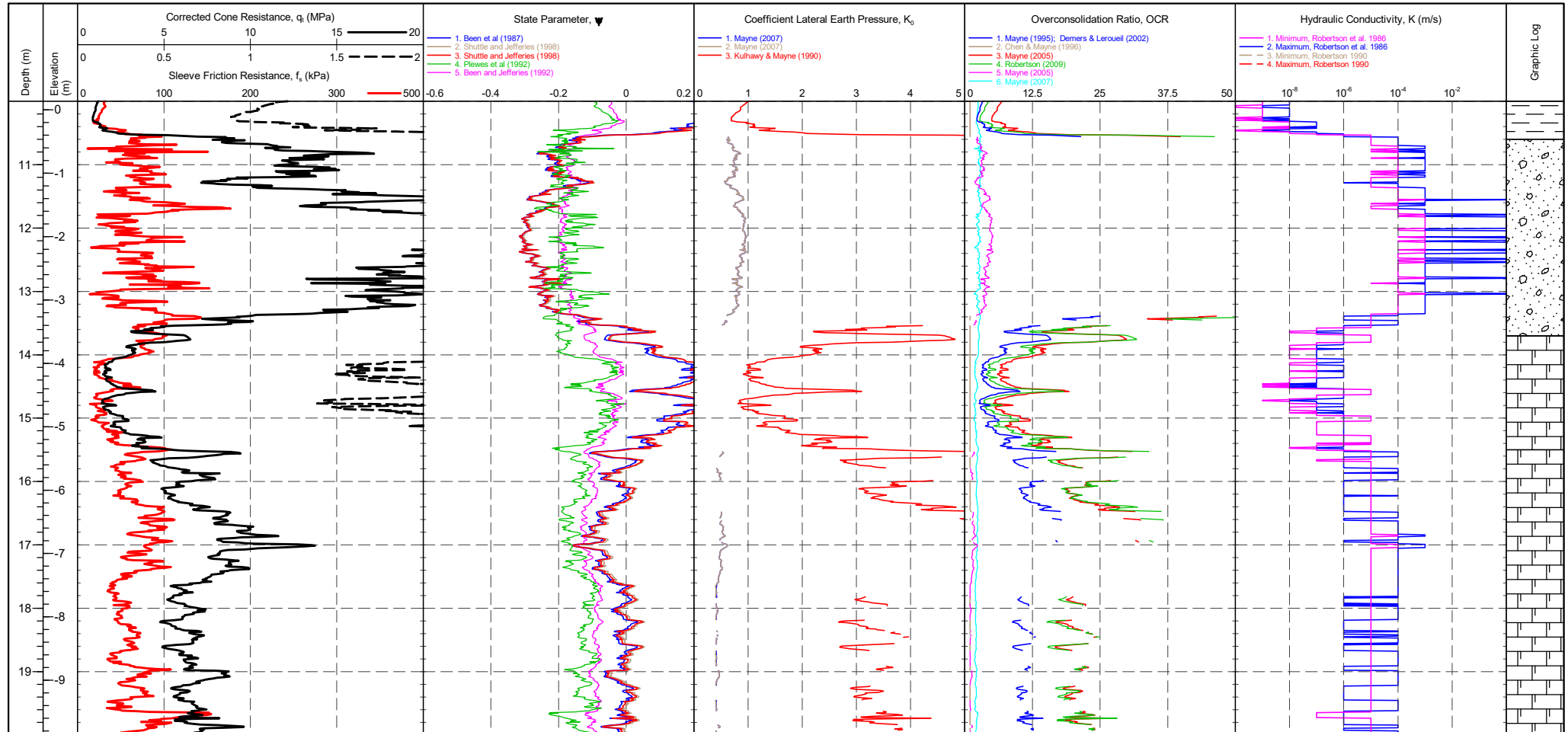
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

PointID

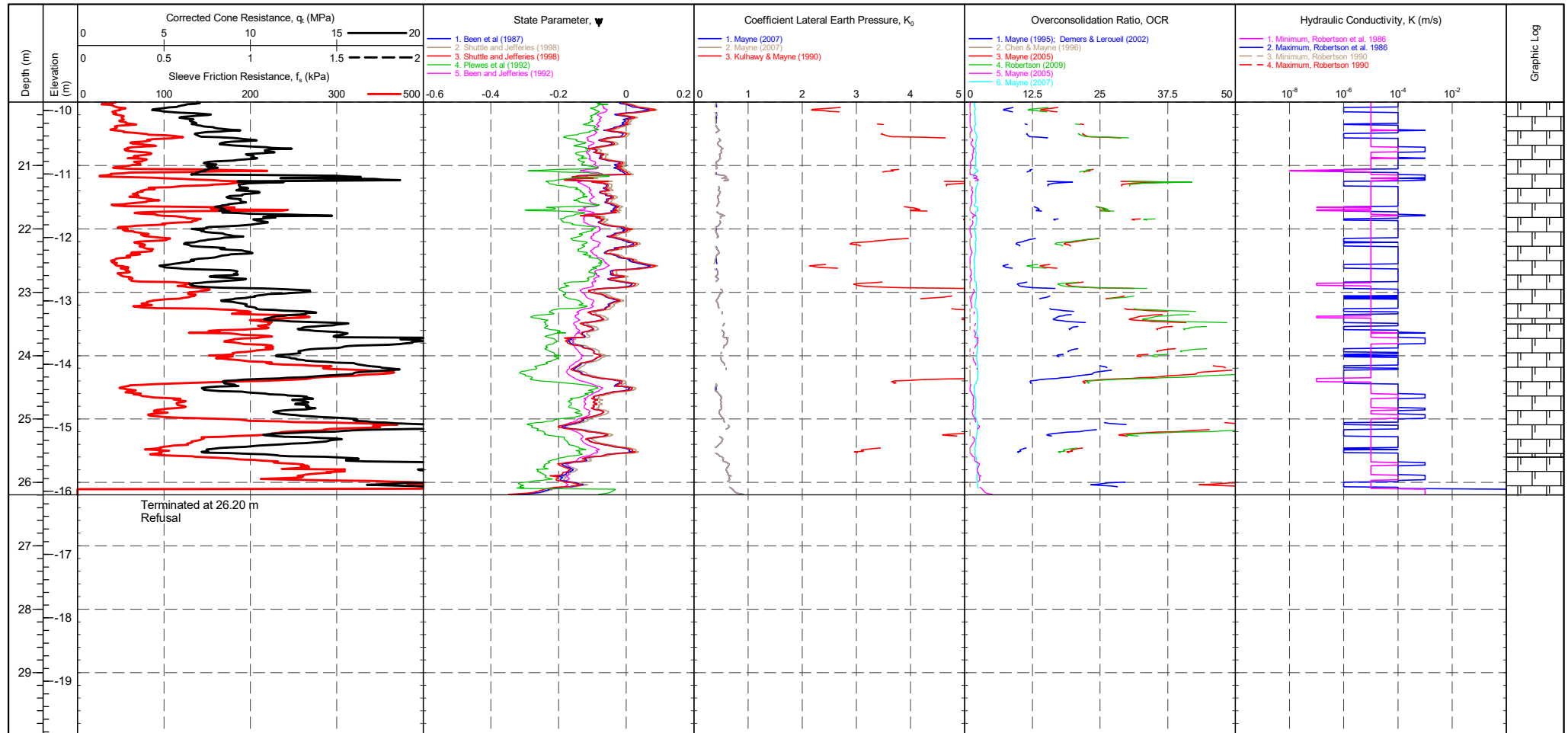
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

PointID

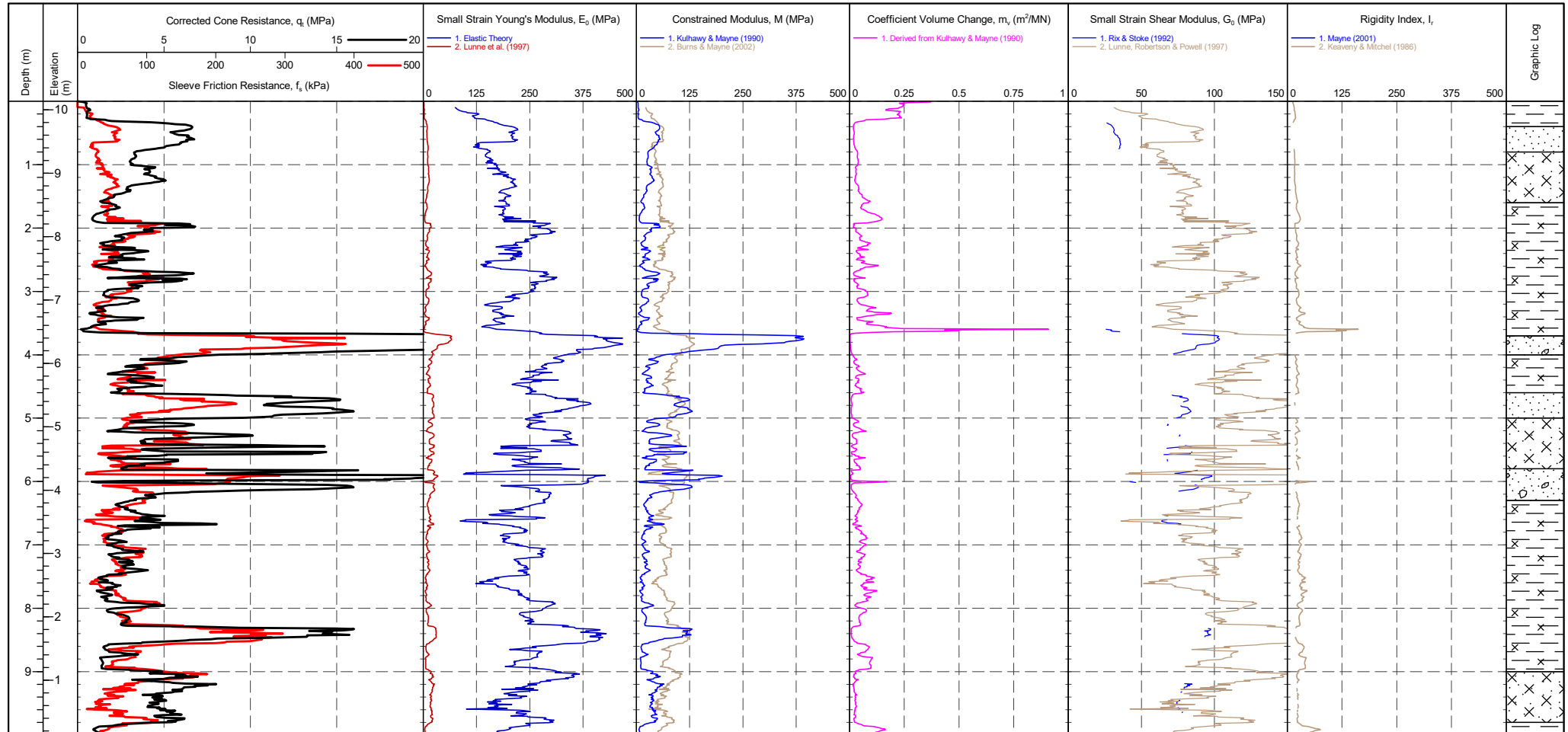
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

PointID

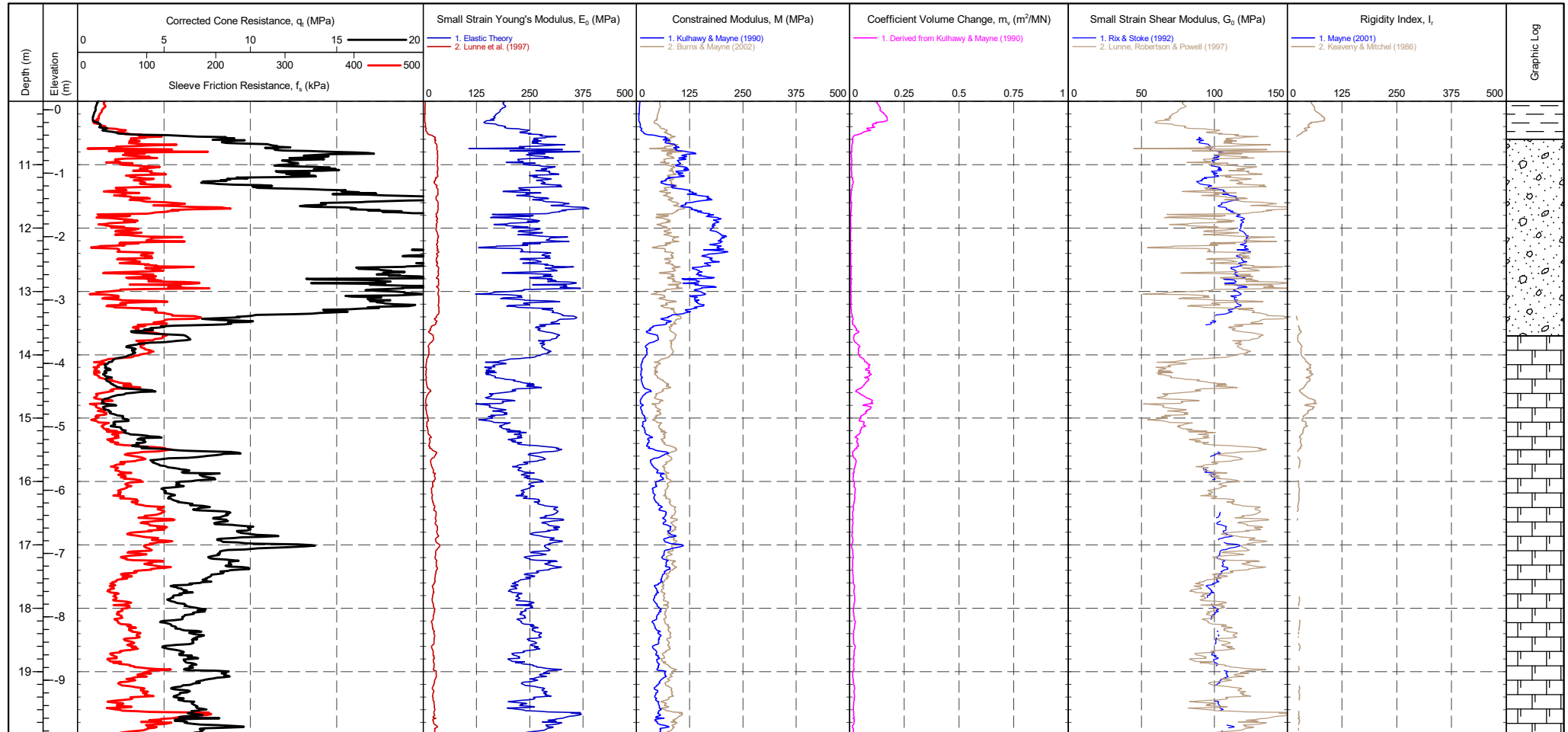
CPT105

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

PointID

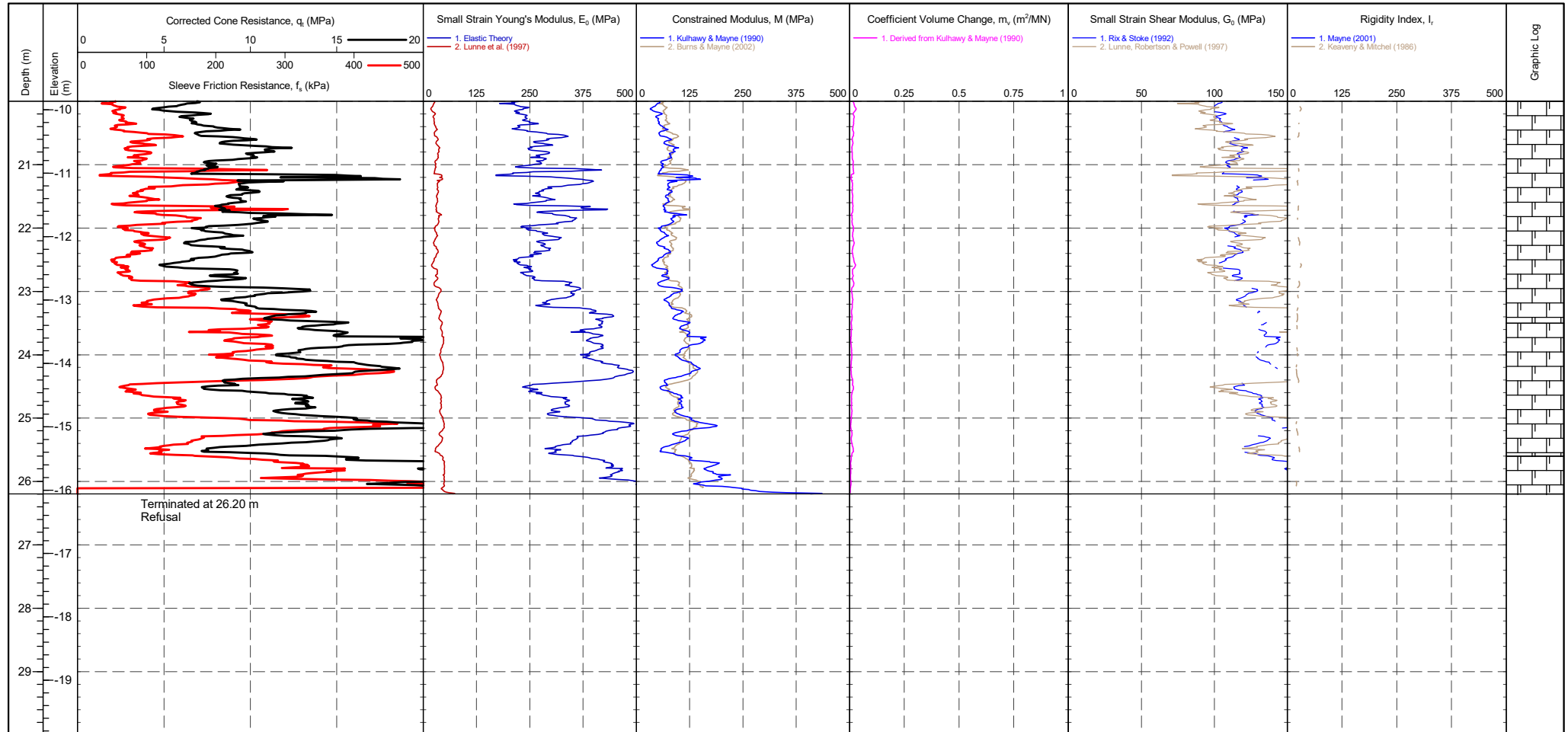
CPT105

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470102.2 m
NORTHING : 105723.2 m
ELEVATION : 10.14 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 3
STATUS : Final
TEST DATE : 29/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

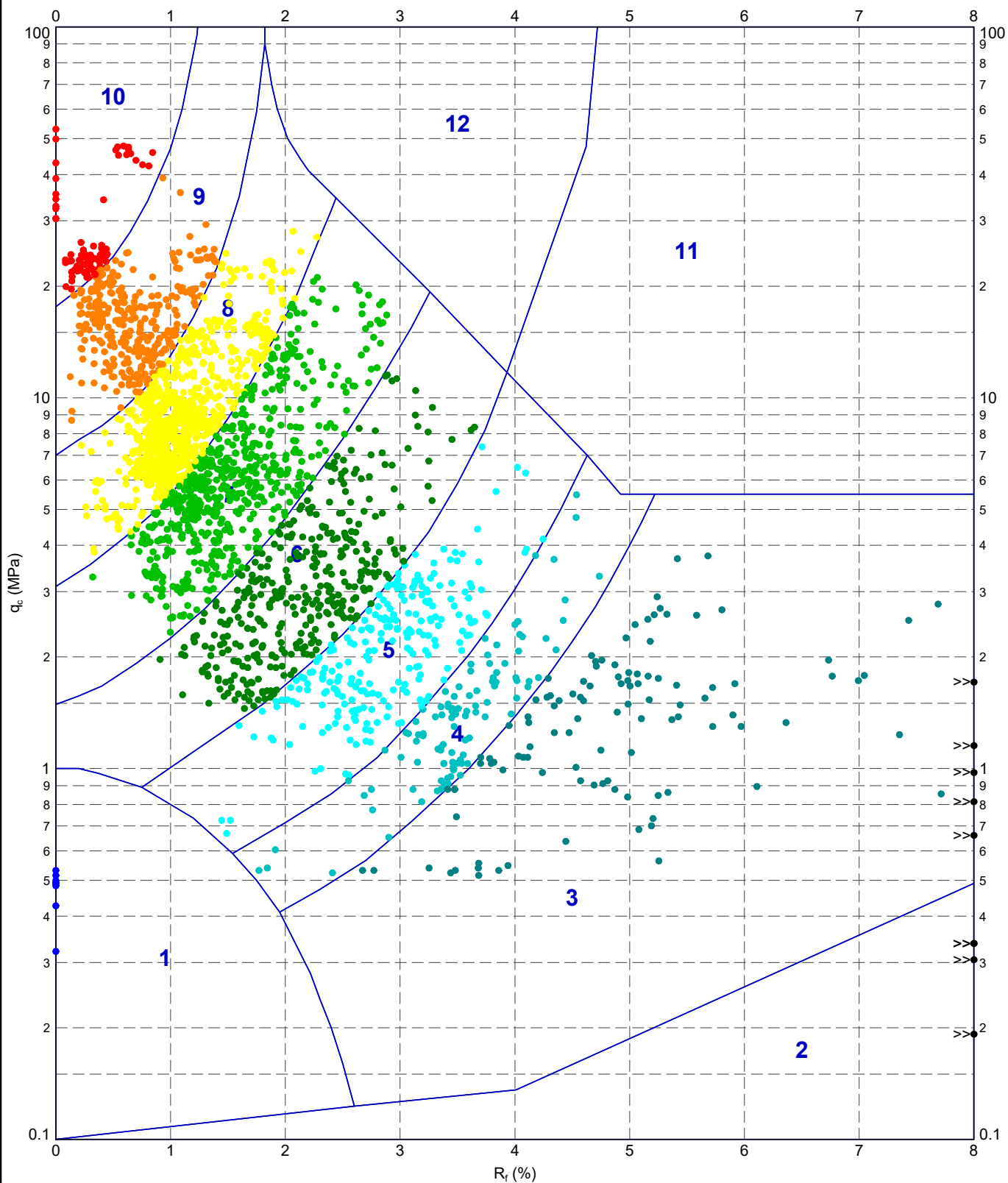
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.462	0.428	0.033924
Sleeve (kPa)	0.0847	0.0838	0.000914
u2 (kPa)	-0.00656	-0.00328	-0.00328
Inclinometer 1 (°)	-2.41	-1.95	-0.460577
Inclinometer 2 (°)	-1.92	-1.27	-0.64978

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE.GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF AMP 1210220 - BROCKHAMPTON - DELTA SIMONS G.P.J. <<DrawingFile>> 25/05/2021 09:56 10:02 00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Proj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT105

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

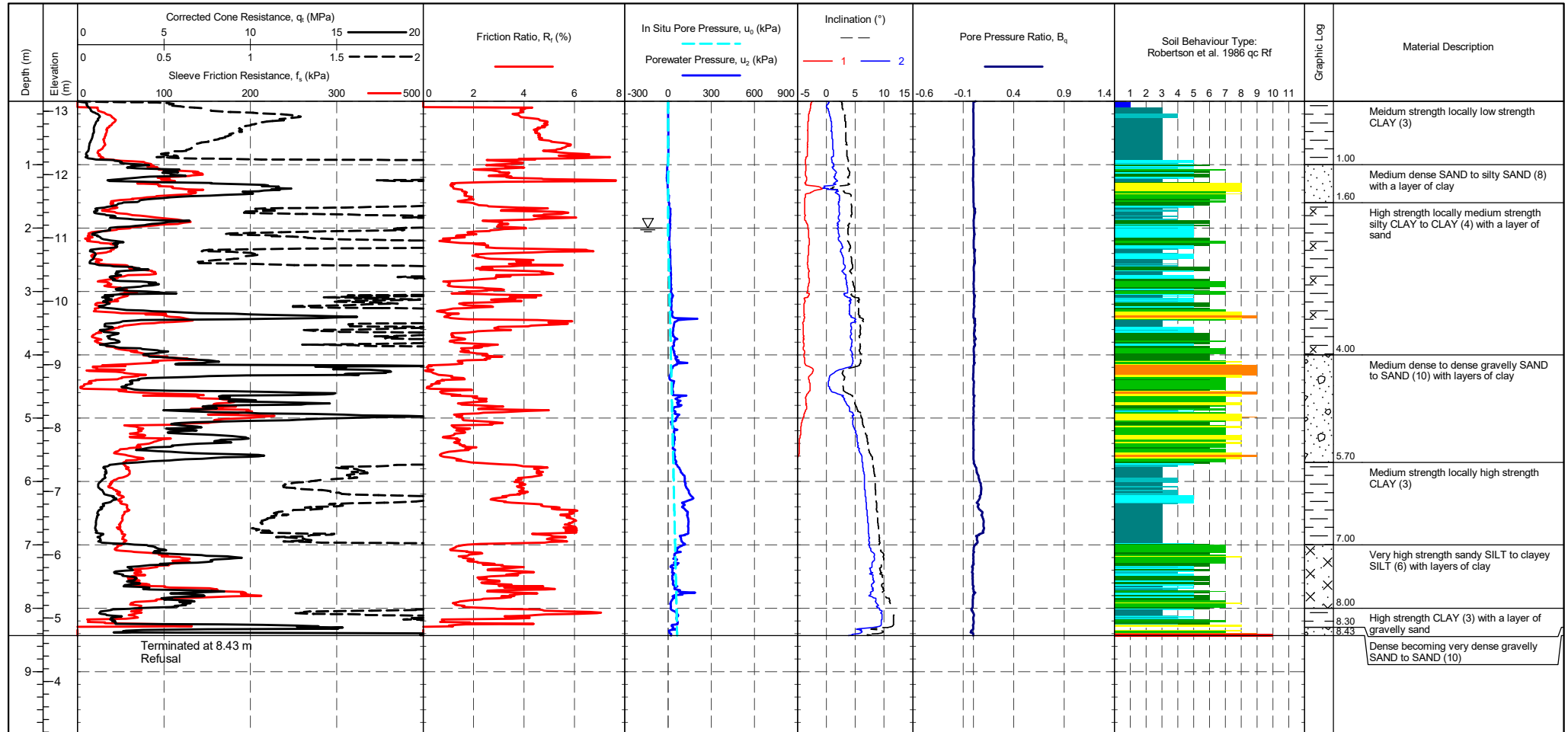
CPT106

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470193.2 m
NORTHING : 105762.0 m
ELEVATION : 13.16 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.463	0.475	-0.012115	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0901	0.0899	0.000215	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00627	0.00123	-0.007503	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (i)	-2.26	-2.19	-0.076502				
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (i)	0.0961	0.547	-0.450854				

PointID

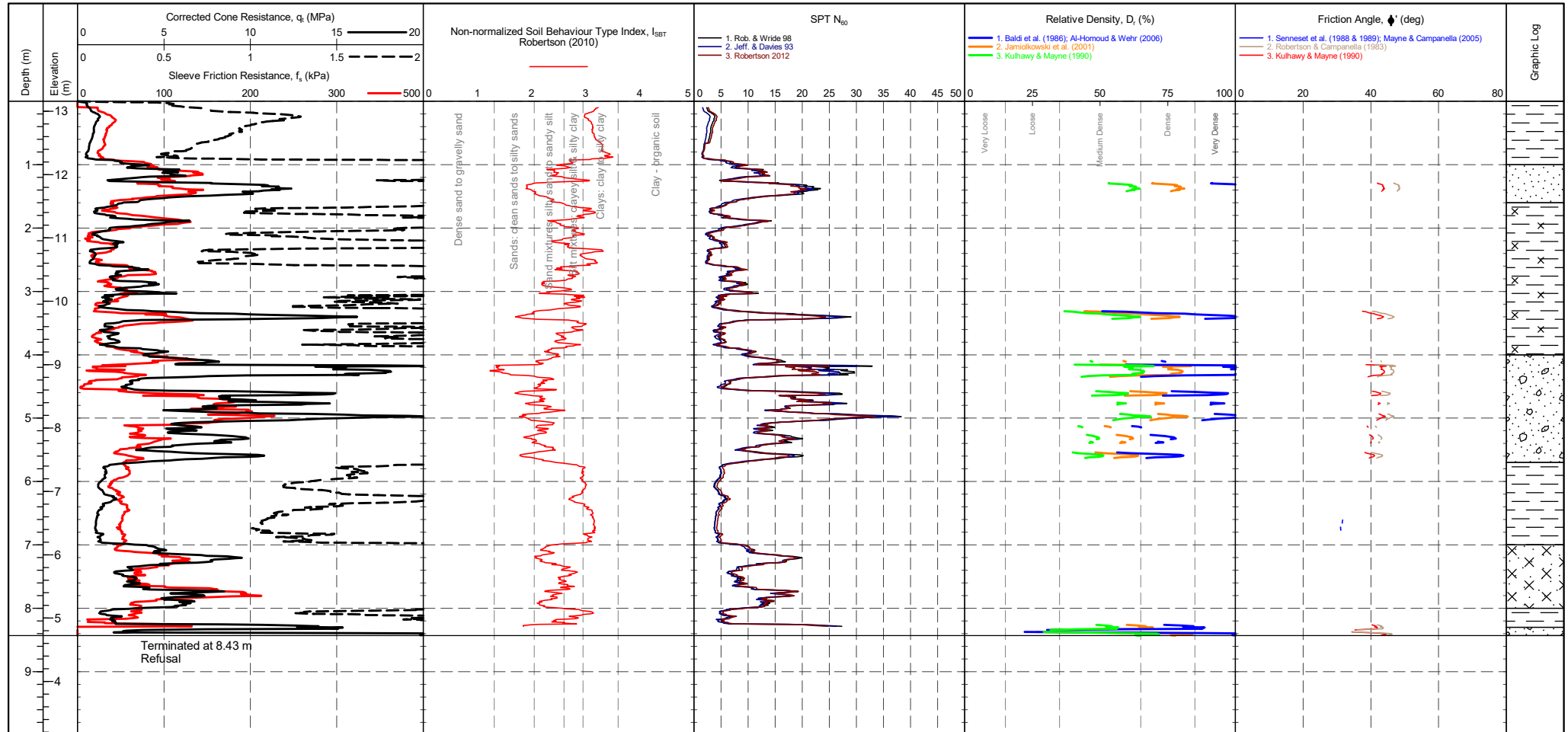
CPT106

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470193.2 m
NORTHING : 105762.0 m
ELEVATION : 13.16 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.463	0.475	-0.012115
Sleeve (kPa)	0.0901	0.0899	0.000215
u2 (kPa)	-0.00627	0.00123	-0.007503
Inclinometer 1 (")	-2.26	-2.19	-0.076502
Inclinometer 2 (")	0.0961	0.547	-0.450854

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

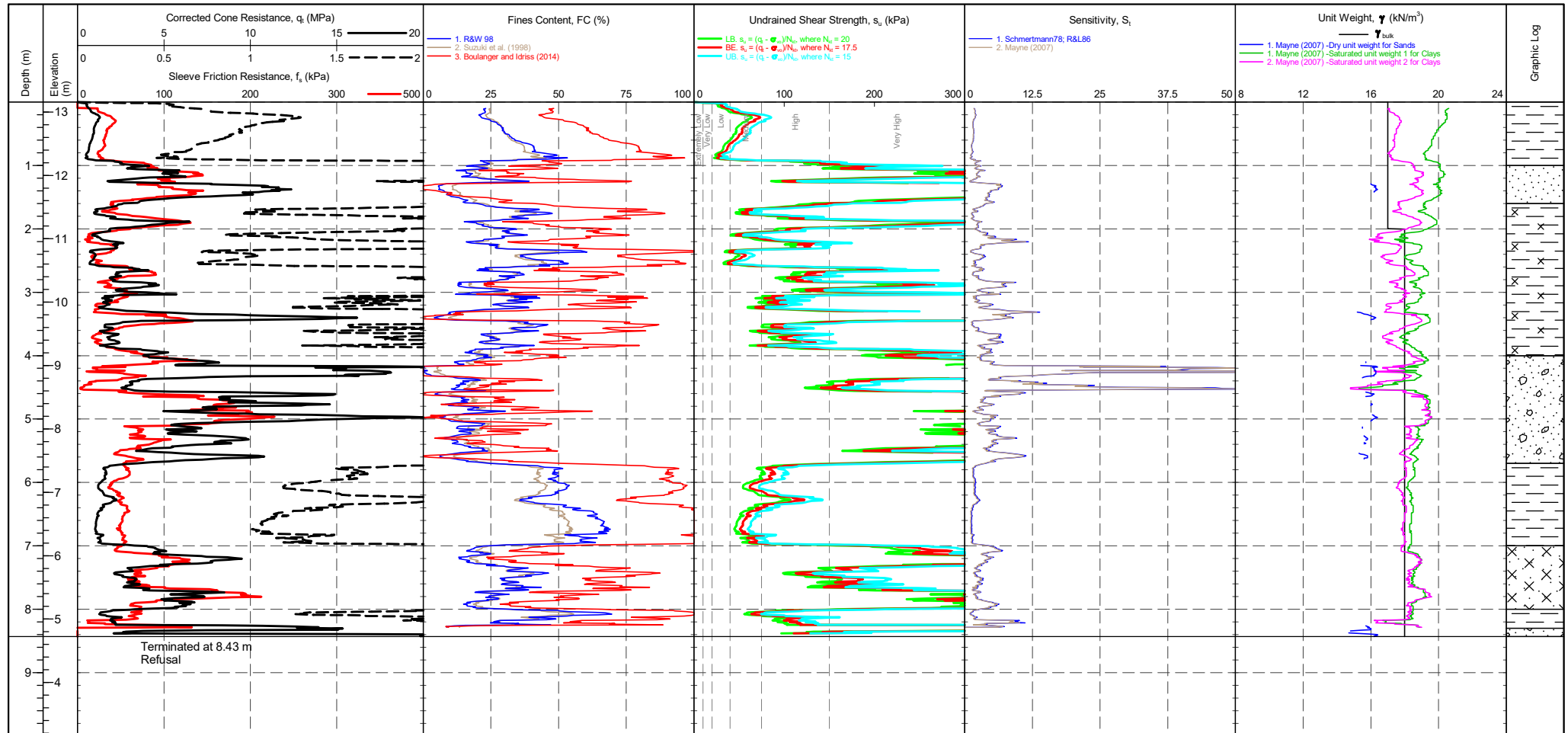
CPT106

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470193.2 m
NORTHING : 105762.0 m
ELEVATION : 13.16 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.463 0.475 -0.012115
Sleeve (kPa) 0.0901 0.0899 0.000215
u2 (kPa) -0.00627 0.00123 -0.007503
Inclinometer 1 (°) -2.26 -2.19 -0.076502
Inclinometer 2 (°) 0.0961 0.547 -0.450854

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

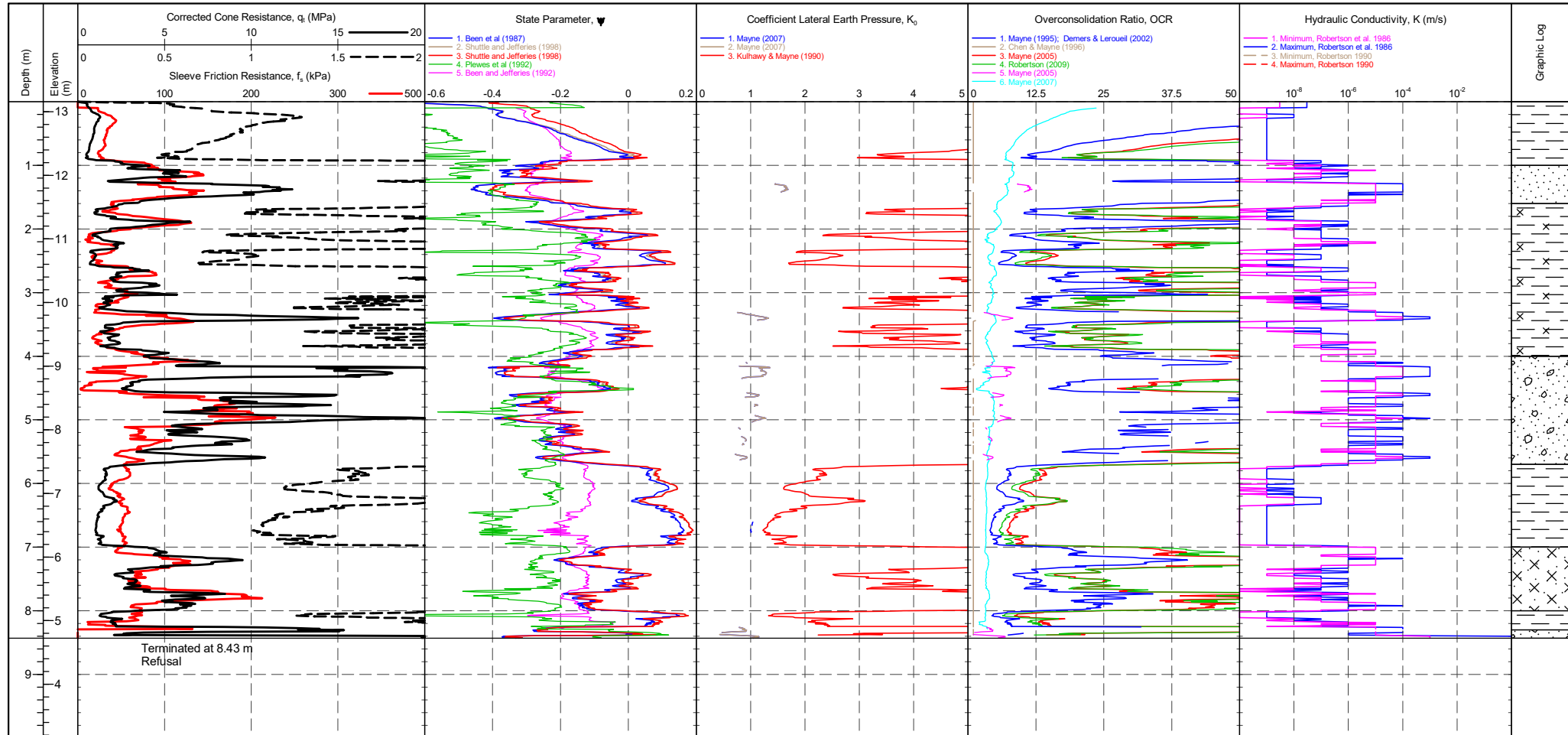
CPT106

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470193.2 m
NORTHING : 105762.0 m
ELEVATION : 13.16 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.463	0.475	-0.012115
Sleeve (kPa)	0.0901	0.0899	0.000215
u2 (kPa)	-0.00627	0.00123	-0.007503
Inclinometer 1 (°)	-2.26	-2.19	-0.076502
Inclinometer 2 (°)	0.0961	0.547	-0.450854

Groundwater Level
Dissipation Test

PointID

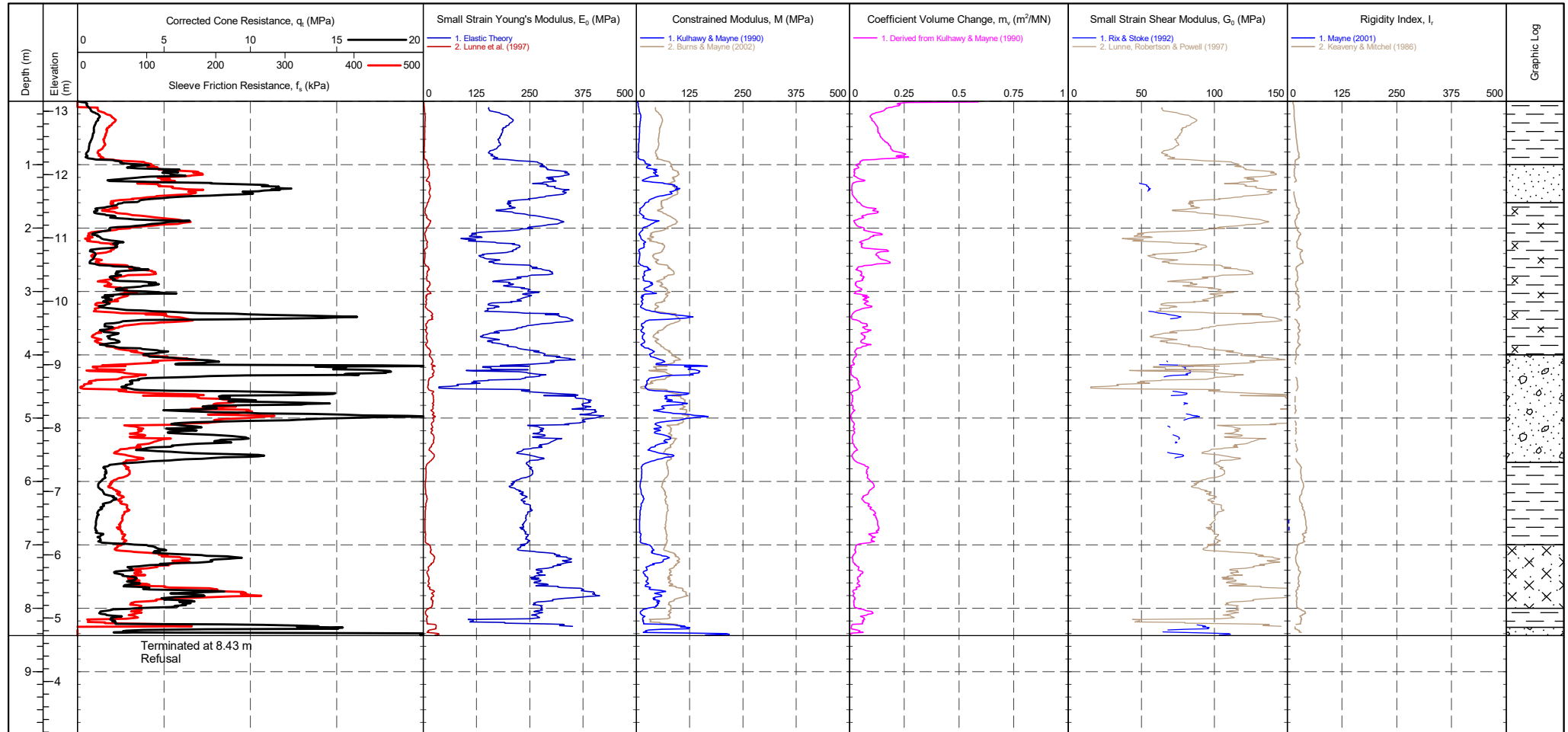
CPT106

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470193.2 m
NORTHING : 105762.0 m
ELEVATION : 13.16 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

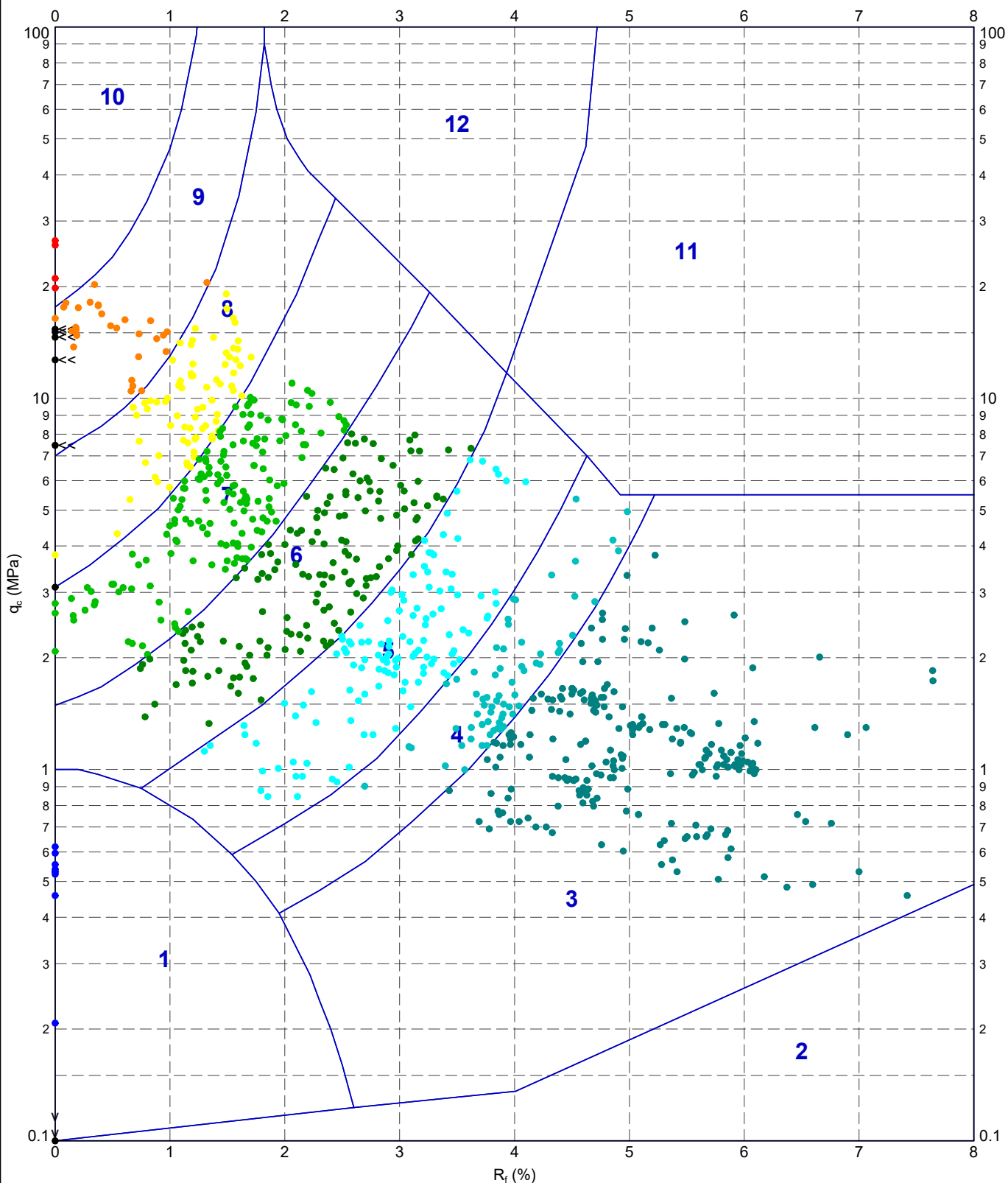
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.463	0.475	-0.012115
Sleeve (kPa)	0.0901	0.0899	0.000215
u2 (kPa)	-0.00627	0.00123	-0.007503
Inclinometer 1 (°)	-2.26	-2.19	-0.076502
Inclinometer 2 (°)	0.0961	0.547	-0.450854

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LIB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS G.P.J. <DrawingFile>> 25/05/2021 09:58 10:02 00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Pj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT106

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

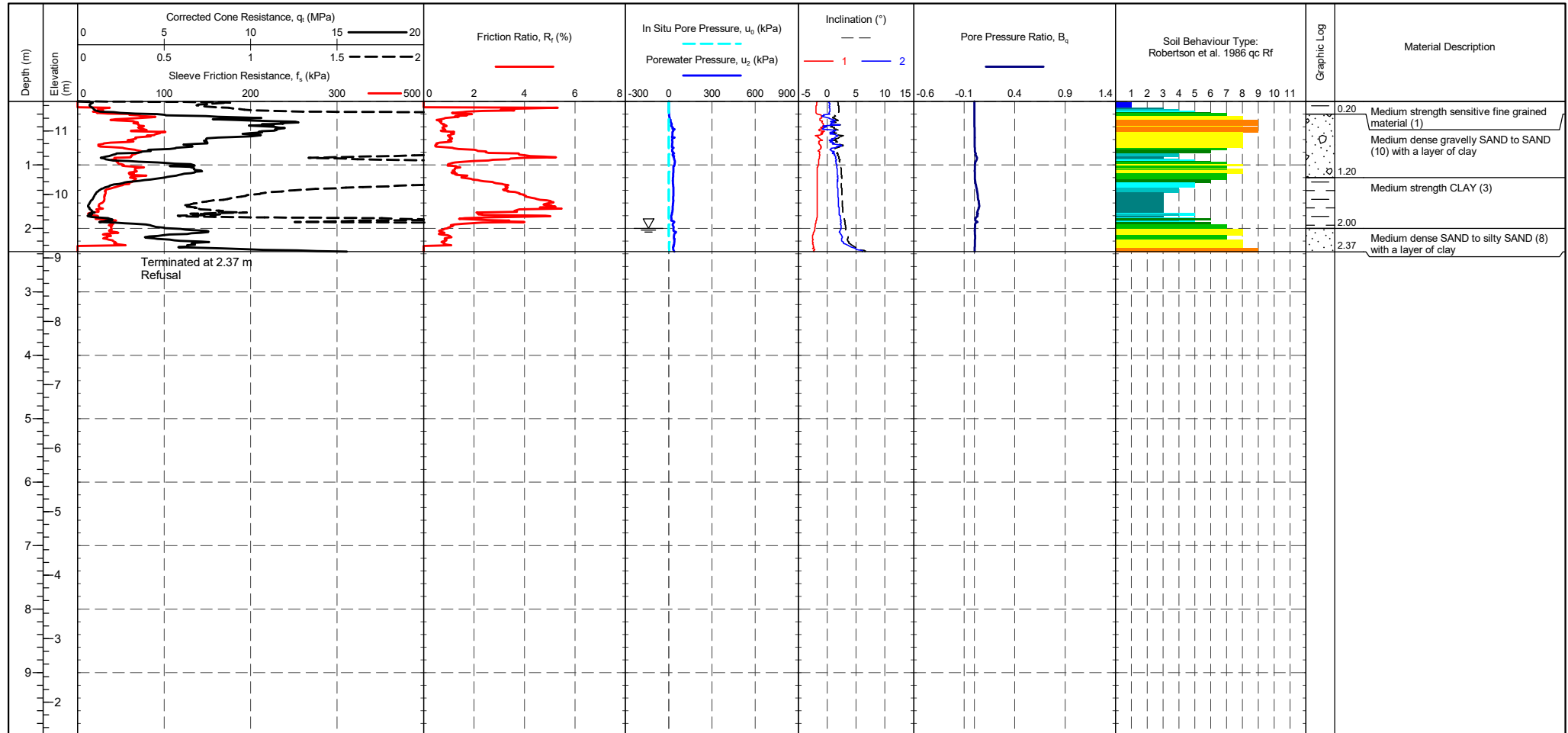
CPT107

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID	: DP15-CFPTxy.71069	TEST TYPE	: TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf						Groundwater Level
CALIBRATION DATE	: 13/11/2020	APPLICATION CLASS	: 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	Dissipation Test		
CONE MODEL	: Subtraction	RIG	: CPT 022	Tip (MPa)	0.475	0.473	0.001615	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND			
CONE AREA	: 15cm²	OPERATOR	: AL	Sleeve (kPa)	0.0900	0.0893	0.000699	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained			
CONE AREA RATIO	: 0.75	FRICTION REDUCER	: None	u2 (kPa)	-0.00164	0.0115	-0.01312	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND			
FILTER POSITION	: u2	WEATHER	: Overcast & Mild	Inclinometer 1 (°)	-1.61	-1.73	0.117096						
FILTER TYPE	: HDPE	GROUNDWATER DEPTH	: Assumed for calculation purposes	Inclinometer 2 (°)	0.443	0.547	-0.103476						

PointID

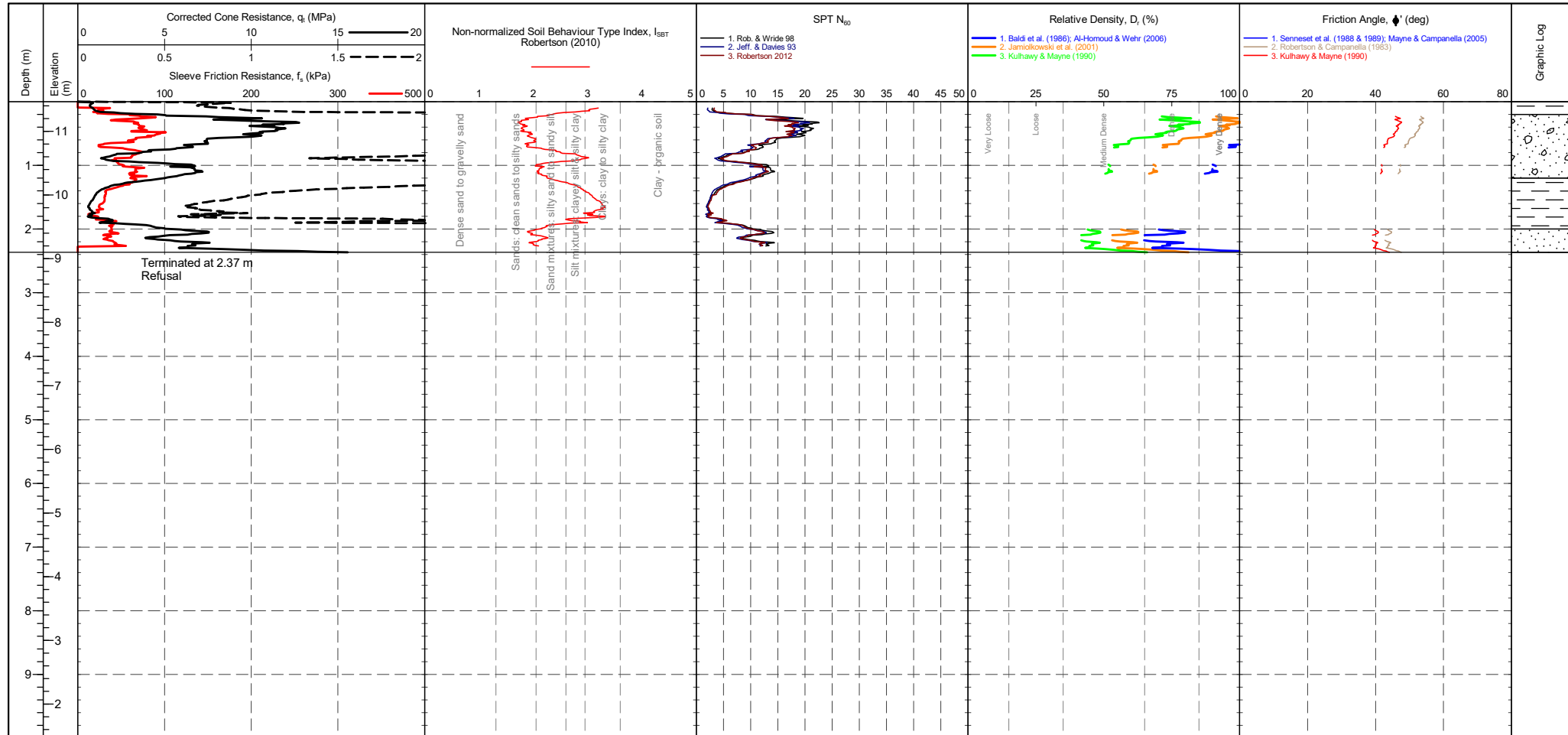
CPT107

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.475	0.473	0.001615
Sleeve (kPa)	0.0900	0.0893	0.000699
u2 (kPa)	-0.00164	0.0115	-0.01312
Inclinometer 1 (°)	-1.61	-1.73	0.117096
Inclinometer 2 (°)	0.443	0.547	-0.103476

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

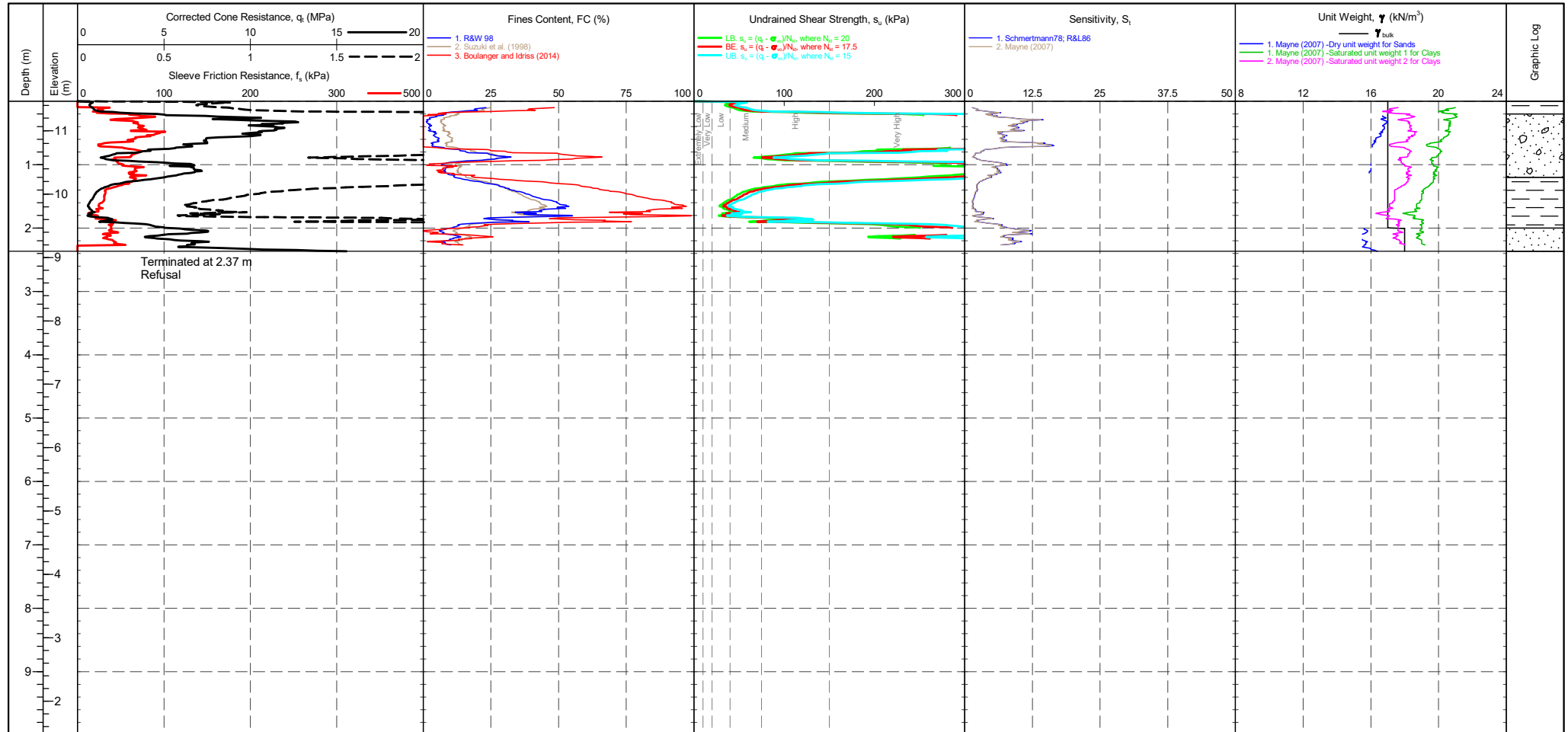
CPT107

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.475	0.473	0.001615
Sleeve (kPa)	0.0900	0.0893	0.000699
u2 (kPa)	-0.00164	0.0115	-0.01312
Inclinometer 1 (°)	-1.61	-1.73	0.117096
Inclinometer 2 (°)	0.443	0.547	-0.103476

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

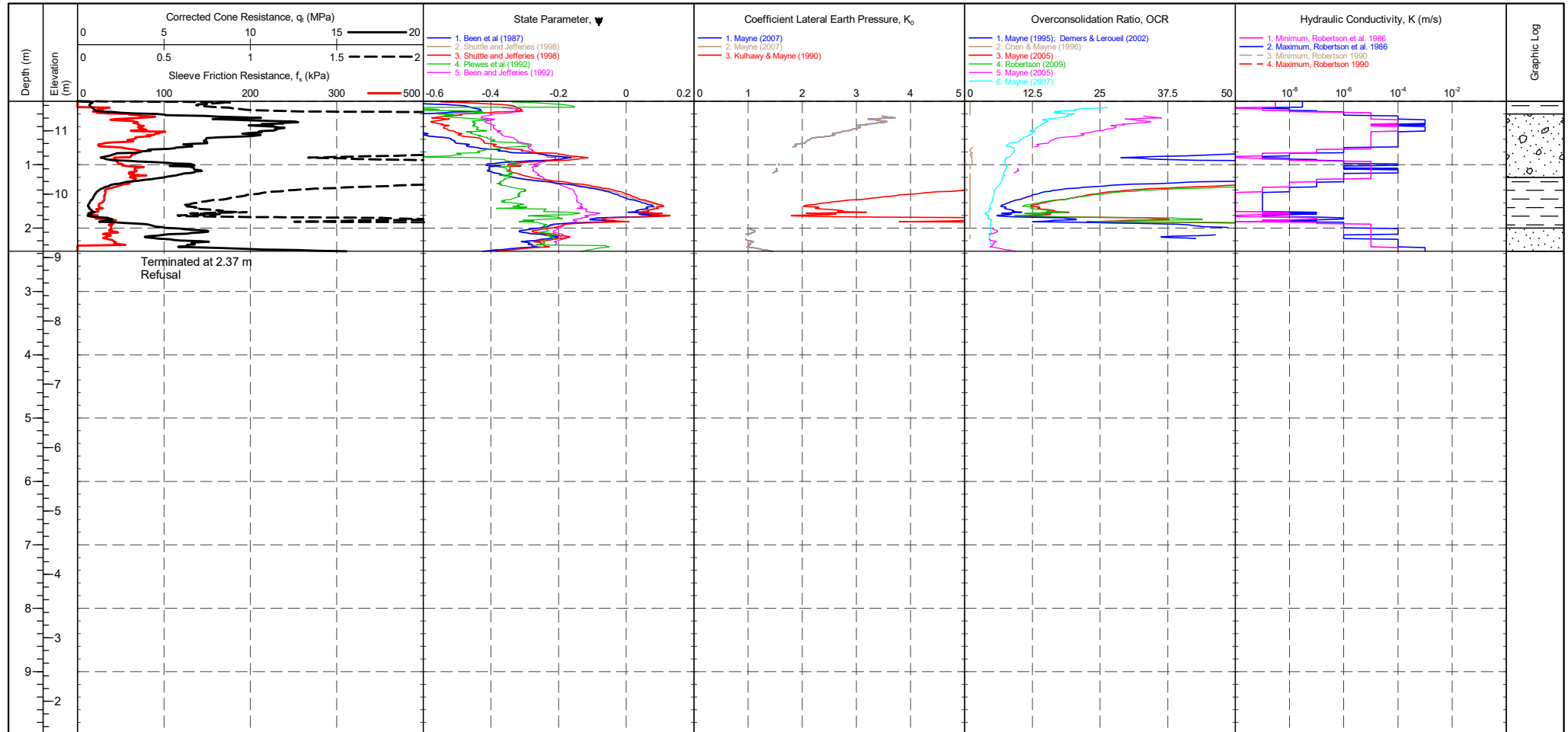
CPT107

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.475	0.473	0.001615
Sleeve (kPa)	0.0900	0.0893	0.000699
u2 (kPa)	-0.00164	0.0115	-0.01312
Inclinometer 1 (°)	-1.61	-1.73	0.117096
Inclinometer 2 (°)	0.443	0.547	-0.103476

Groundwater Level
Dissipation Test

PointID

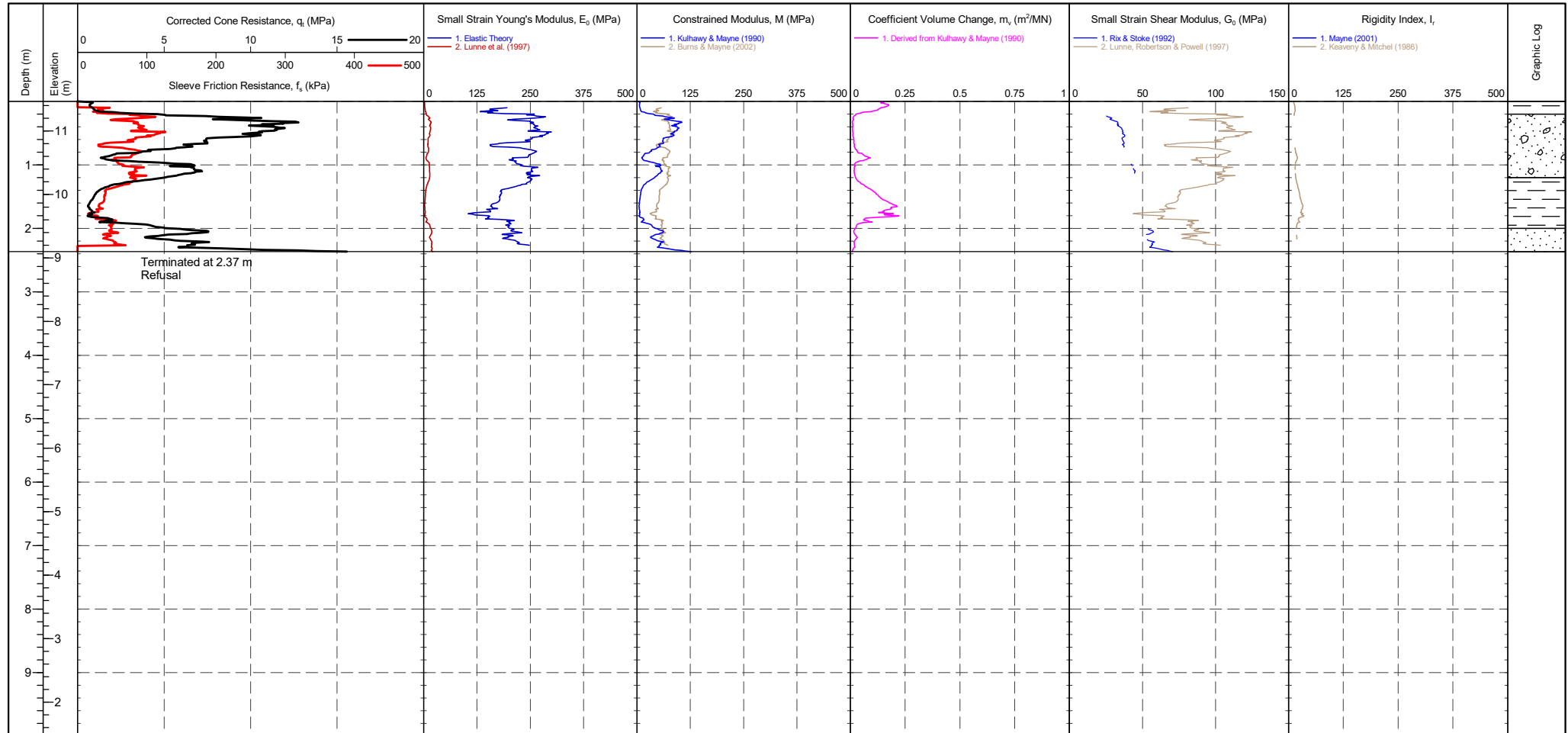
CPT107

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : $15cm^2$
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

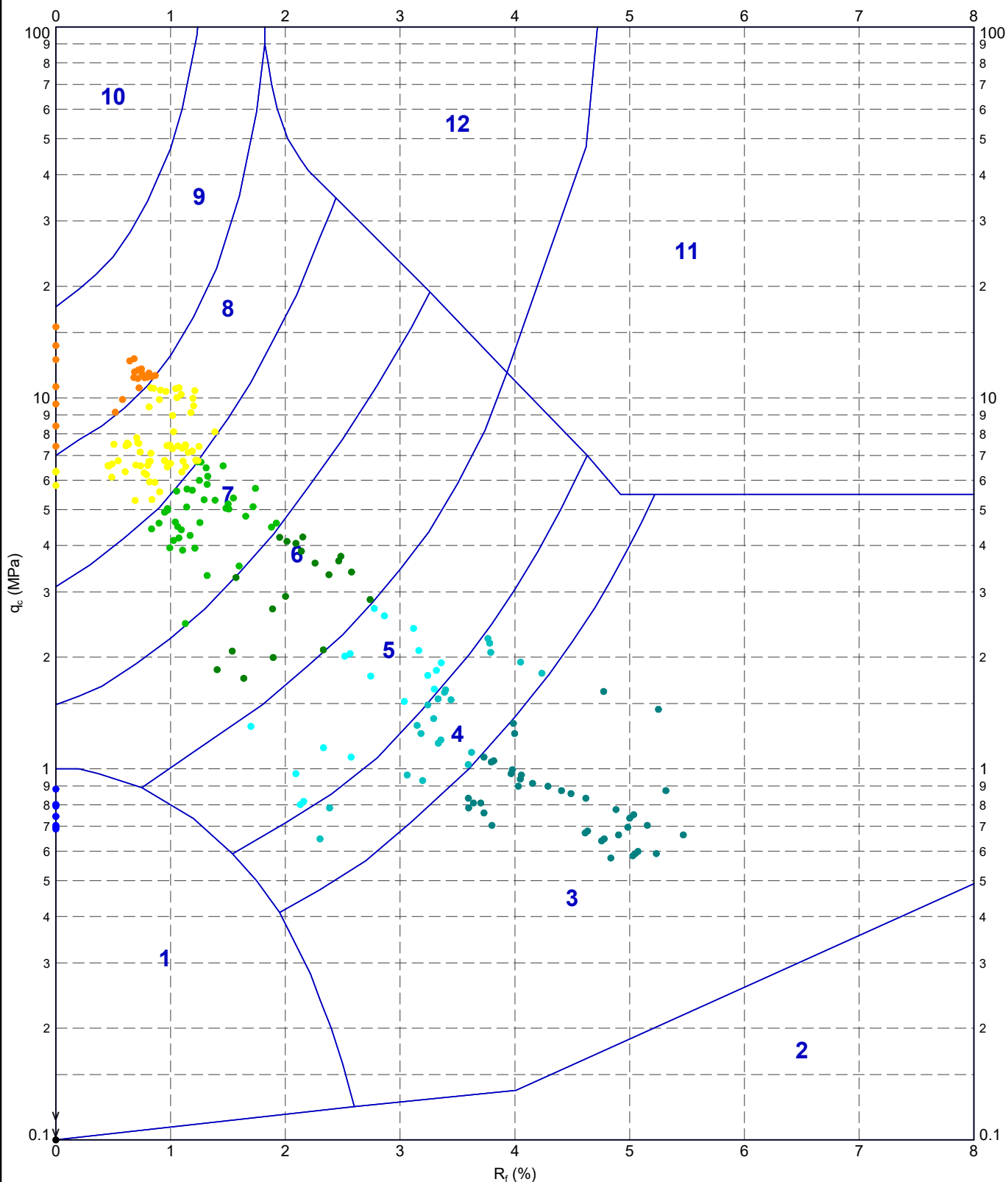
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.475	0.473	0.001615
Sleeve (kPa)	0.0900	0.0893	0.000699
u2 (kPa)	-0.00164	0.0115	-0.01312
Inclinometer 1 (°)	-1.61	-1.73	0.117096
Inclinometer 2 (°)	0.443	0.547	-0.103476

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 2.02.1 LUB - ZOE.GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS.GPJ <<DrawingFile>> 25/05/2021 10:00 10.02.00.04 Dated Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 | In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT107

DRAWN	DATE	25/05/2021
CHECKED	DATE	25/05/2021
SCALE	Not To Scale	
PROJECT No	FIGURE No	A4
1210220		

PointID

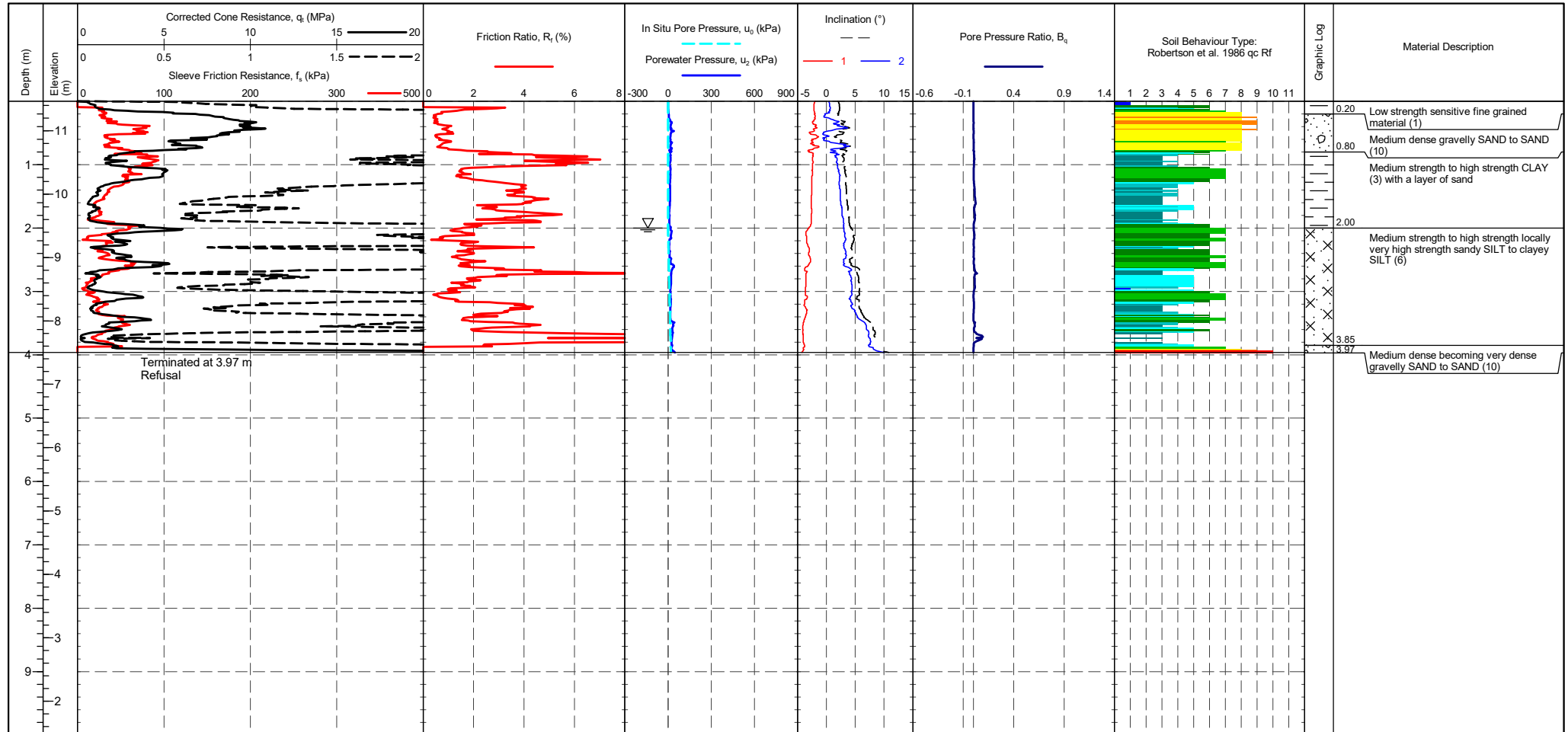
CPT107A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2	CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf						Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND				
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.477	0.481	-0.004039	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND				
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0898	0.0892	0.000537	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained				
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	0.00943	0.0172	-0.00779	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND				
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (°)	-1.95	-1.93	-0.021858							
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (°)	0.443	0.558	-0.114562							

PointID

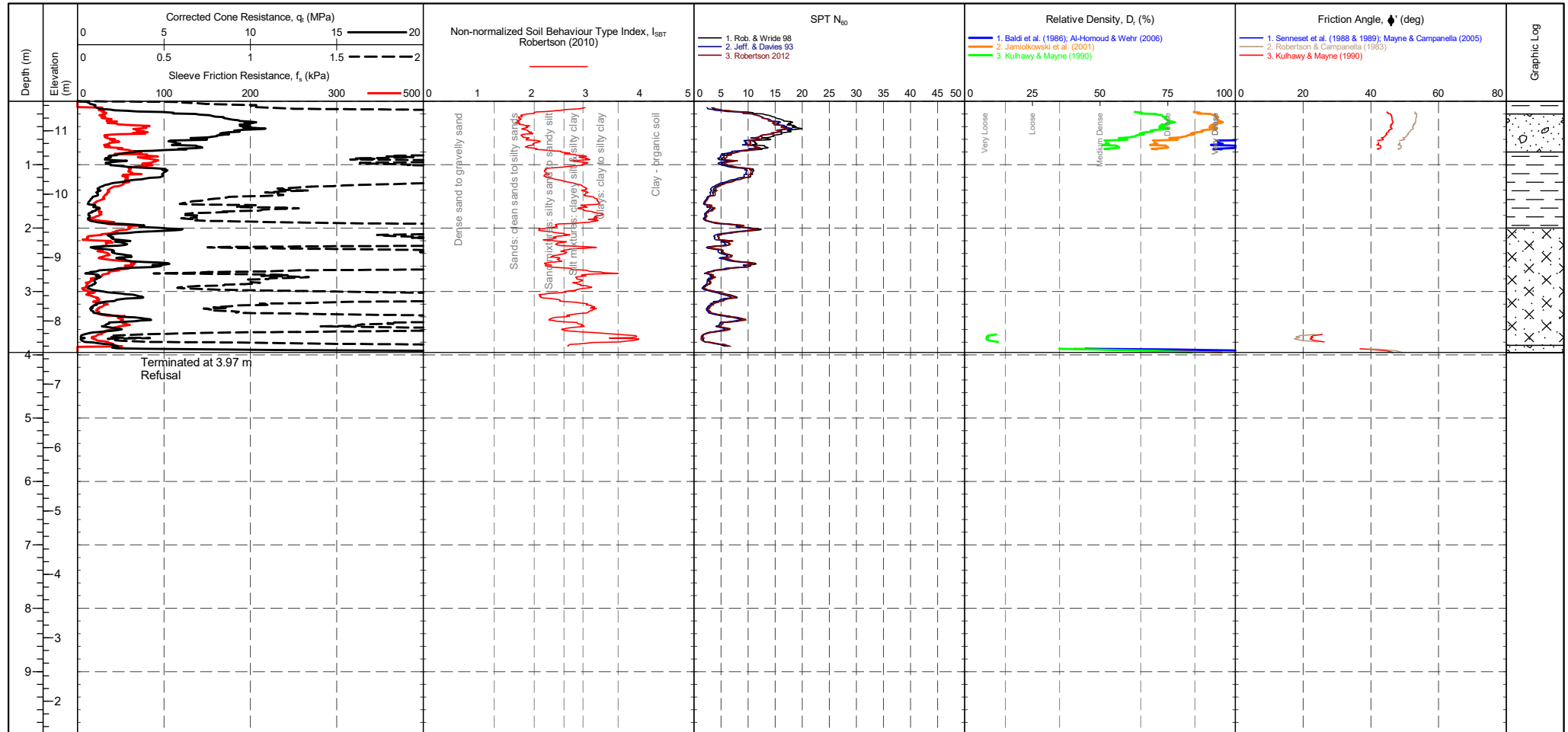
CPT107A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.481	-0.004039
Sleeve (kPa)	0.0898	0.0892	0.000537
u2 (kPa)	0.00943	0.0172	-0.00779
Inclinometer 1 (")	-1.95	-1.93	-0.021858
Inclinometer 2 (")	0.443	0.558	-0.114562

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

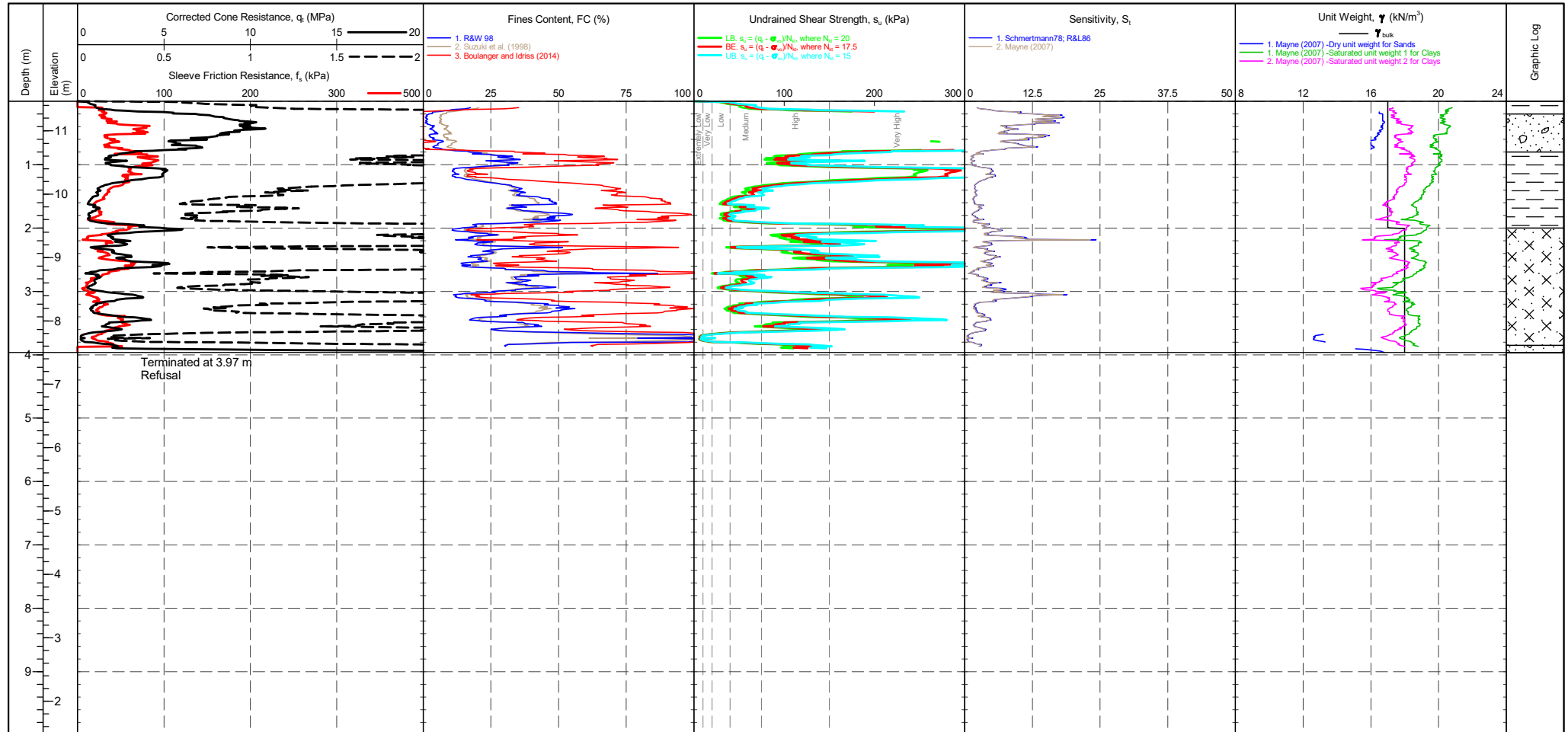
CPT107A

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES
Transducer Pre Post Difference
Tip (MPa) 0.477 0.481 -0.004039
Sleeve (kPa) 0.0898 0.0892 0.000537
u2 (kPa) 0.00943 0.0172 -0.00779
Inclinometer 1 (°) -1.95 -1.93 -0.021858
Inclinometer 2 (°) 0.443 0.558 -0.114562

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11
Term based on measurement su (kPa)
Extremely low strength <10
Very low strength 10-20
Low strength 20-40
Term based on measurement su (kPa)
Medium strength 40-75
High strength 75-150
Very high strength 150-300
Extremely high strength >300

Groundwater Level
Dissipation Test

PointID

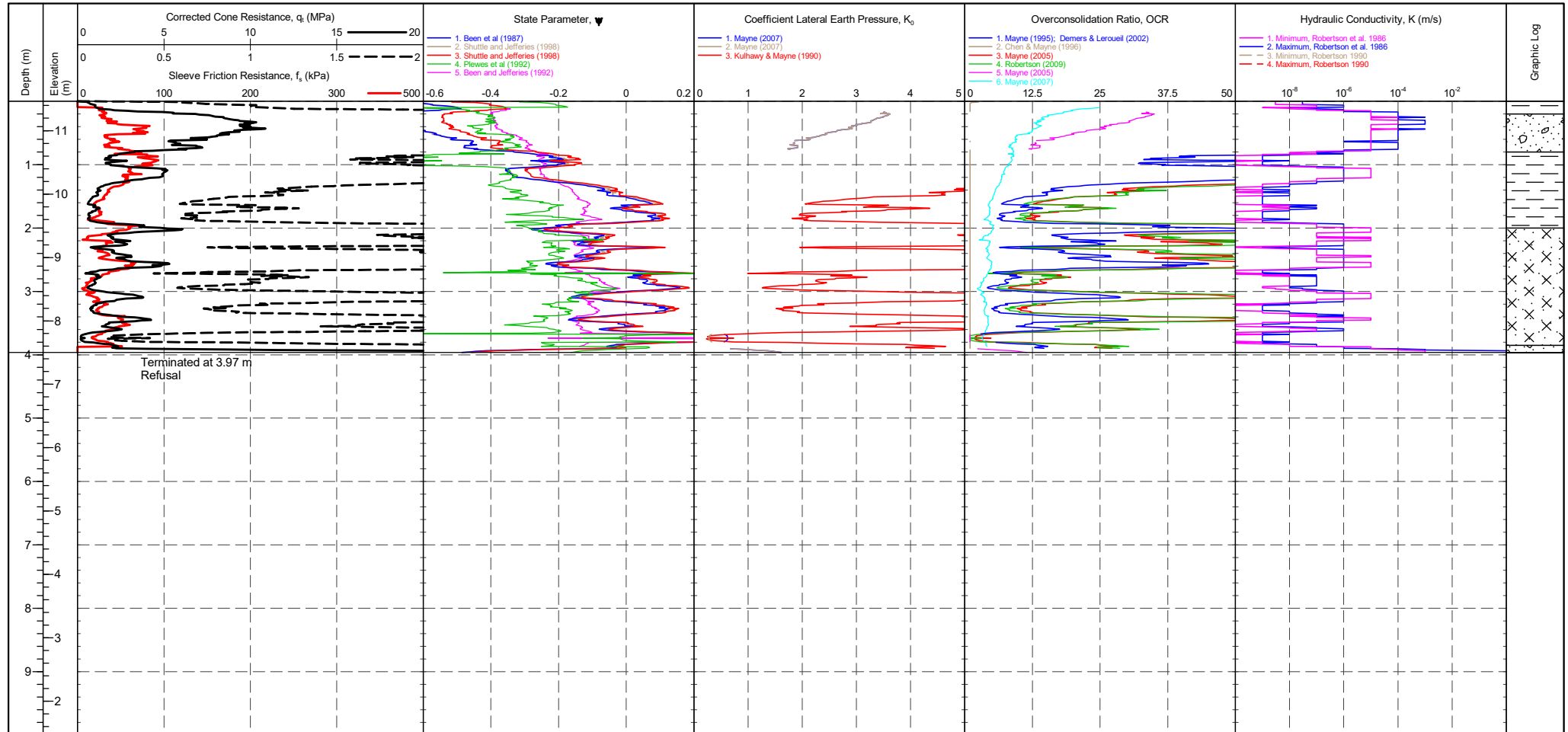
CPT107A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.481	-0.004039
Sleeve (kPa)	0.0898	0.0892	0.000537
u2 (kPa)	0.00943	0.0172	-0.00779
Inclinometer 1 (°)	-1.95	-1.93	-0.021858
Inclinometer 2 (°)	0.443	0.558	-0.114562

Groundwater Level
Dissipation Test

PointID

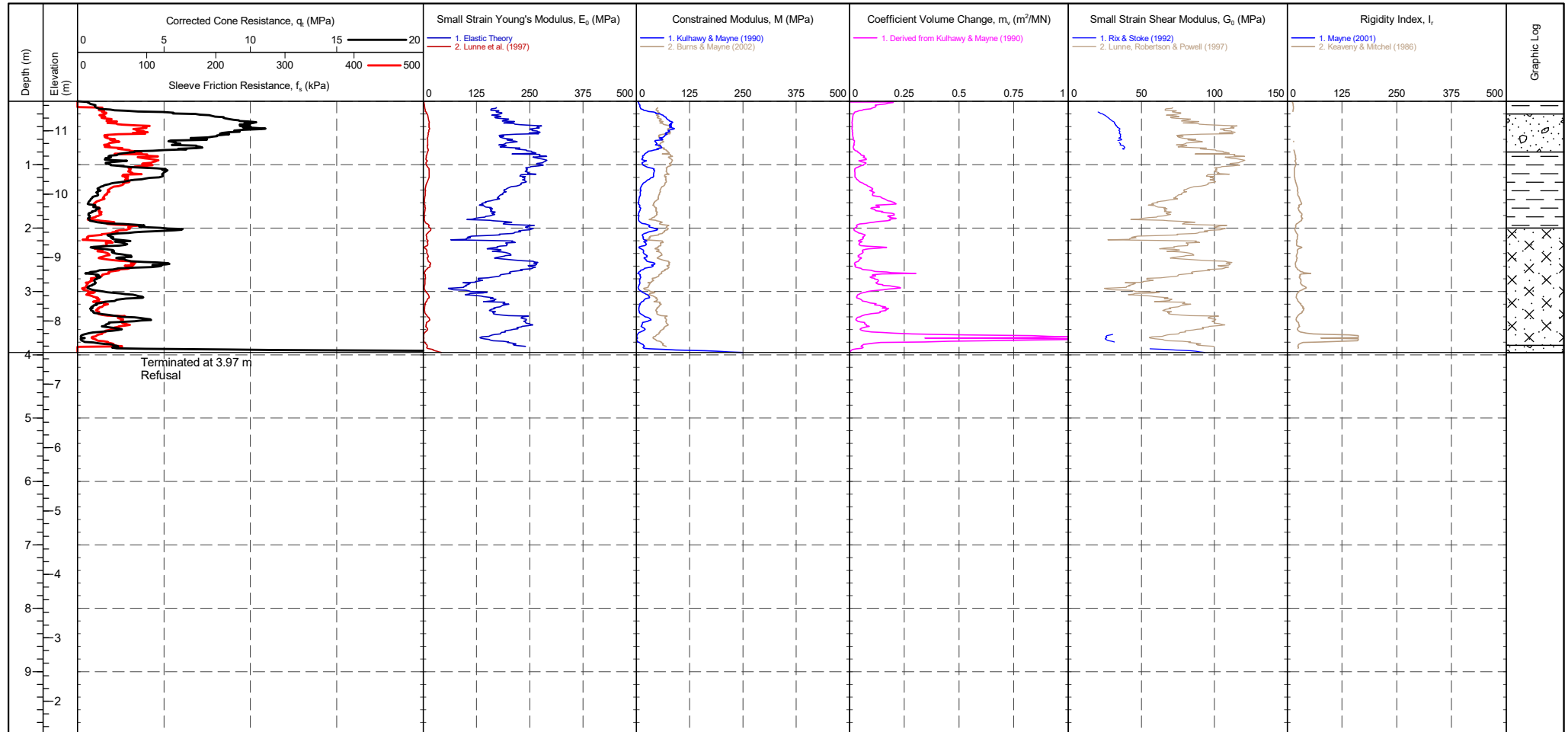
CPT107A

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

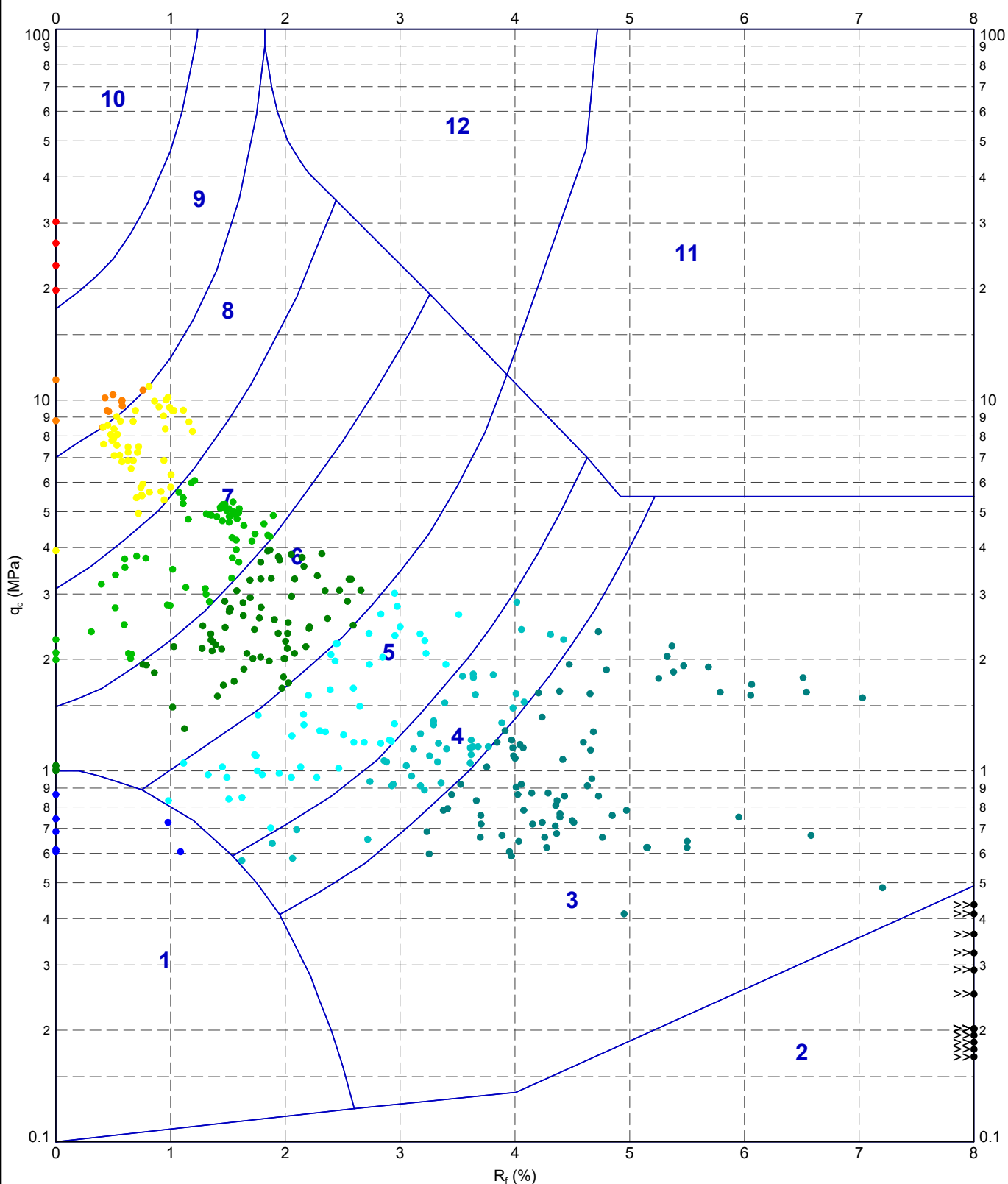
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.477	0.481	-0.004039
Sleeve (kPa)	0.0898	0.0892	0.000537
u2 (kPa)	0.00943	0.0172	-0.00779
Inclinometer 1 (°)	-1.95	-1.93	-0.021858
Inclinometer 2 (°)	0.443	0.558	-0.114562

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LIB - ZOE GLEB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS G.P.J. <<DrawingFile>> 25/05/2021 10:02:10.02 10:02:00.04 Datagel Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Proj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 q_c vs R_f

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 q_c vs. R_f - CPT107A

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

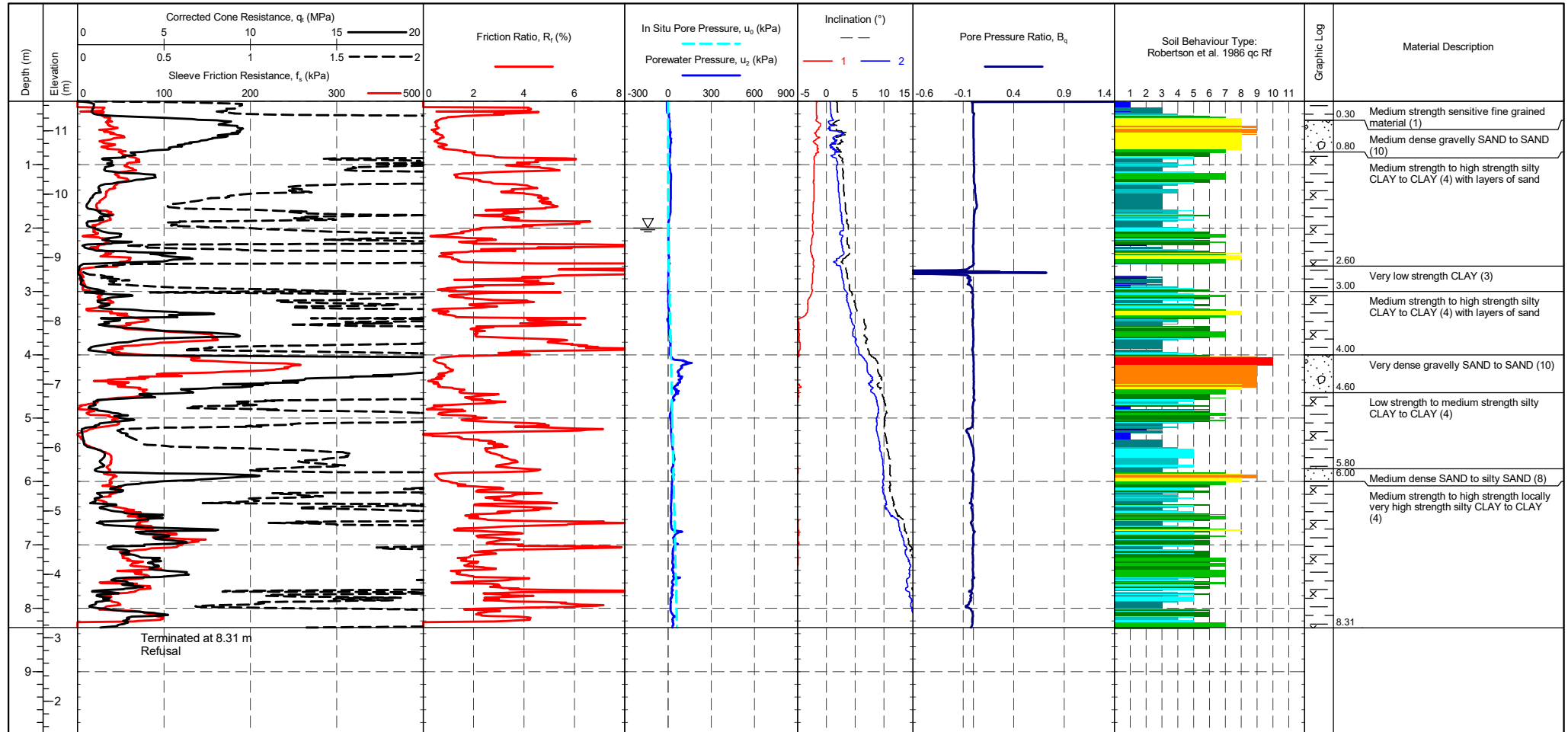
CPT107B

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPTU ZERO VALUES				METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND	
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.485	0.479	0.005654	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND	
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0898	0.0894	0.000376	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained	
CONE AREA RATIO : 0.75	FRICITION REDUCER : None	u2 (kPa)	0.0131	0.0206	-0.007462	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND	
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 (i)	-1.95	-1.73	-0.226387				
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 (i)	0.443	0.658	-0.21434				

PointID

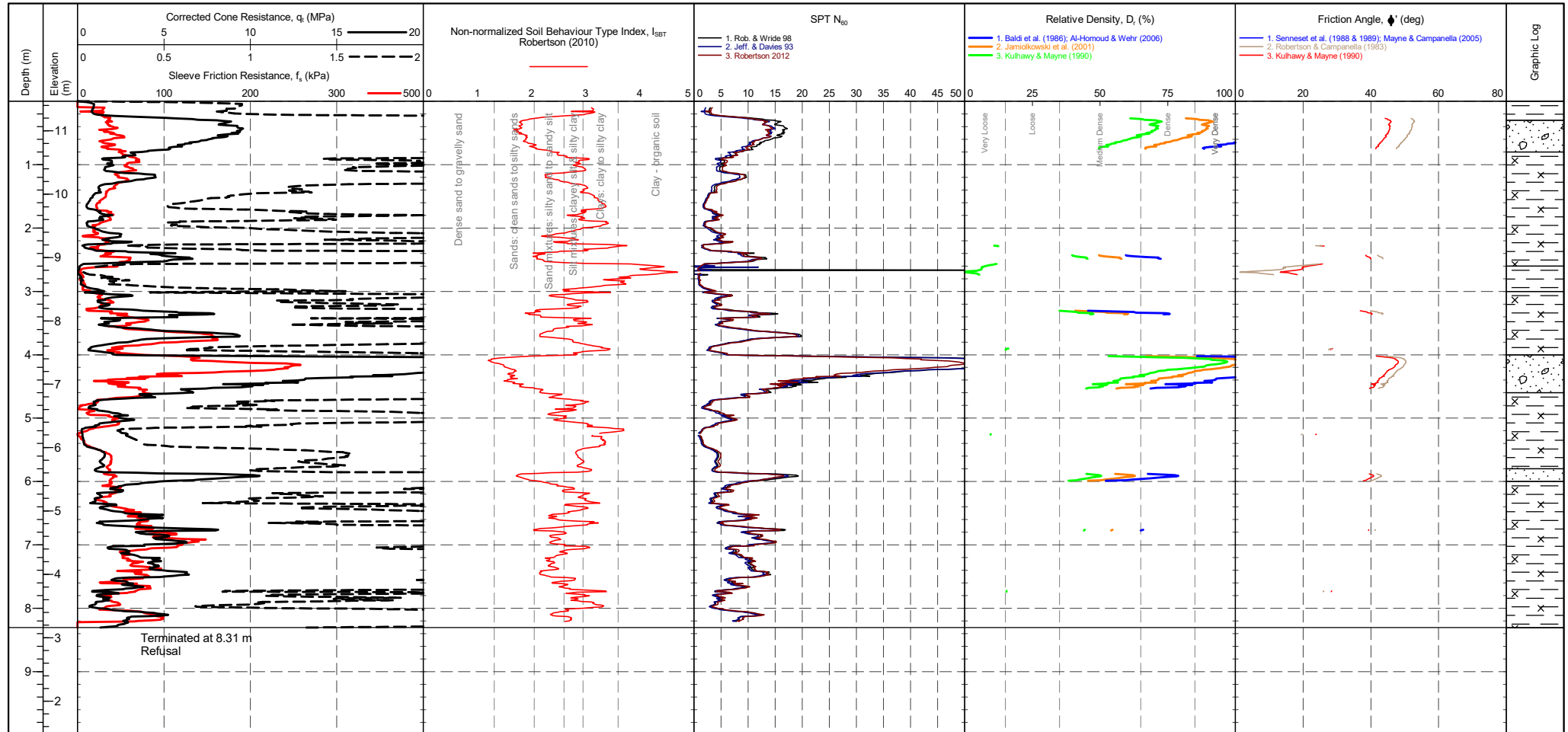
CPT107B

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.485	0.479	0.005654
Sleeve (kPa)	0.0898	0.0894	0.000376
u2 (kPa)	0.0131	0.0206	-0.007462
Inclinometer 1 (°)	-1.95	-1.73	-0.226387
Inclinometer 2 (°)	0.443	0.658	-0.21434

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

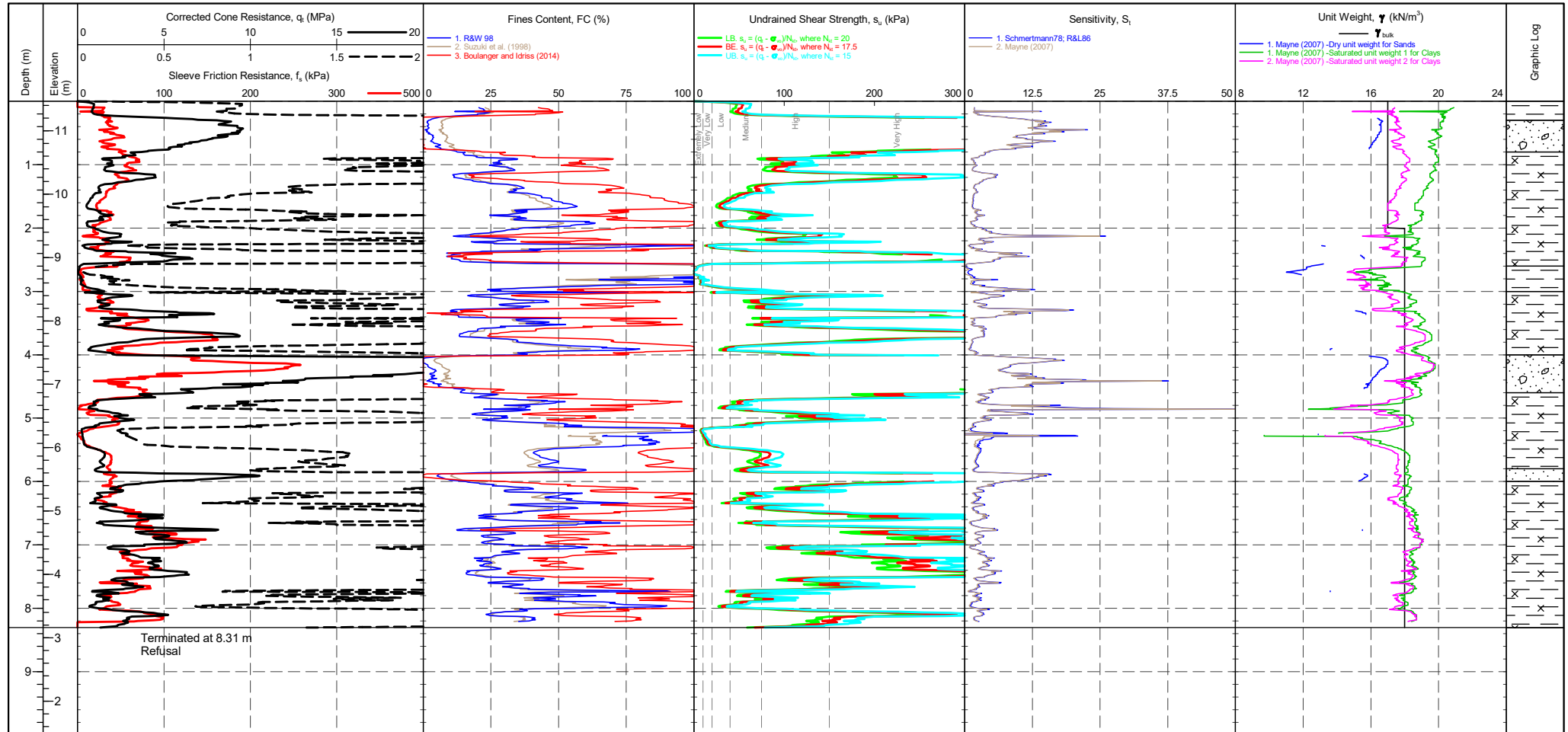
CPT107B

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.485	0.479	0.005654
Sleeve (kPa)	0.0898	0.0894	0.000376
u2 (kPa)	0.0131	0.0206	-0.007462
Inclinometer 1 (°)	-1.95	-1.73	-0.226387
Inclinometer 2 (°)	0.443	0.658	-0.21434

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

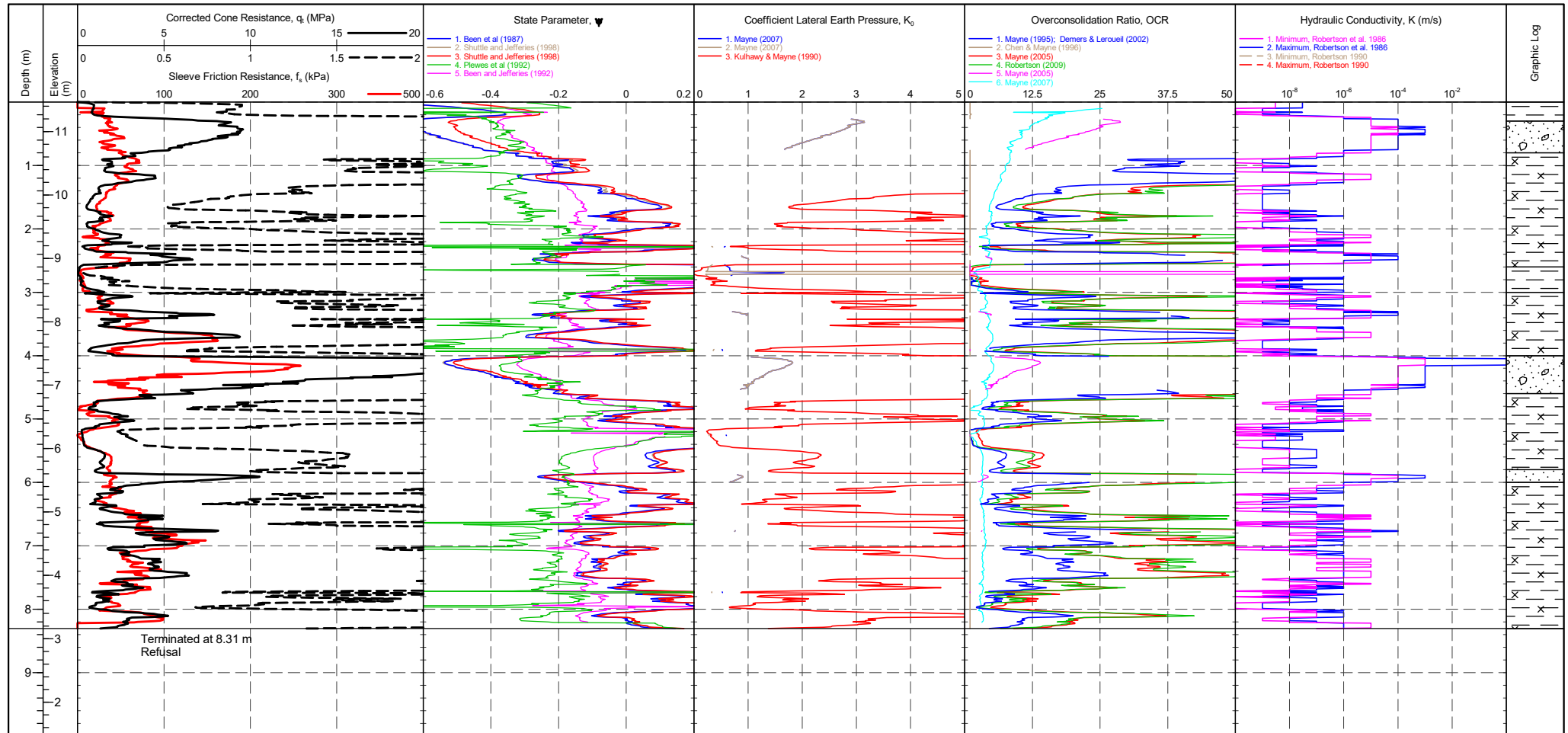
CPT107B

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.485	0.479	0.005654
Sleeve (kPa)	0.0898	0.0894	0.000376
u2 (kPa)	0.0131	0.0206	-0.007462
Inclinometer 1 (°)	-1.95	-1.73	-0.226387
Inclinometer 2 (°)	0.443	0.658	-0.21434

Groundwater Level
Dissipation Test

PointID

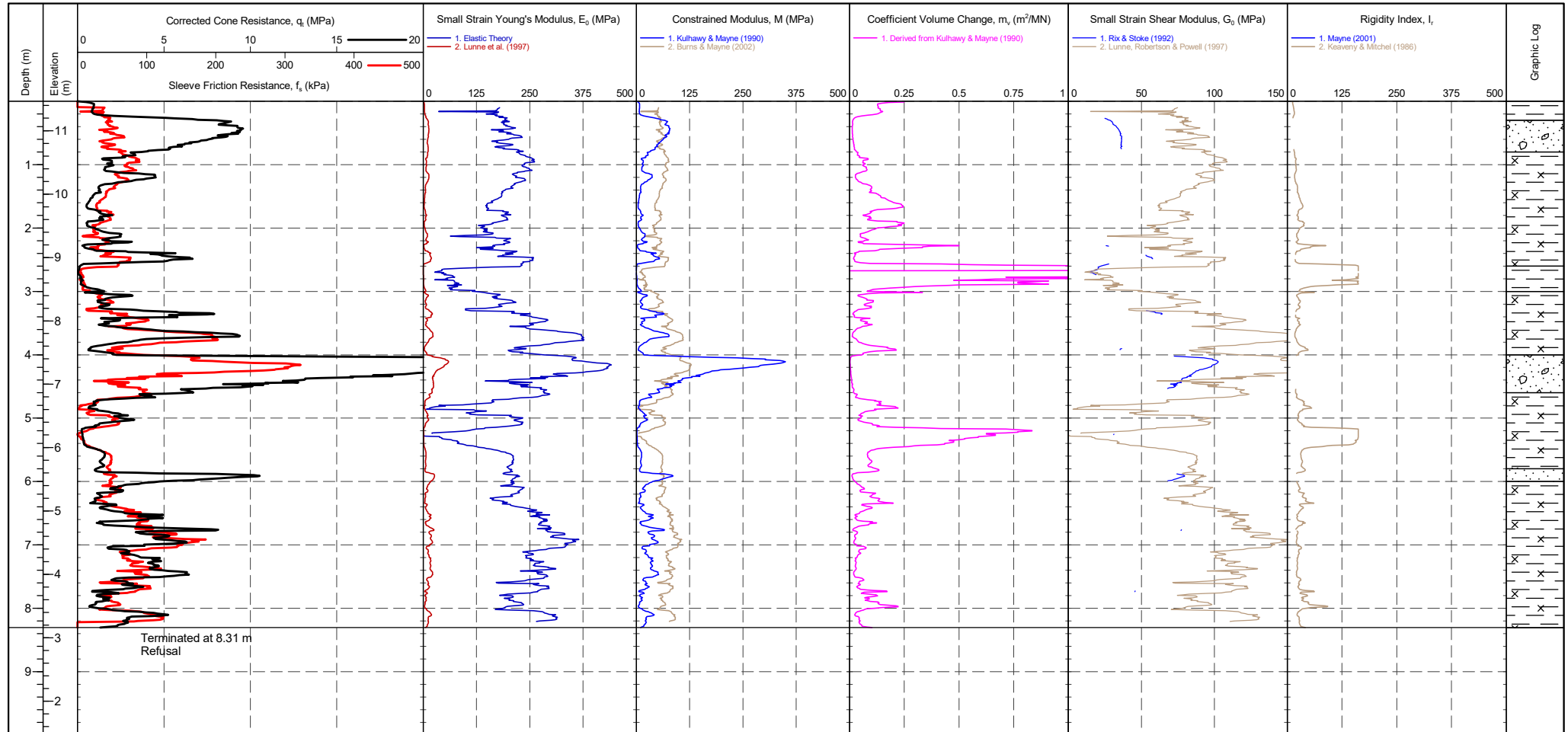
CPT107B

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on inclination.

SHEET : 1 OF 1
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

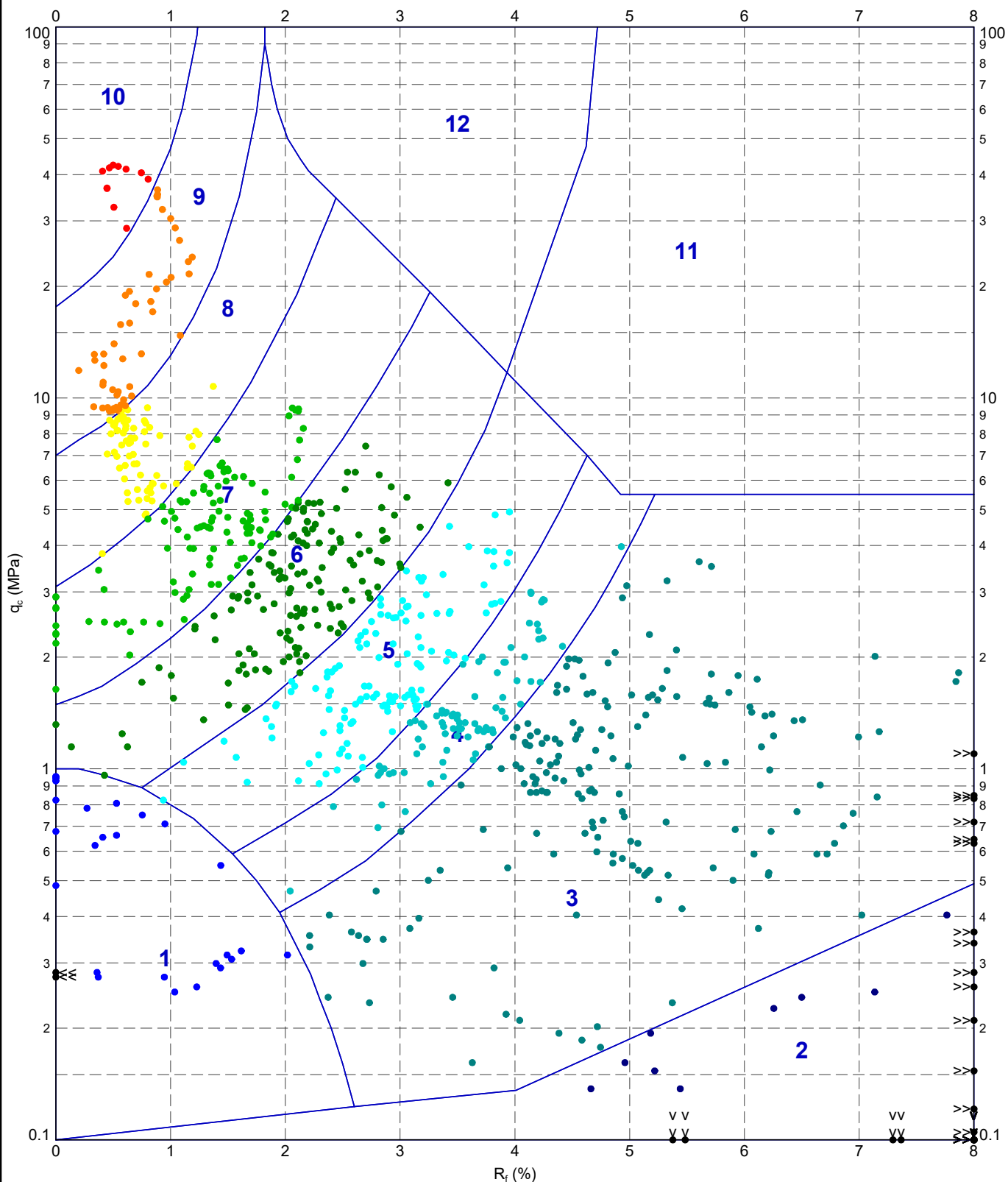
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.485	0.479	0.005654
Sleeve (kPa)	0.0898	0.0894	0.000376
u2 (kPa)	0.0131	0.0206	-0.007462
Inclinometer 1 (°)	-1.95	-1.73	-0.226387
Inclinometer 2 (°)	0.443	0.658	-0.21434

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LIB - ZOE.GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MP 1210220 - BROCKHAMPTON - DELTA SIMONS.GPJ <<DrawingFile>> 25/05/2021 10:04 10:02:00.04 Datag Lab and In Situ Tool - DSD | Lib: In Situ SI 2.02.0 2017-07-10 Proj: In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc R_f

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. R_f - CPT107B

DRAWN	DATE	25/05/2021
CHECKED	DATE	25/05/2021
SCALE	Not To Scale	
PROJECT No	FIGURE No	A4
1210220		

PointID

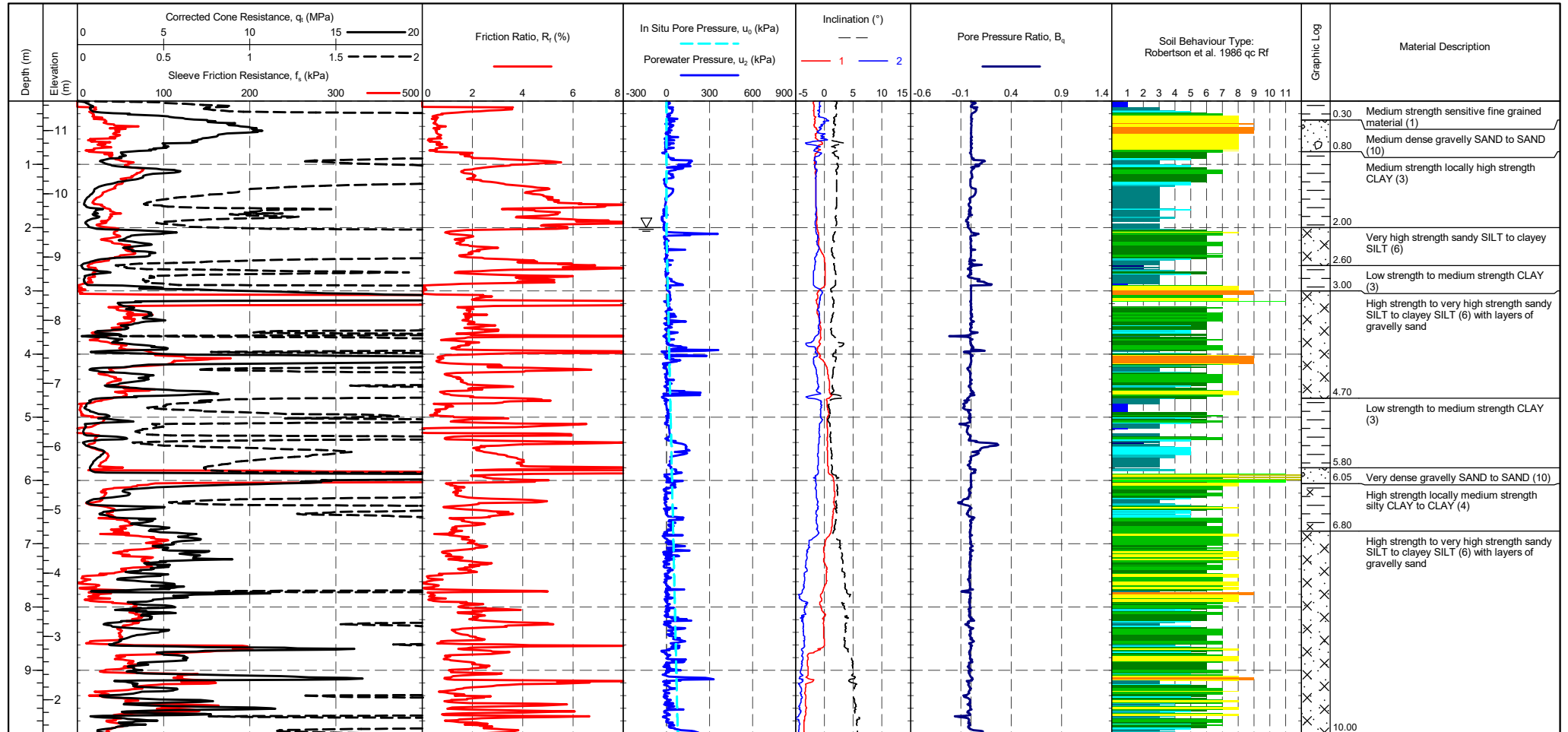
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.460	0.434	0.025846	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0887	0.0882	0.000483	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00615	-0.00287	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.80	-1.61	-0.187353		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.649	-0.742	0.092515		10 - Gravelly SAND to SAND	12 - SAND to clayey SAND

PointID

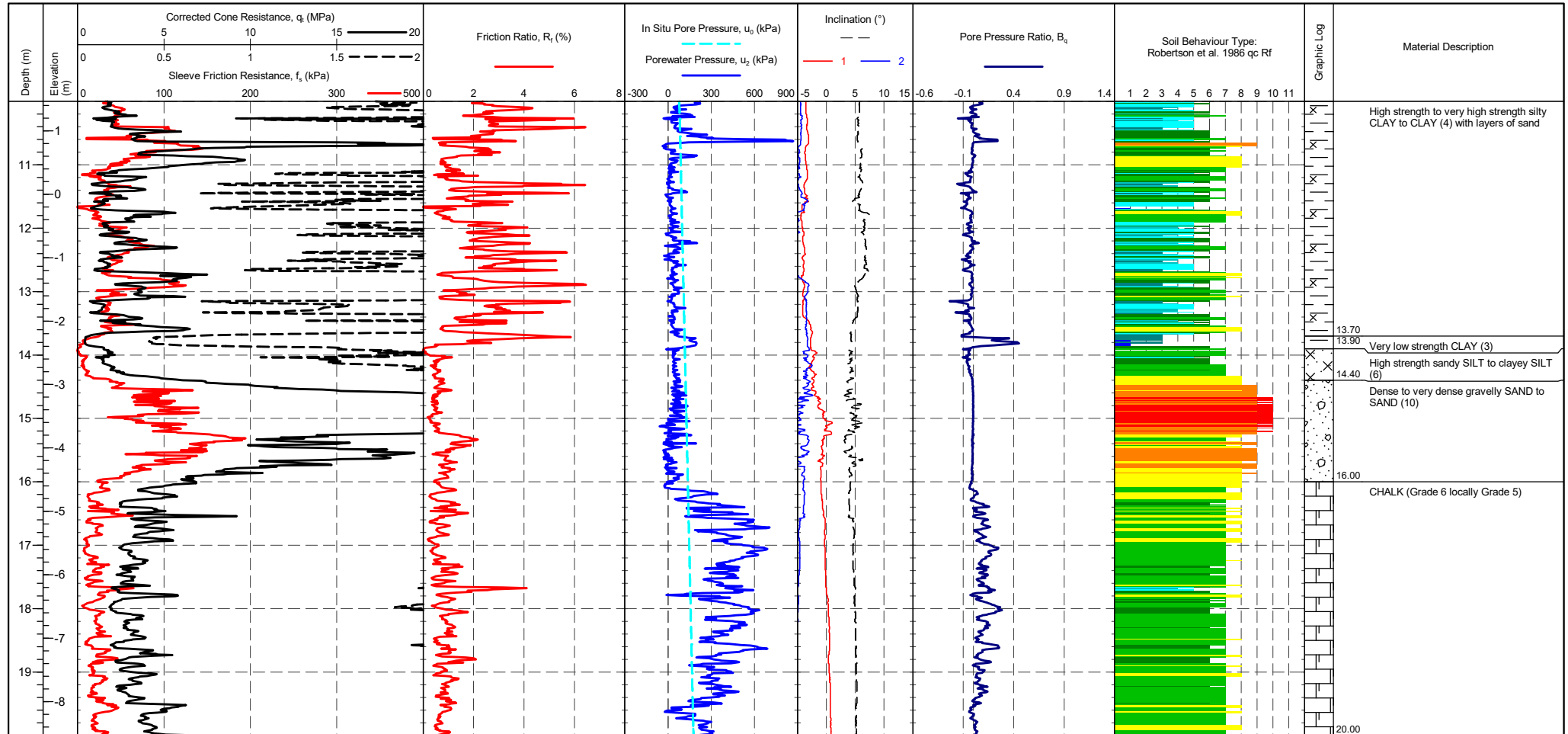
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.460	0.434	0.025846	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0887	0.0882	0.000483	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00615	-0.00287	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.80	-1.61	-0.187353		9 - SAND	11 - Very stiff fine grained
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.649	-0.742	0.092515		10 - Gravelly SAND to SAND	12 - SAND to clayey SAND

PointID

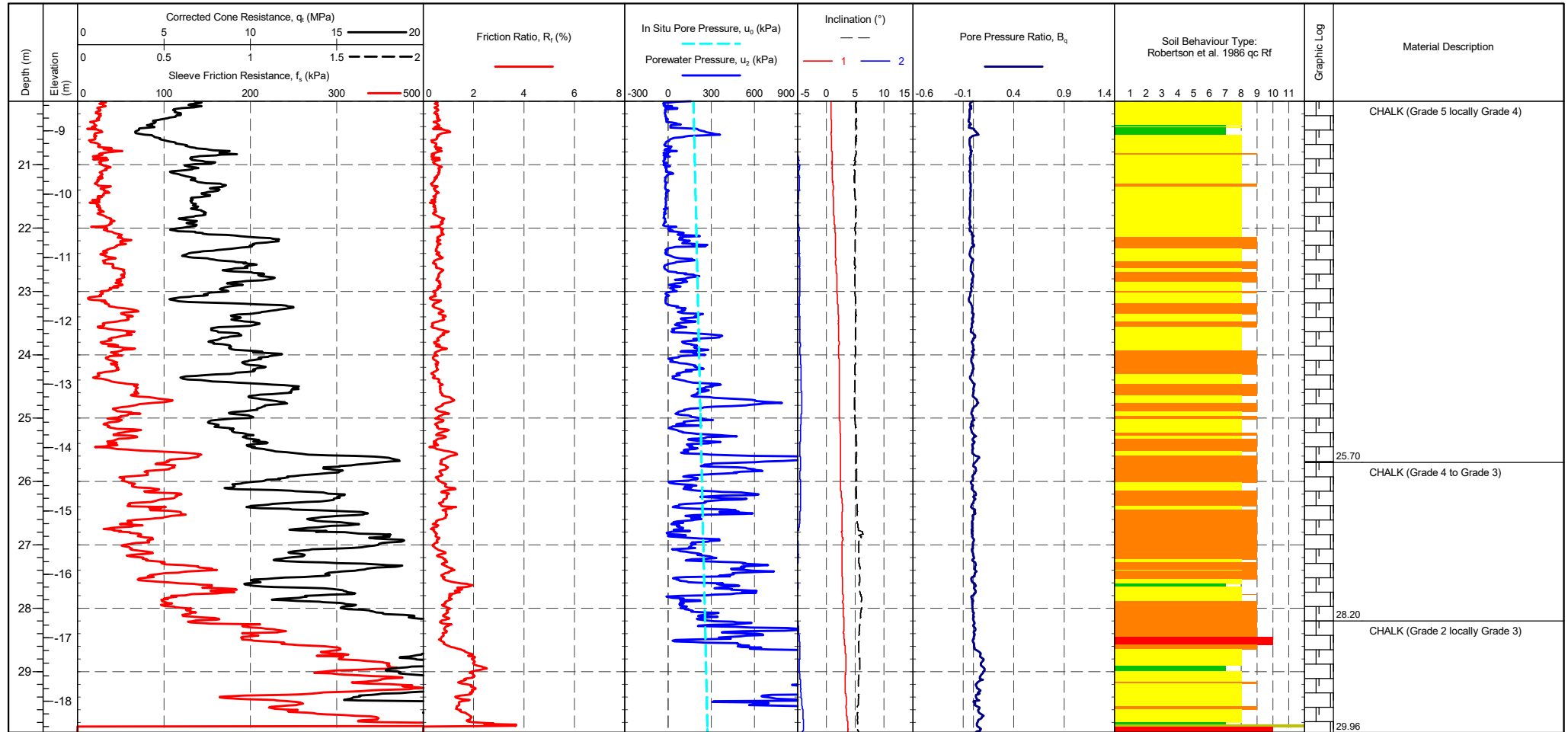
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.460	0.434	0.025846	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0887	0.0882	0.000483	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00615	-0.00287	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 ($^\circ$)	-1.80	-1.61	-0.187353		9 - SAND	10 - Gravely SAND to SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 ($^\circ$)	-0.649	-0.742	0.092515		11 - Very stiff fine grained	12 - SAND to clayey SAND

PointID

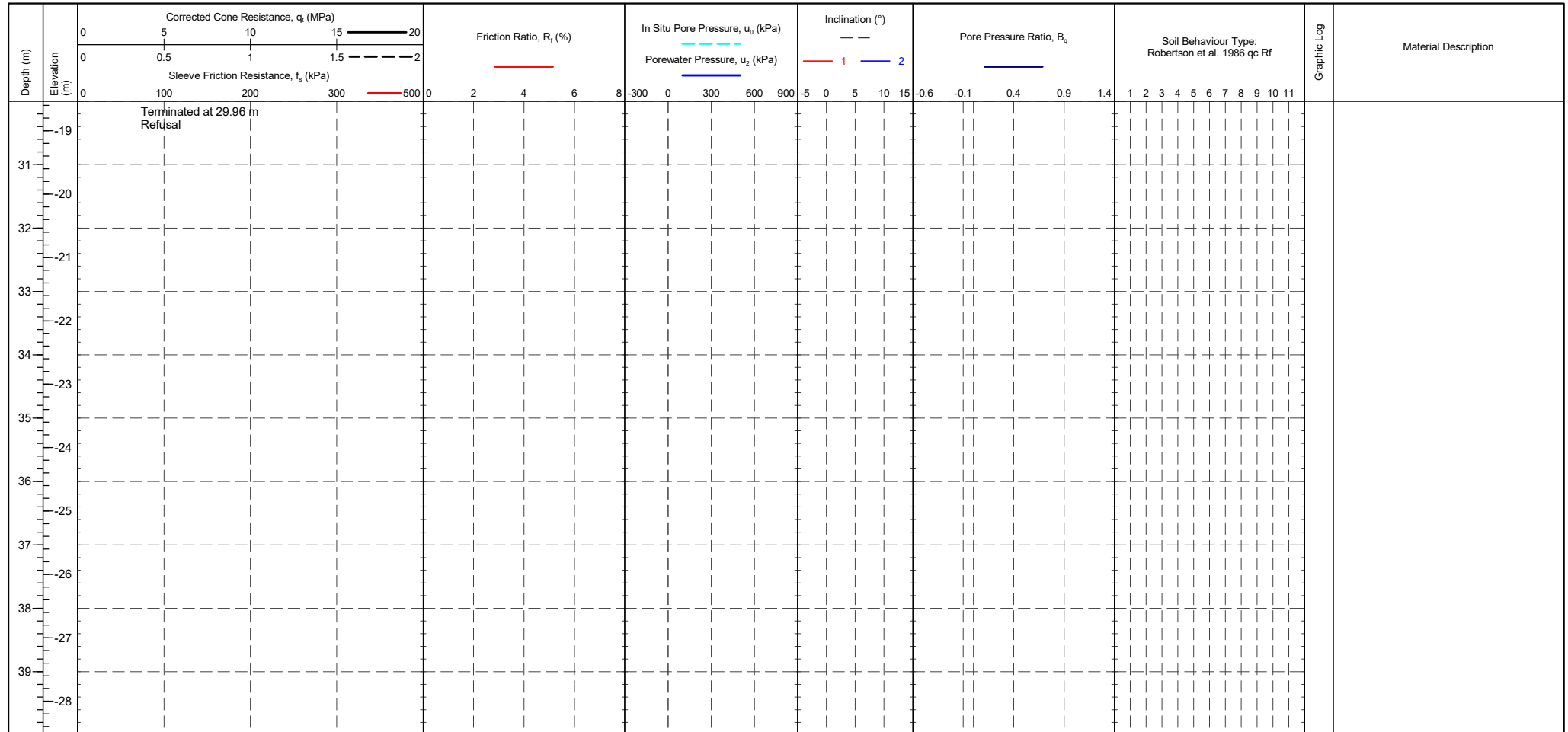
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069	TEST TYPE : TE2	CPT ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020	APPLICATION CLASS : 2	Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	9 - SAND
CONE MODEL : Subtraction	RIG : CPT 022	Tip (MPa)	0.460	0.434	0.025846	2 - Organic material	6 - Sandy SILT to clayey SILT	10 - Gravelly SAND to SAND
CONE AREA : 15cm ²	OPERATOR : AL	Sleeve (kPa)	0.0887	0.0882	0.000483	3 - CLAY	7 - Silty SAND to sandy SILT	11 - Very stiff fine grained
CONE AREA RATIO : 0.75	FRICTION REDUCER : None	u2 (kPa)	-0.00615	-0.00287	-0.00328	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	12 - SAND to clayey SAND
FILTER POSITION : u2	WEATHER : Overcast & Mild	Inclinometer 1 ($^\circ$)	-1.80	-1.61	-0.187353			
FILTER TYPE : HDPE	GROUNDWATER DEPTH : Assumed for calculation purposes	Inclinometer 2 ($^\circ$)	-0.649	-0.742	0.092515			

PointID

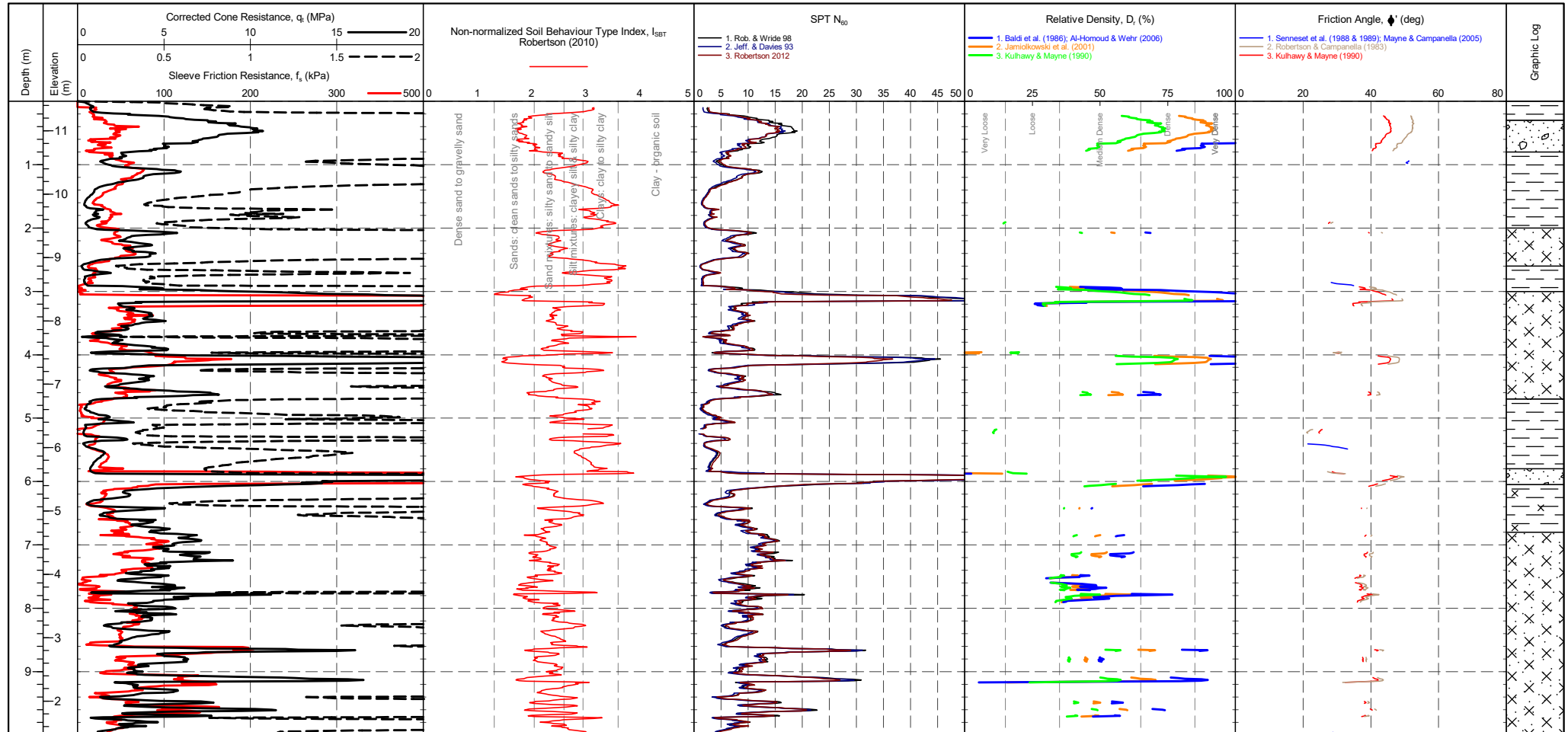
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

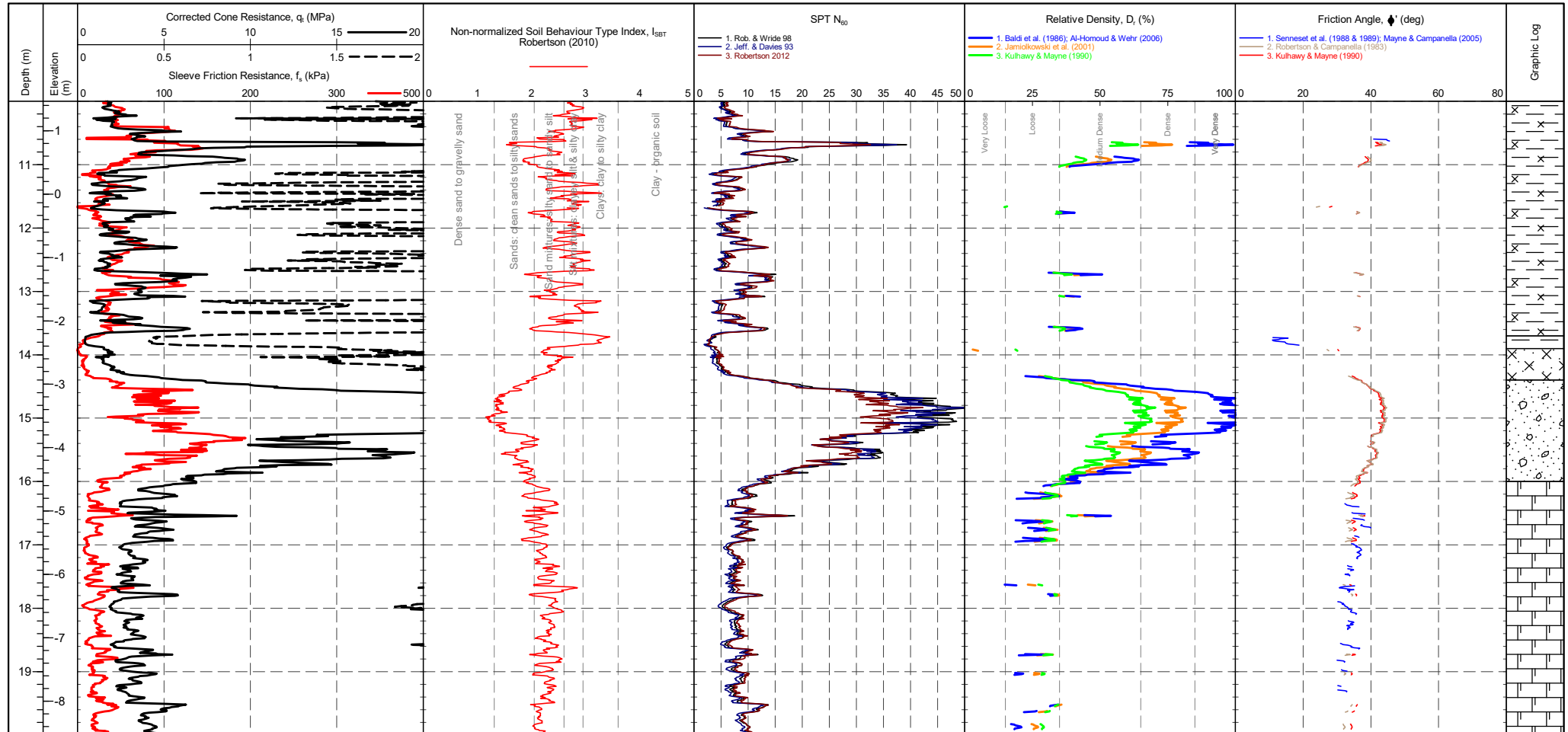
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (")	-1.80	-1.61	-0.187353
Inclinometer 2 (")	-0.649	-0.742	0.092515

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level

Dissipation Test

PointID

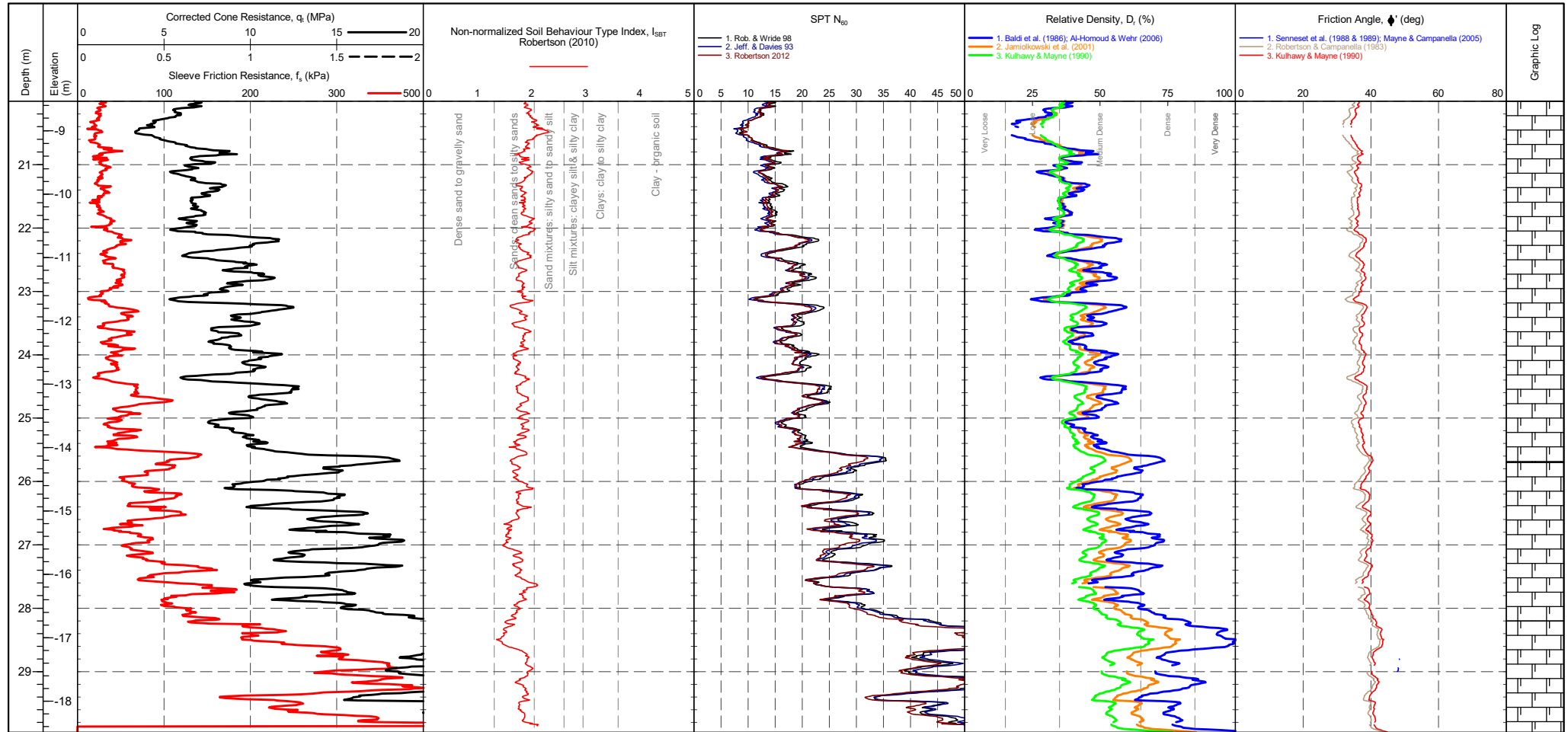
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (")	-1.80	-1.61	-0.187353
Inclinometer 2 (")	-0.649	-0.742	0.092515

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D _r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

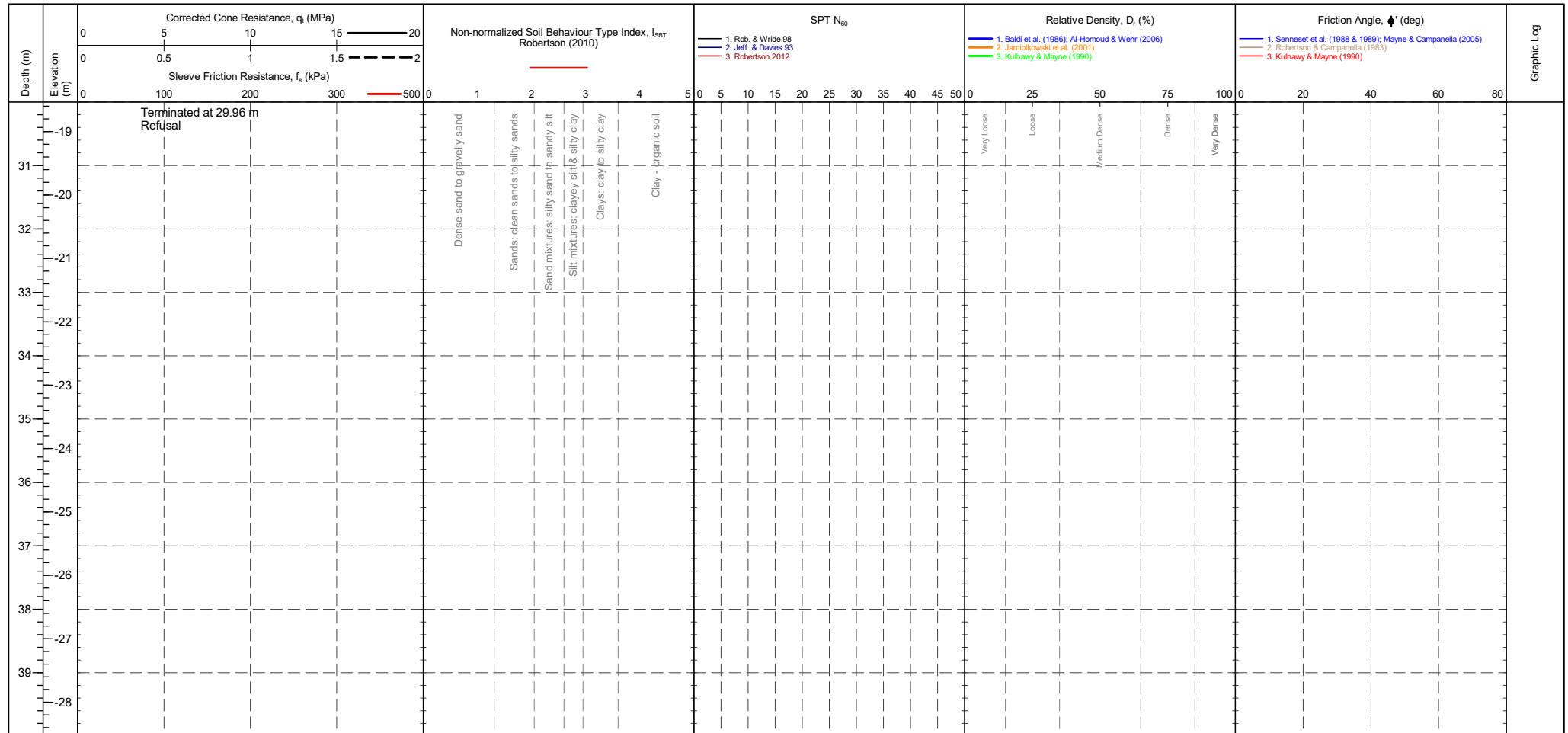
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (")	-1.80	-1.61	-0.187353
Inclinometer 2 (")	-0.649	-0.742	0.092515

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

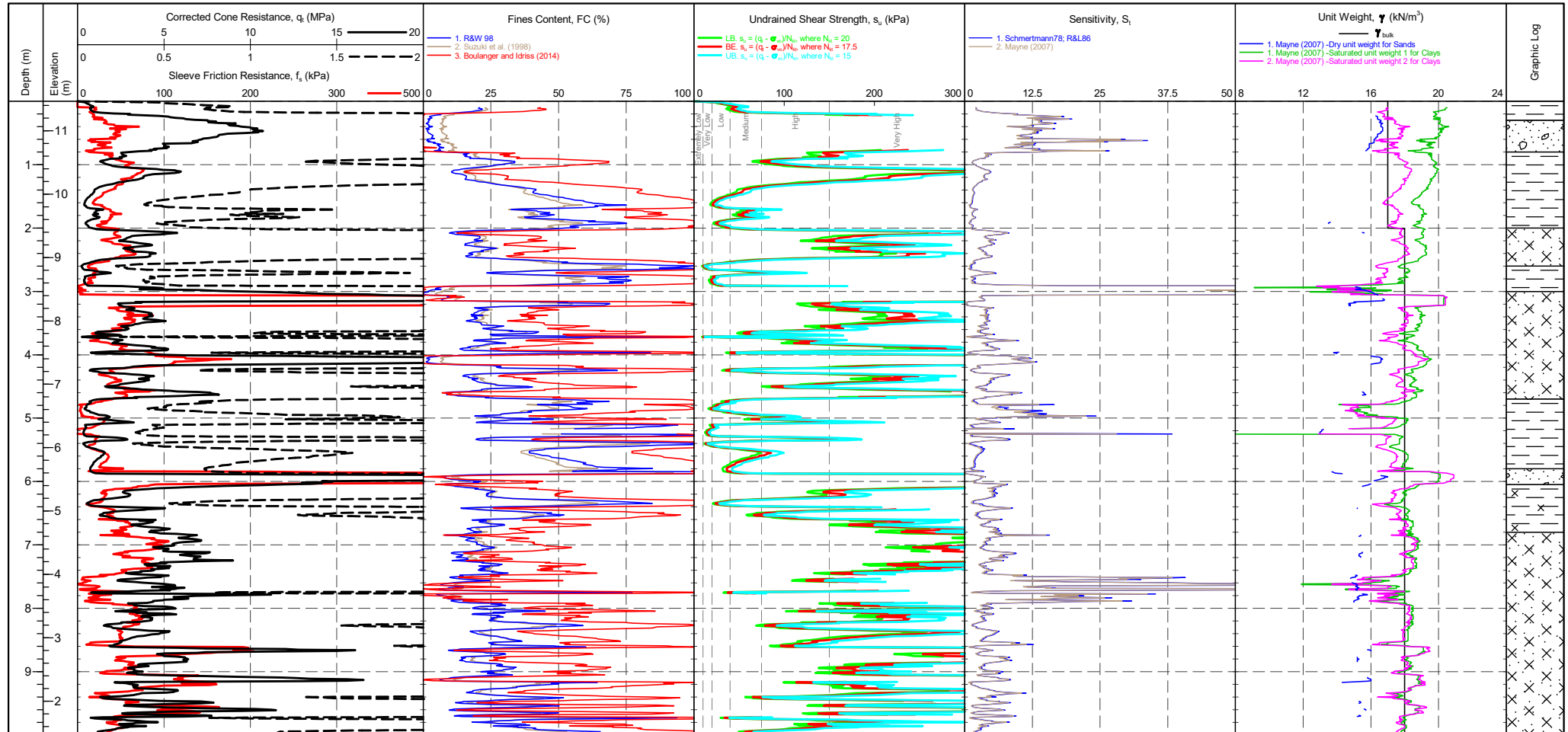
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.460 0.434 0.025846
Sleeve (kPa) 0.0887 0.0882 0.000483
u2 (kPa) -0.00615 -0.00287 -0.00328
Inclinometer 1 (°) -1.80 -1.61 -0.187353
Inclinometer 2 (°) -0.649 -0.742 0.092515

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

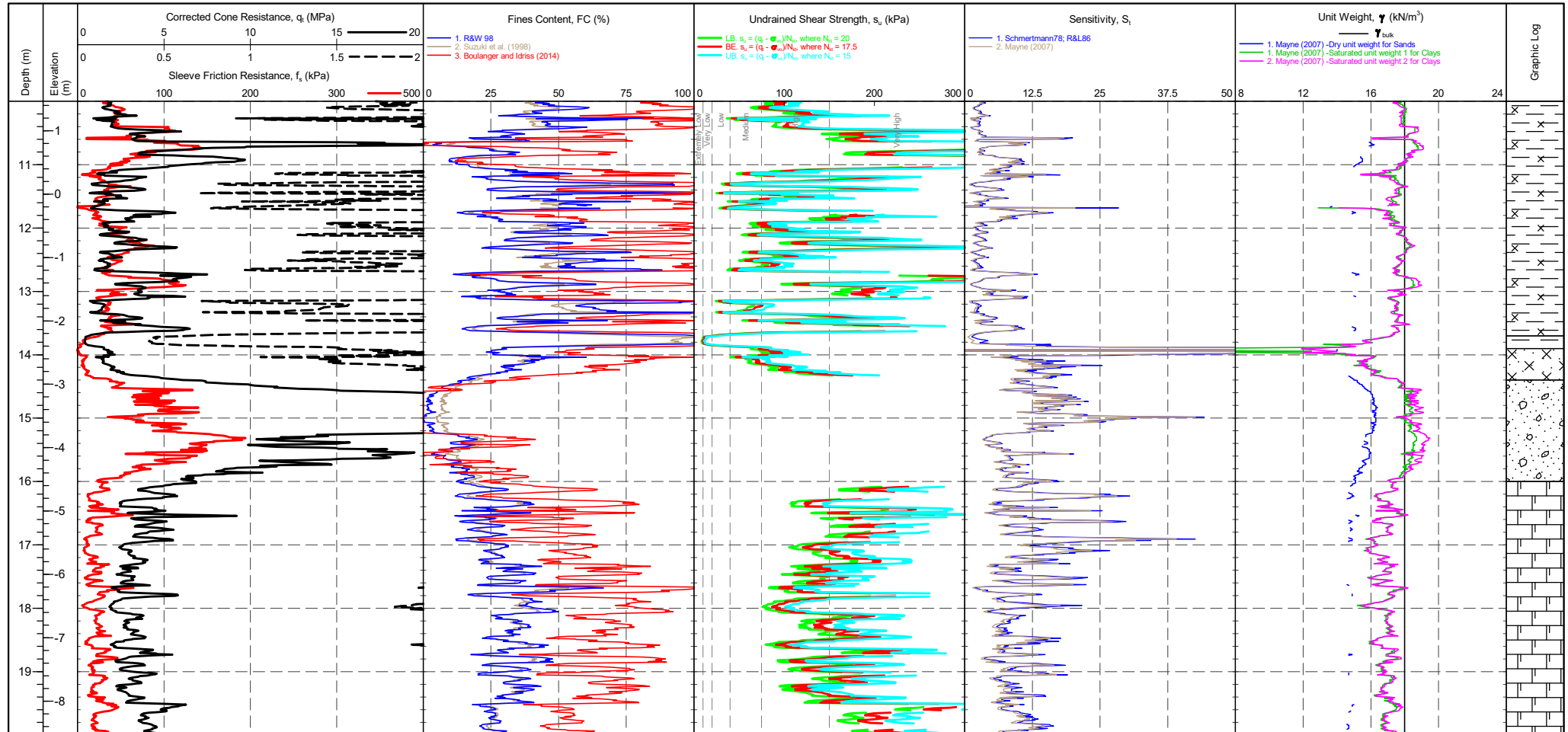
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.460 0.434 0.025846
Sleeve (kPa) 0.0887 0.0882 0.000483
u2 (kPa) -0.00615 -0.00287 -0.00328
Inclinometer 1 (°) -1.80 -1.61 -0.187353
Inclinometer 2 (°) -0.649 -0.742 0.092515

CPTU ZERO VALUES

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level

Dissipation Test

PointID

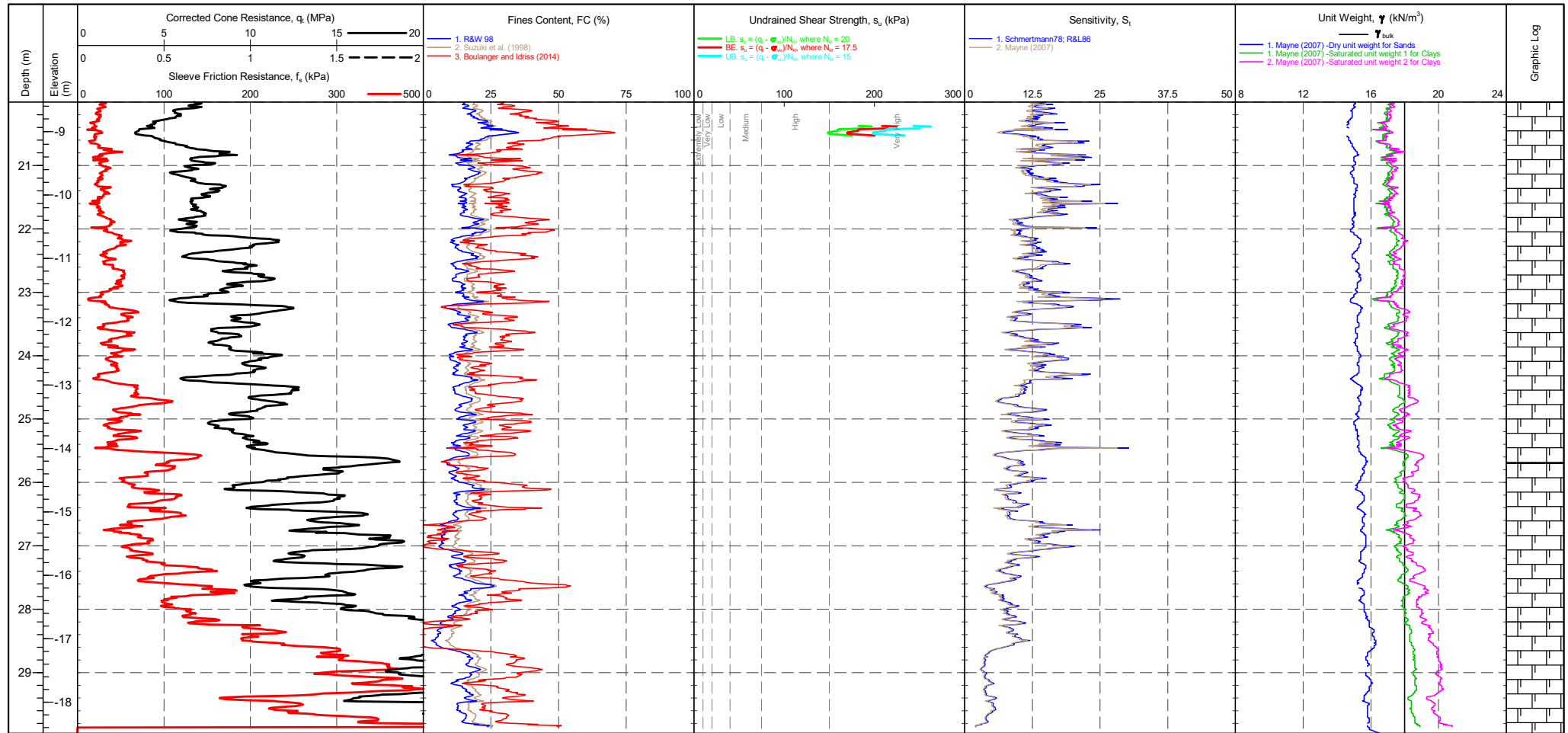
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

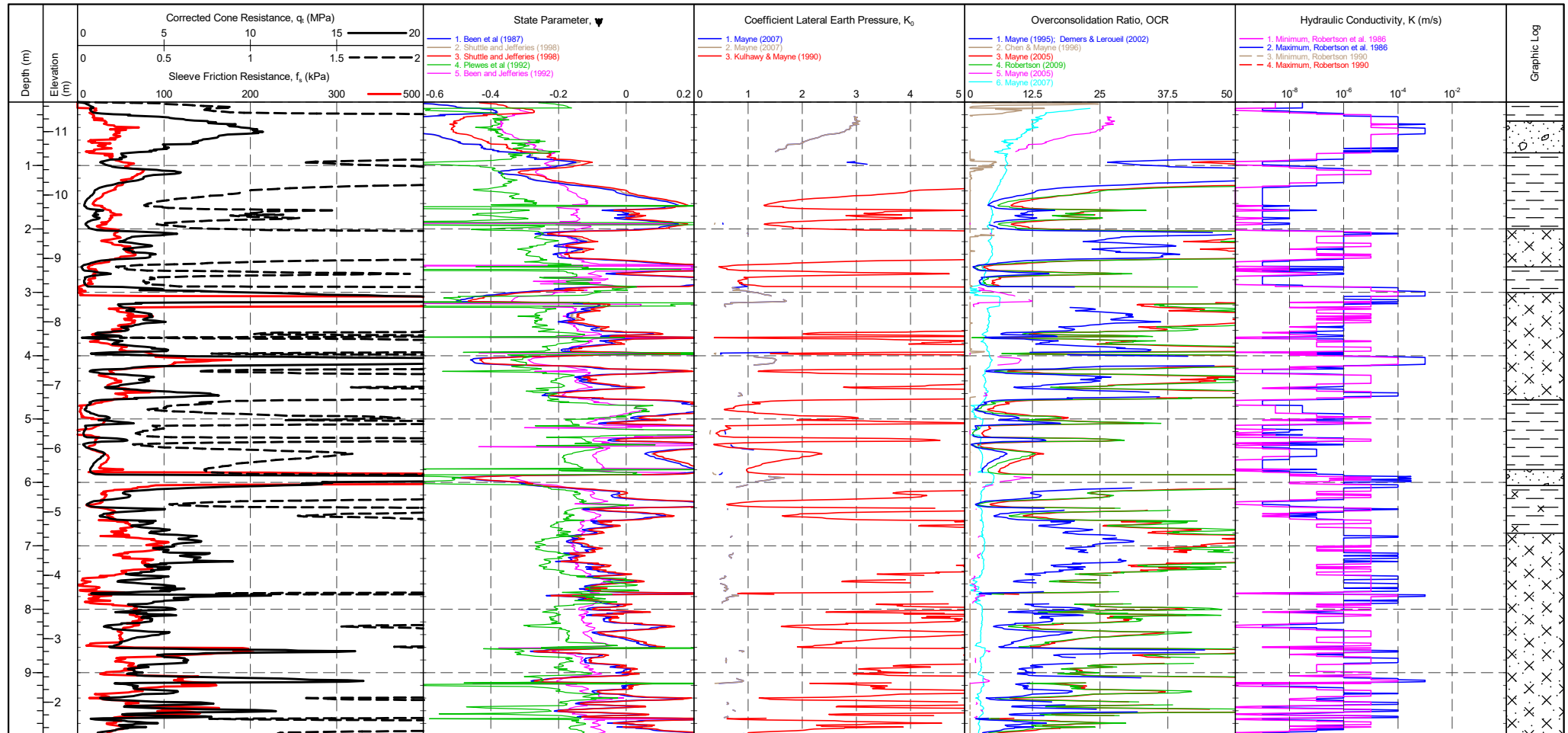
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

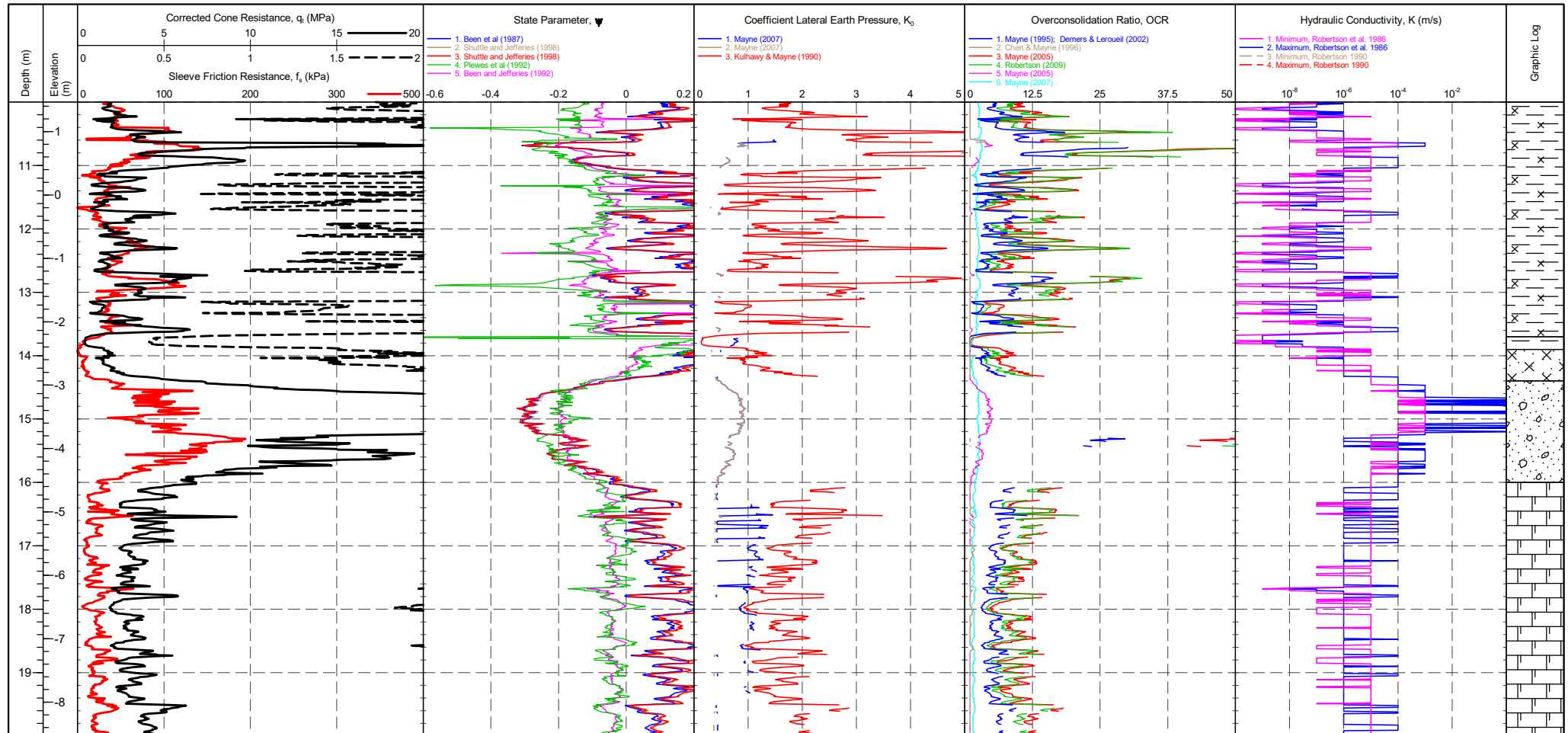
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

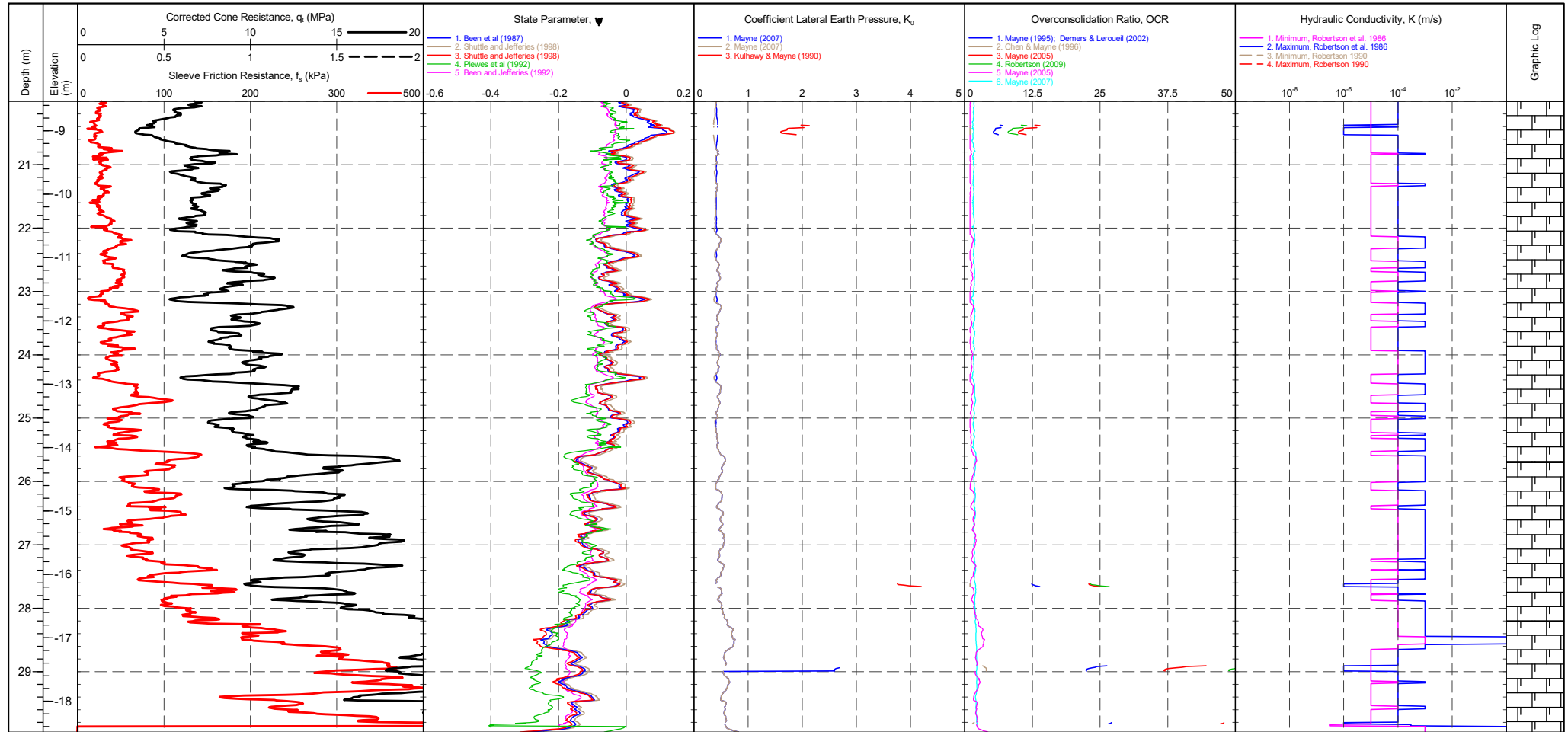
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

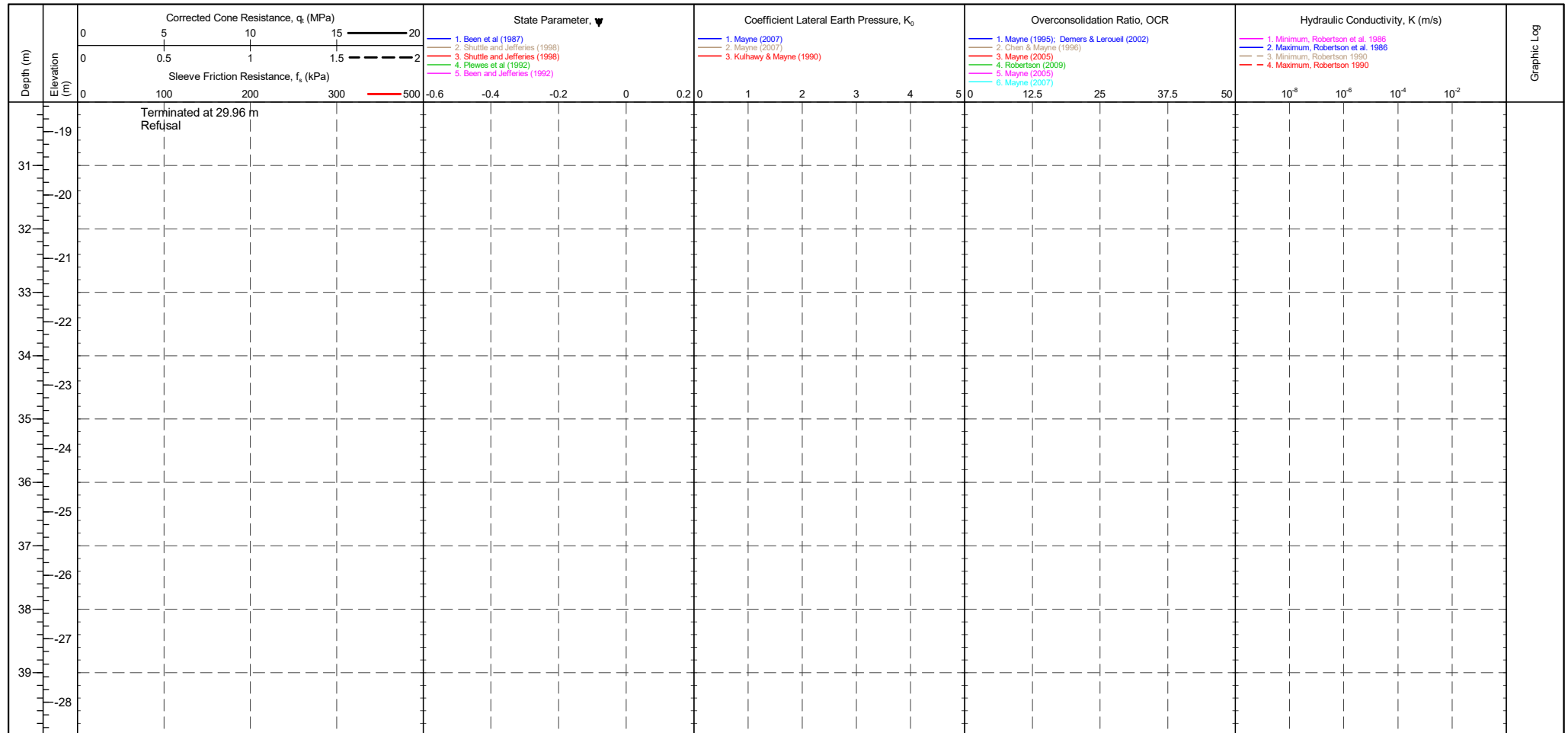
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

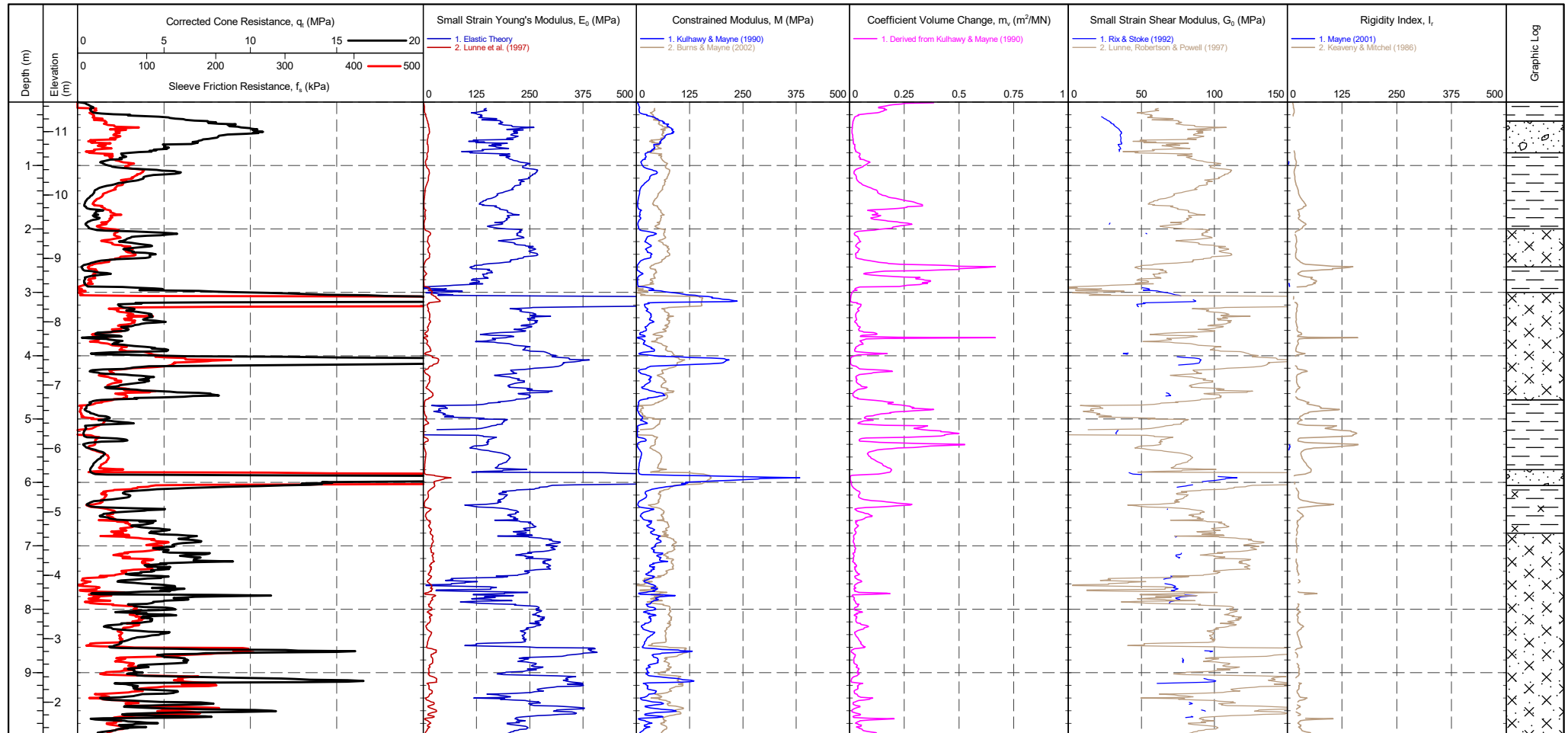
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

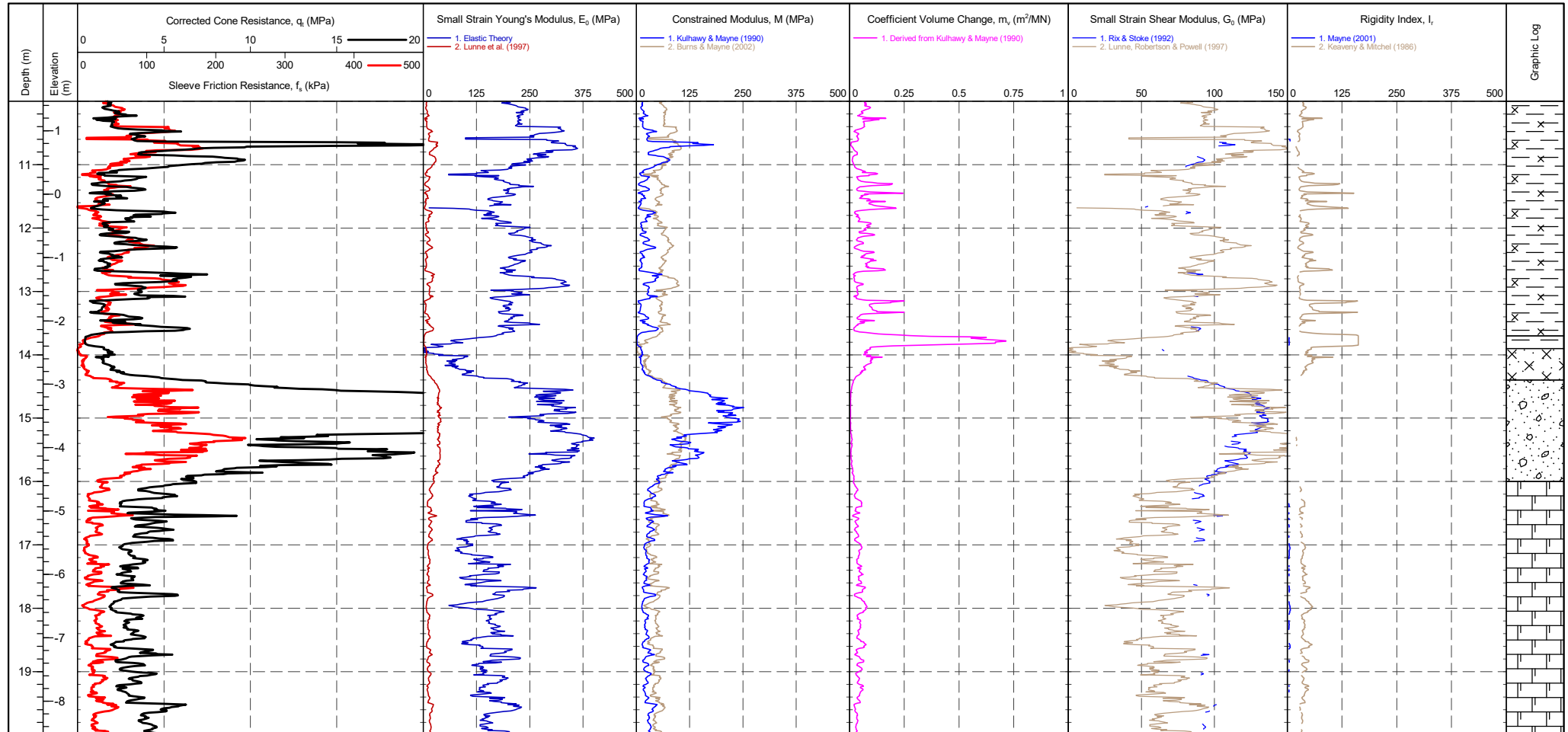
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

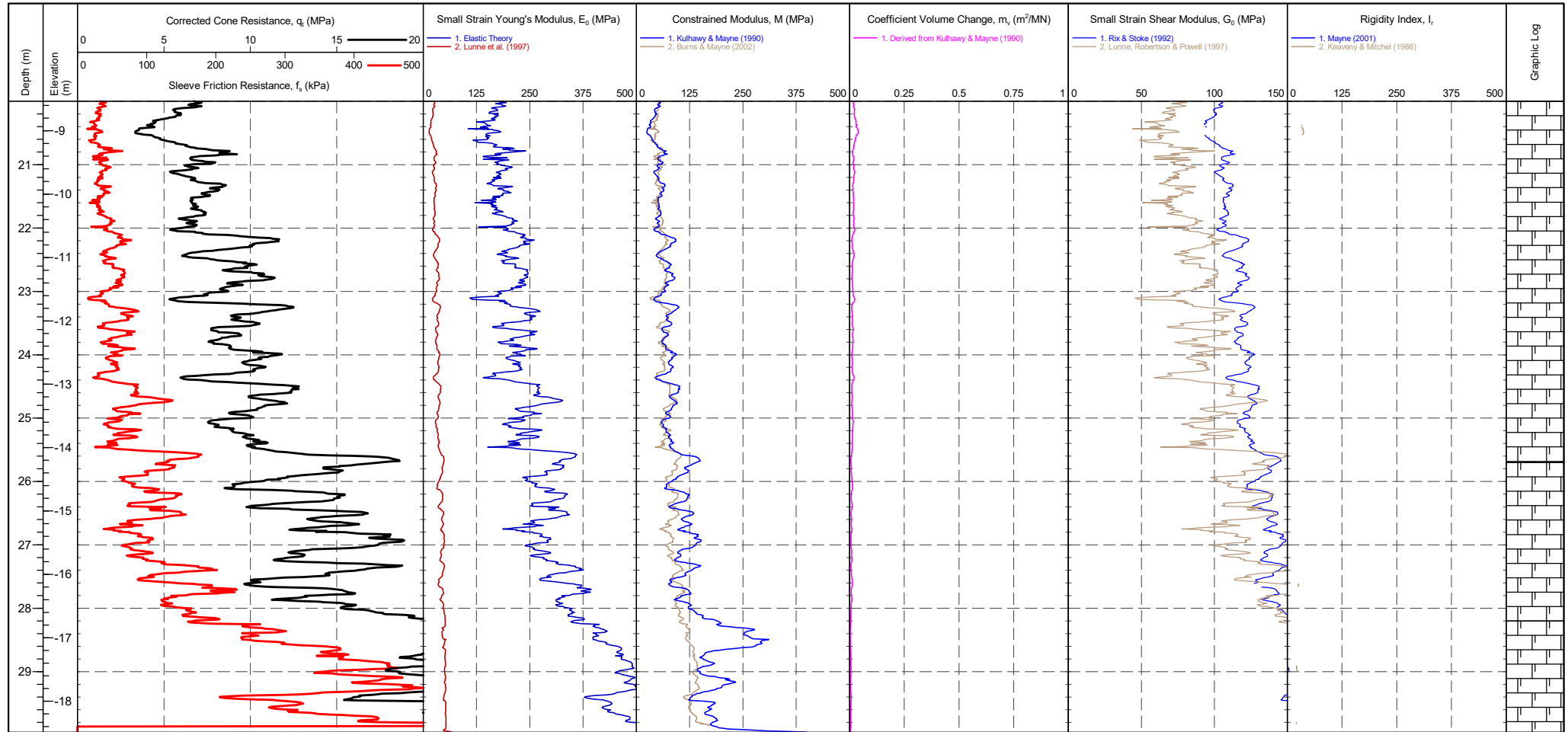
CPT107C

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 3 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

PointID

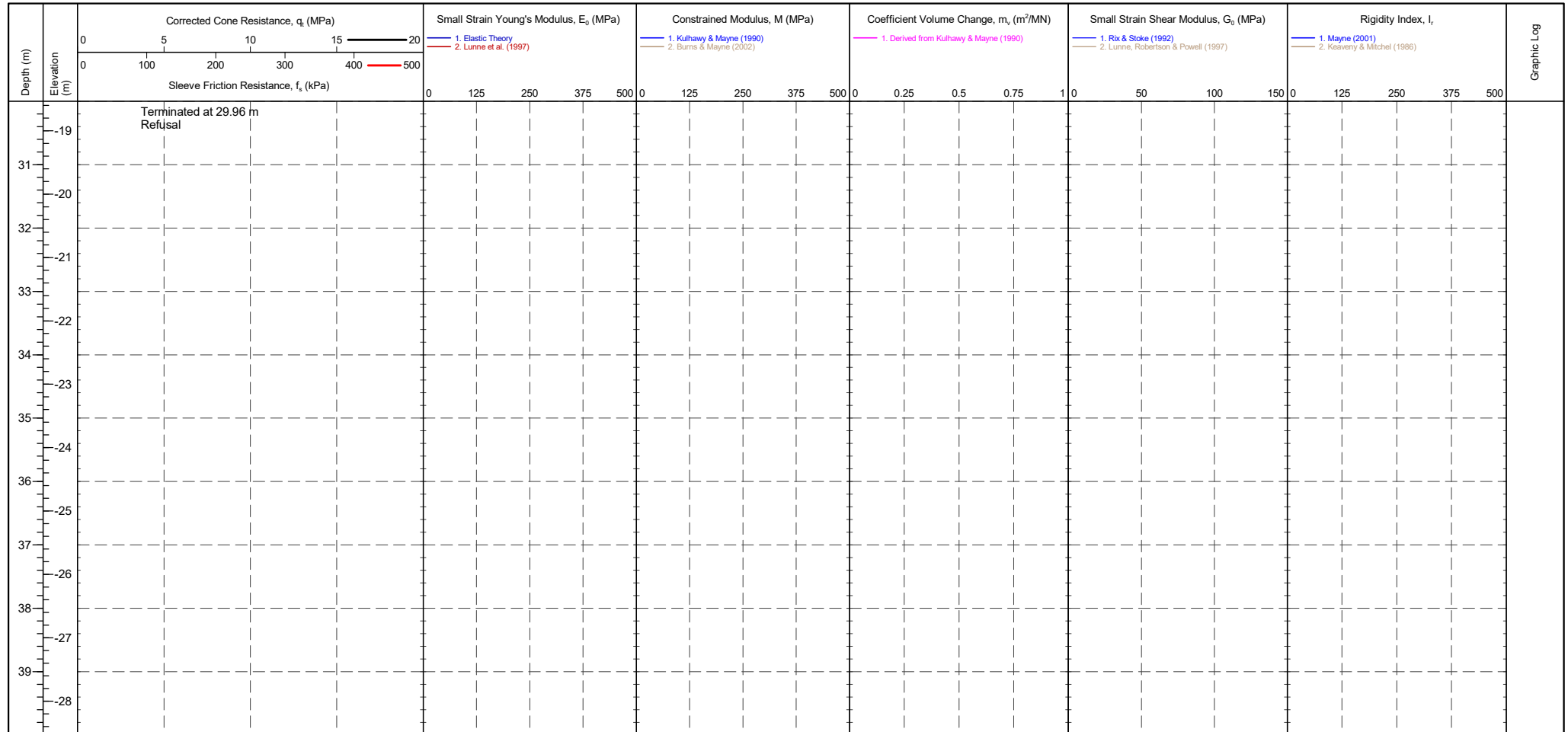
CPT107C

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470238.6 m
NORTHING : 105760.1 m
ELEVATION : 11.47 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 4 OF 4
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

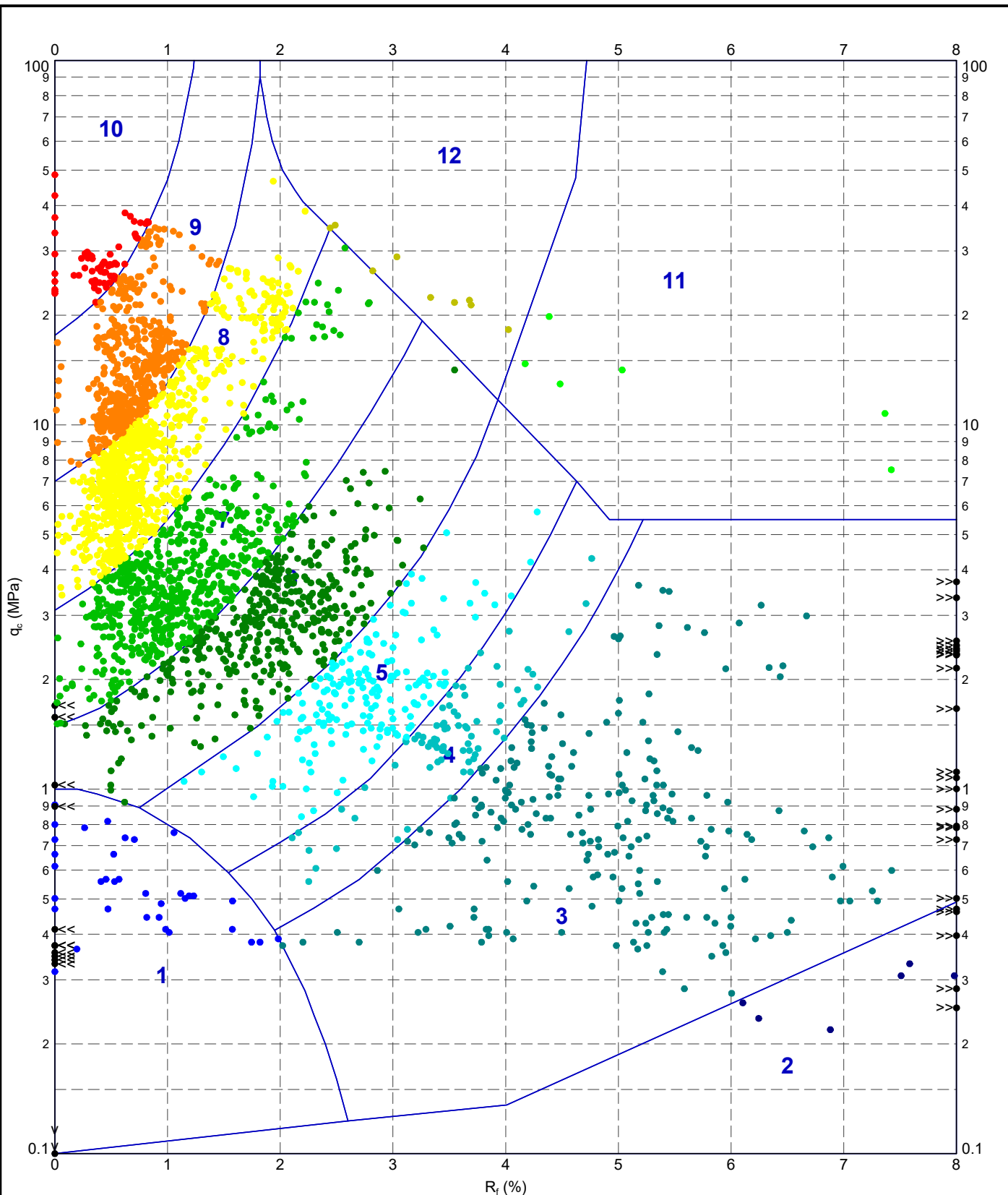
TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.434	0.025846
Sleeve (kPa)	0.0887	0.0882	0.000483
u2 (kPa)	-0.00615	-0.00287	-0.00328
Inclinometer 1 (°)	-1.80	-1.61	-0.187353
Inclinometer 2 (°)	-0.649	-0.742	0.092515

Groundwater Level
Dissipation Test

210430-ADVANCED REPORT INSTITUSI 202.1 LUB - ZOE GLB Graph CPT ROBERTSON ET AL. 86 QC VS. RF MAP 1210220 - BROCKHAMPTON - DELTA SIMONS CPT107C <<DrawingFile>> 25/05/2021 10:12 10.02.00.04 Dated Lab and In Situ Tool In Situ SI 2.02.0 2017-07-10



METHOD: Robertson et al. 1986 qc Rf

- | | | | |
|-------------------------------------|-------------------------------|------------------------------|------------------------------|
| 1 - Sensitive fine grained material | 4 - Silty CLAY to CLAY | 7 - Silty SAND to sandy SILT | 10 - Gravelly SAND to SAND |
| 2 - Organic material | 5 - Clayey SILT to silty CLAY | 8 - SAND to silty SAND | 11 - Very stiff fine grained |
| 3 - CLAY | 6 - Sandy SILT to clayey SILT | 9 - SAND | 12 - SAND to clayey SAND |

IN SITU
SITE INVESTIGATION

TITLE

Delta Simons
Brockhampton
Brockhampton
Robertson et al. 1986 qc vs. Rf - CPT107C

DRAWN

DATE

25/05/2021

CHECKED

DATE

25/05/2021

SCALE

Not To Scale

A4

PROJECT No

1210220

FIGURE No

PointID

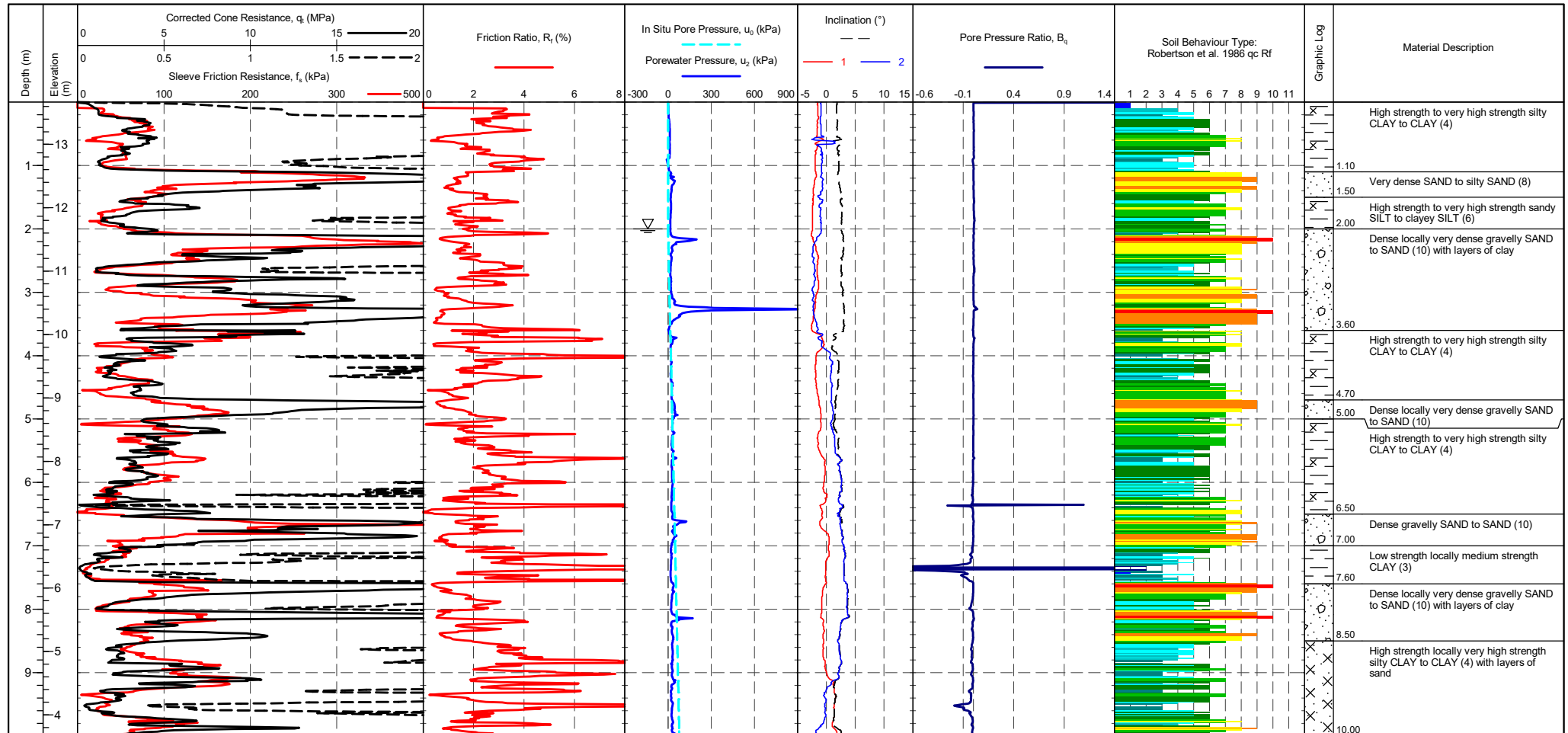
CPT108

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.460	0.468	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0918	0.0928	-0.001076	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u2 (kPa)	-0.00656	0.00902	-0.01558	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 (°)	-1.73	-1.38	-0.343481		9 - SAND	
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 (°)	-0.872	-0.954	0.082234		10 - Gravelly SAND to SAND	
									11 - Very stiff fine grained	
									12 - SAND to clayey SAND	

PointID

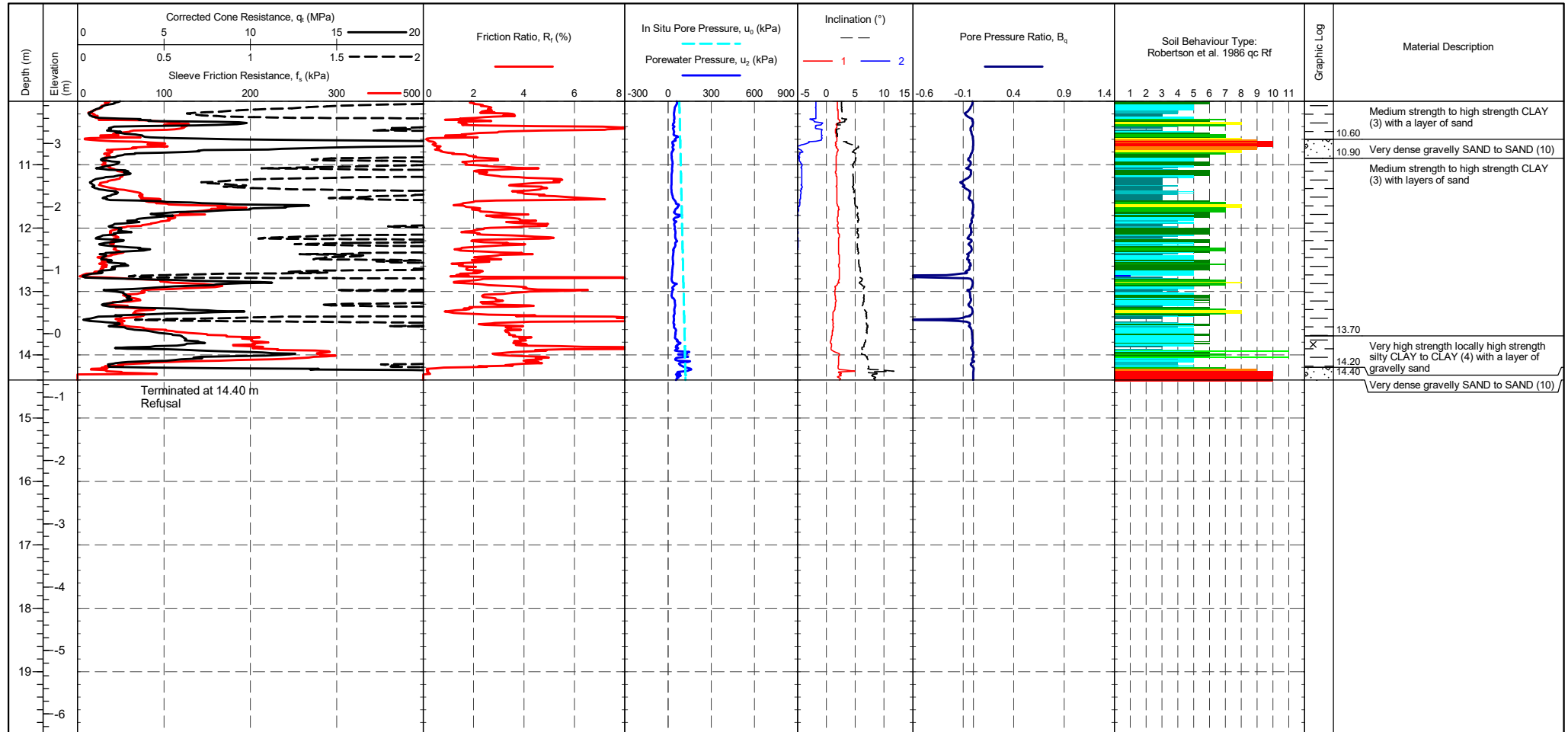
CPT108

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069		TEST TYPE : TE2		CPTU ZERO VALUES			METHOD: Robertson et al. 1986 qc Rf			Groundwater Level Dissipation Test
CALIBRATION DATE : 13/11/2020		APPLICATION CLASS : 2		Transducer	Pre	Post	Difference	1 - Sensitive fine grained material	5 - Clayey SILT to silty CLAY	
CONE MODEL : Subtraction		RIG : CPT 022		Tip (MPa)	0.460	0.468	-0.008077	2 - Organic material	6 - Sandy SILT to clayey SILT	
CONE AREA : 15cm ²		OPERATOR : AL		Sleeve (kPa)	0.0918	0.0928	-0.001076	3 - CLAY	7 - Silty SAND to sandy SILT	
CONE AREA RATIO : 0.75		FRICTION REDUCER : None		u_2 (kPa)	-0.00656	0.00902	-0.01558	4 - Silty CLAY to CLAY	8 - SAND to silty SAND	
FILTER POSITION : u2		WEATHER : Overcast & Mild		Inclinometer 1 ($^\circ$)	-1.73	-1.38	-0.343481		9 - SAND	10 - Gravely SAND to SAND
FILTER TYPE : HDPE		GROUNDWATER DEPTH : Assumed for calculation purposes		Inclinometer 2 ($^\circ$)	-0.872	-0.954	0.082234		11 - Very stiff fine grained	12 - SAND to clayey SAND

PointID

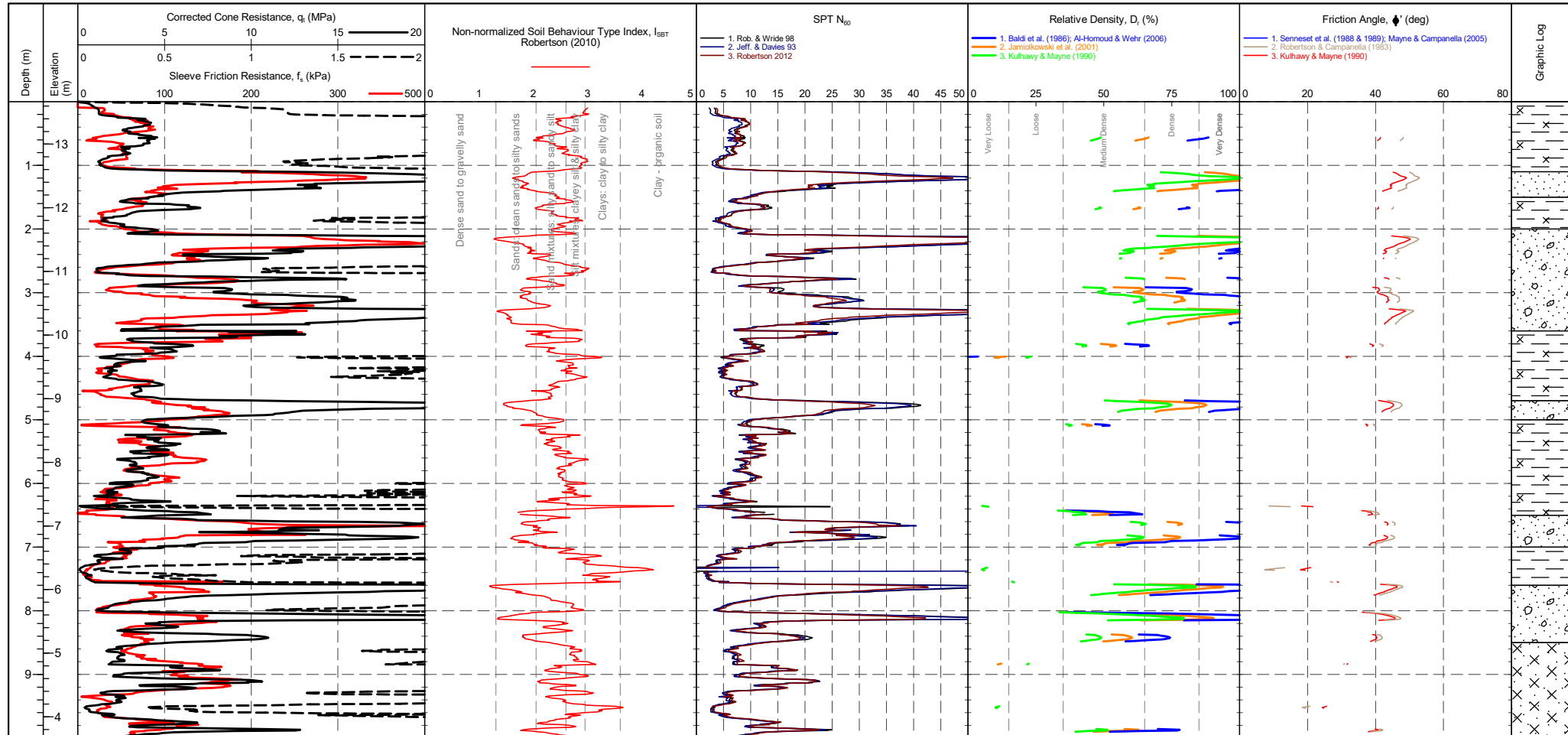
CPT108

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SBT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level
Dissipation Test

PointID

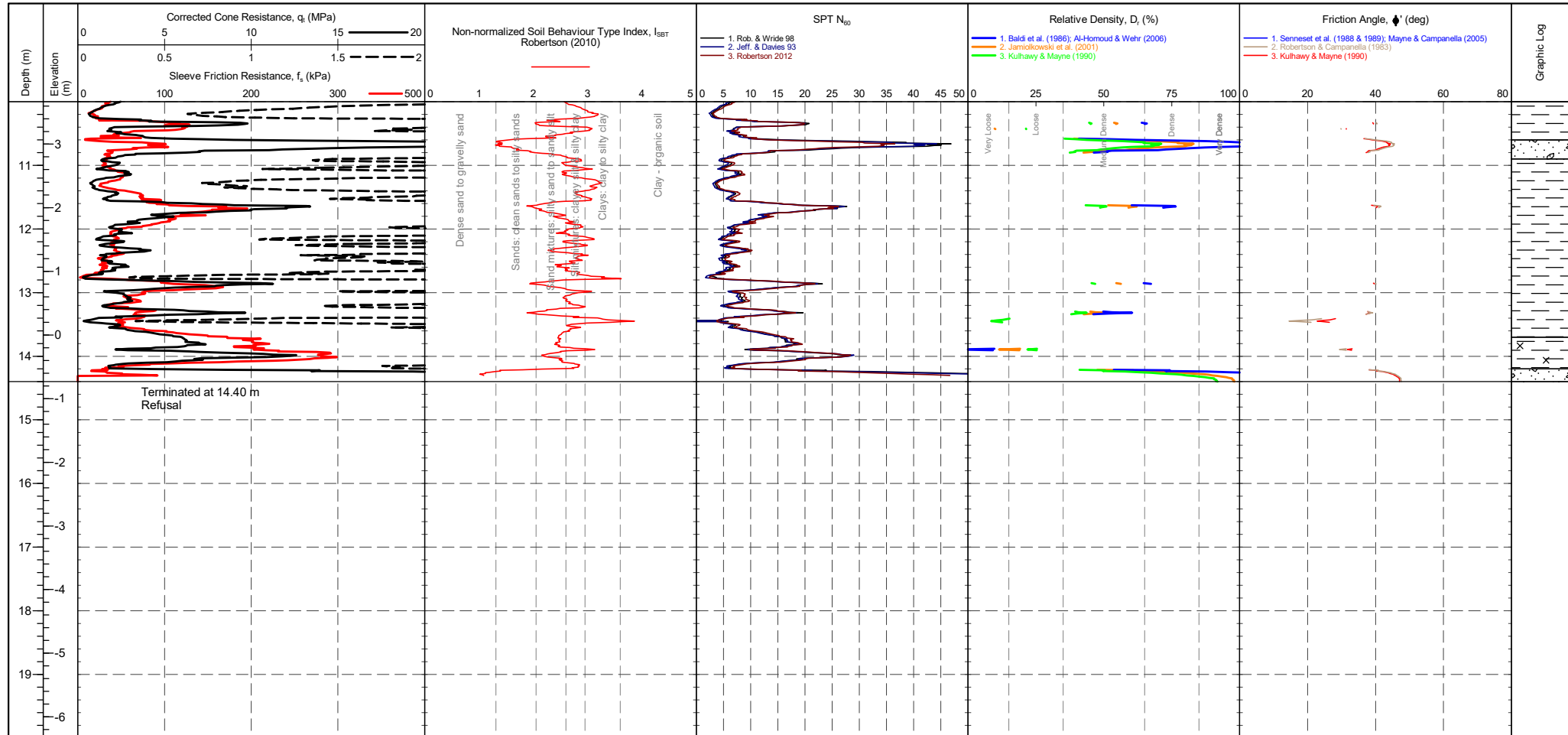
CPT108

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

GRANULAR SOILS (Sands & Gravels) Robertson et al. 1986 Zones 7-10 and Zone 12

Description	SPT Index, I_c	Description	SPT N value, NSPT	Description	Relative Density D_r (%)
Clays	2.95-3.60	Very Loose	0 - 4	Very Loose	0 - 15
Silt mixtures	2.60-2.95	Loose	4 - 10	Loose	15 - 35
Sand mixtures	2.05-2.60	Medium Dense	10 - 30	Medium Dense	35 - 65
Sands	1.31-2.05	Dense	30 - 50	Dense	65 - 85
Gravelly sand	<1.31	Very Dense	>50	Very Dense	>85

Groundwater Level

Dissipation Test

PointID

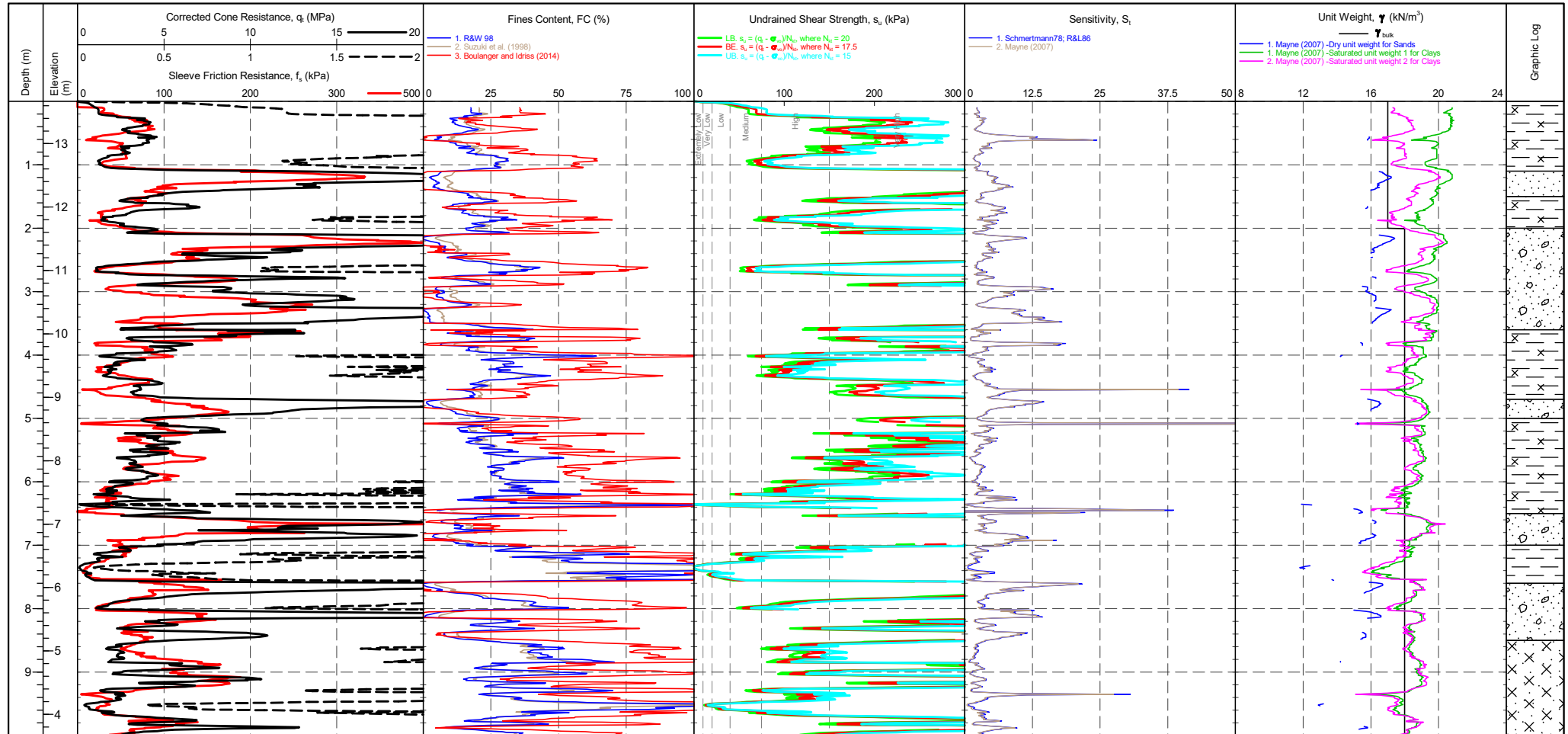
CPT108

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

Transducer Pre Post Difference
Tip (MPa) 0.460 0.468 -0.008077
Sleeve (kPa) 0.0918 0.0928 -0.001076
u2 (kPa) -0.00656 0.00902 -0.01558
Inclinometer 1 (°) -1.73 -1.38 -0.343481
Inclinometer 2 (°) -0.872 -0.954 0.082234

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	su (kPa)	Term based on measurement	su (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

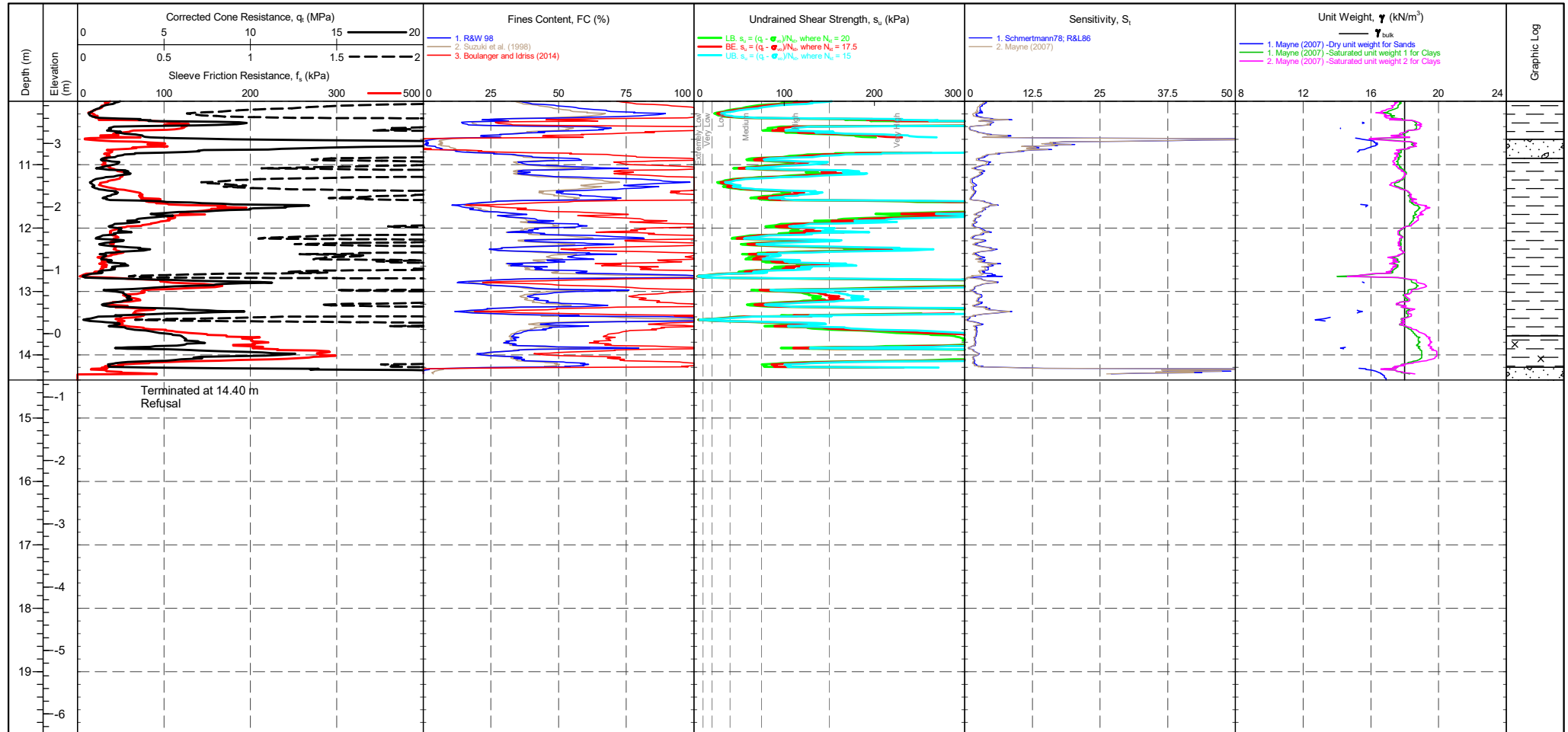
CPT108

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

COHESIVE SOILS (Clays & Silts) Robertson et al. 1986 Zones 1-6 and Zone 11

Term based on measurement	s_u (kPa)	Term based on measurement	s_u (kPa)
Extremely low strength	<10	Medium strength	40-75
Very low strength	10-20	High strength	75-150
Low strength	20-40	Very high strength	150-300
		Extremely high strength	>300

Groundwater Level
Dissipation Test

PointID

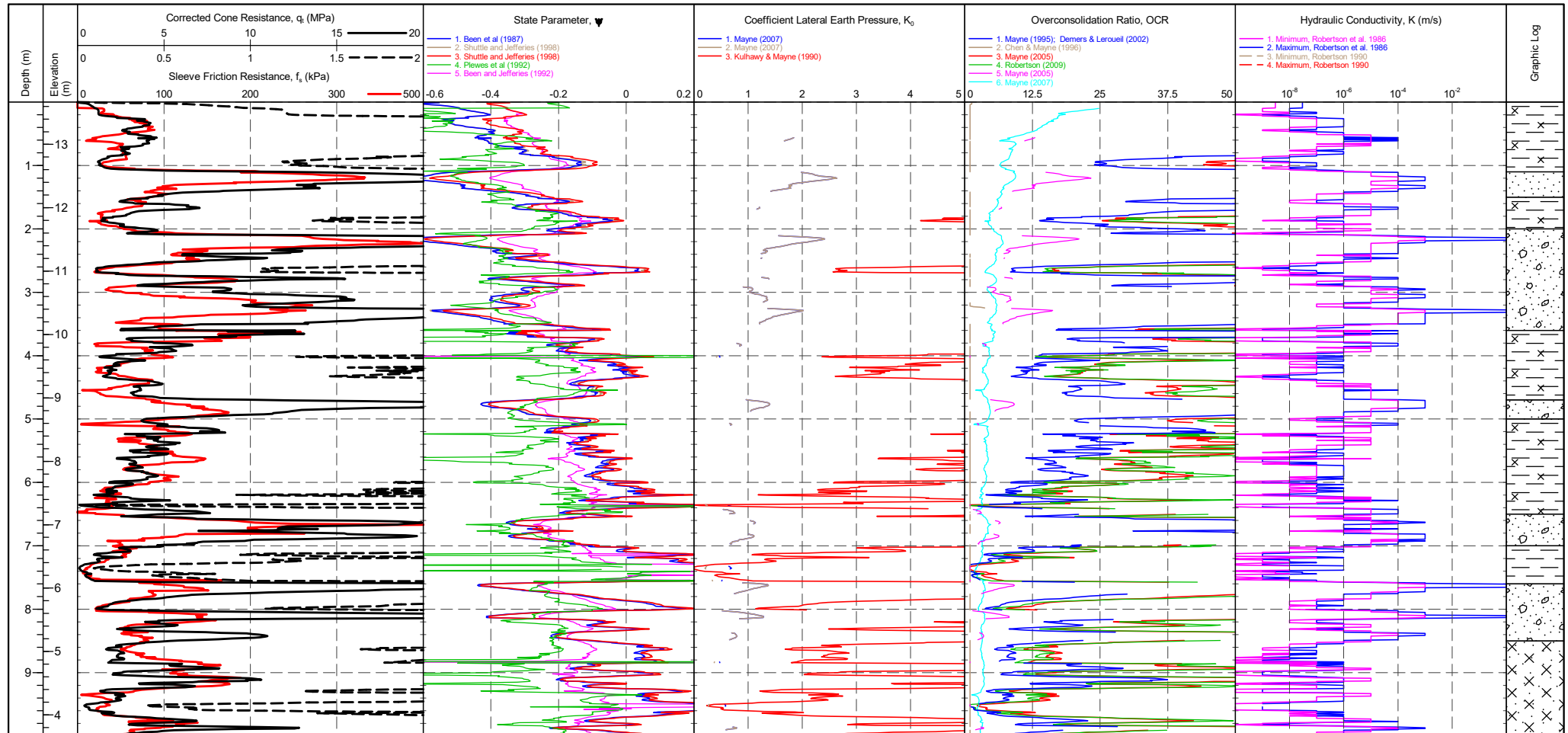
CPT108

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

Groundwater Level
Dissipation Test

PointID

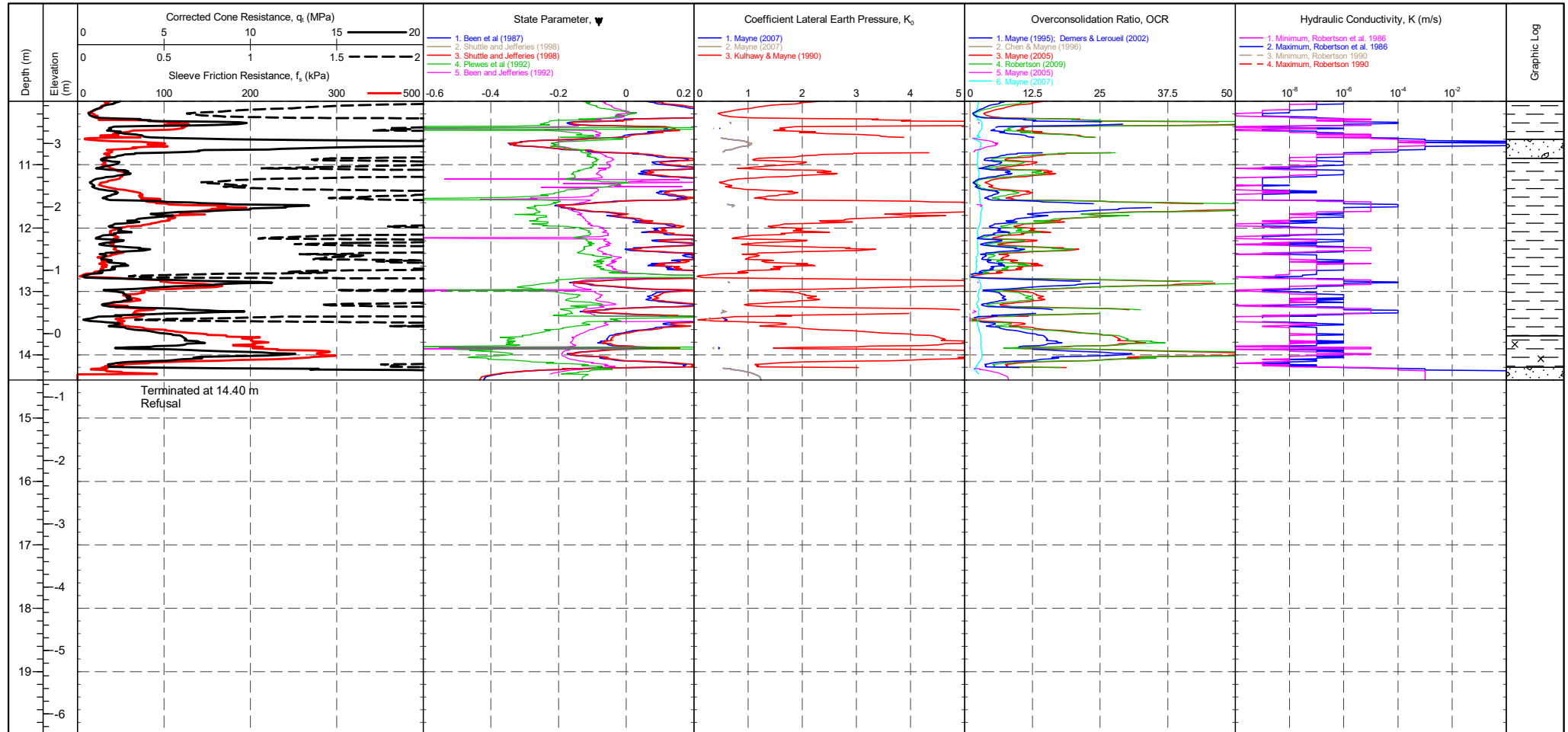
CPT108

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

Groundwater Level
Dissipation Test

PointID

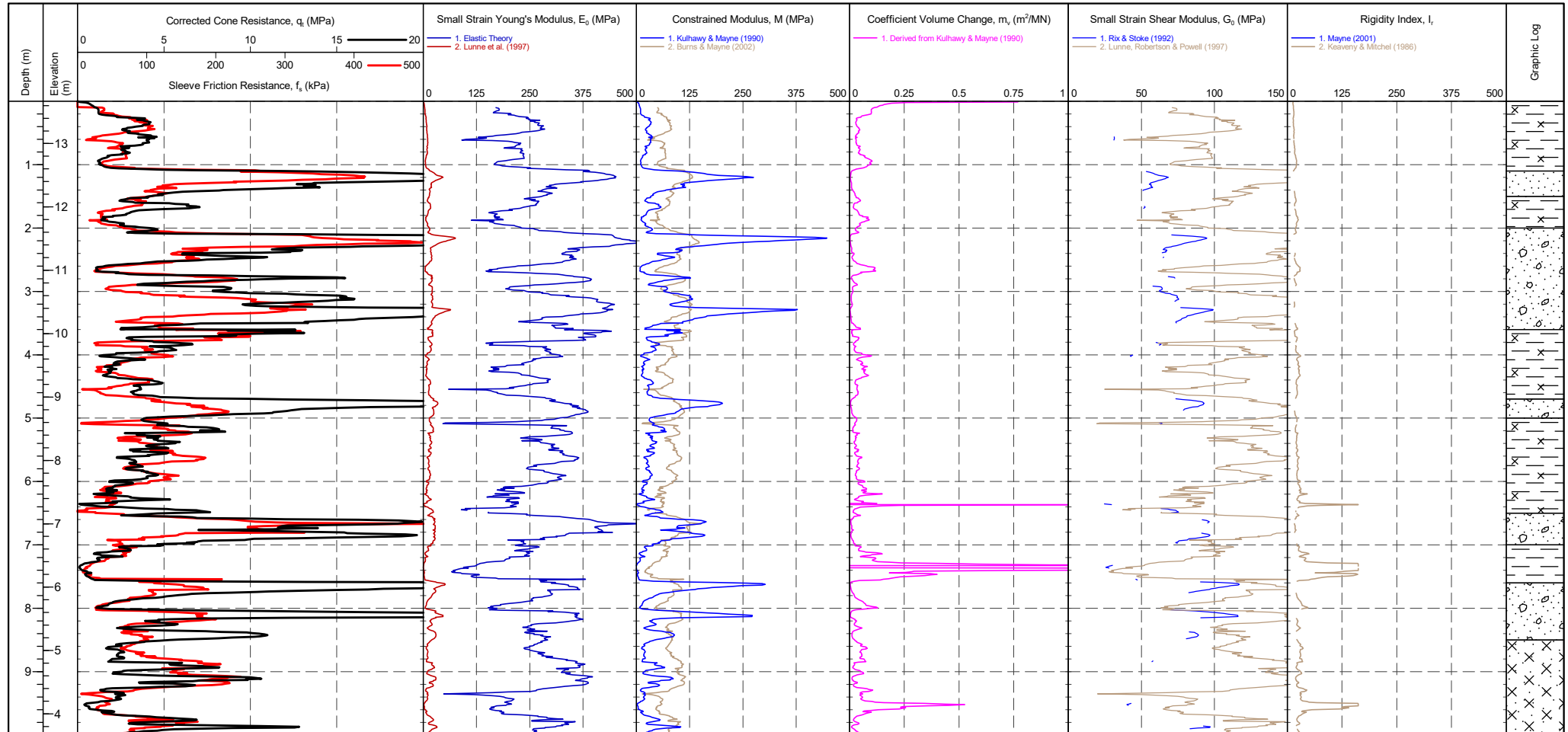
CPT108

CLIENT : Delta Simons
PROJECT: Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 1 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

Groundwater Level
Dissipation Test

PointID

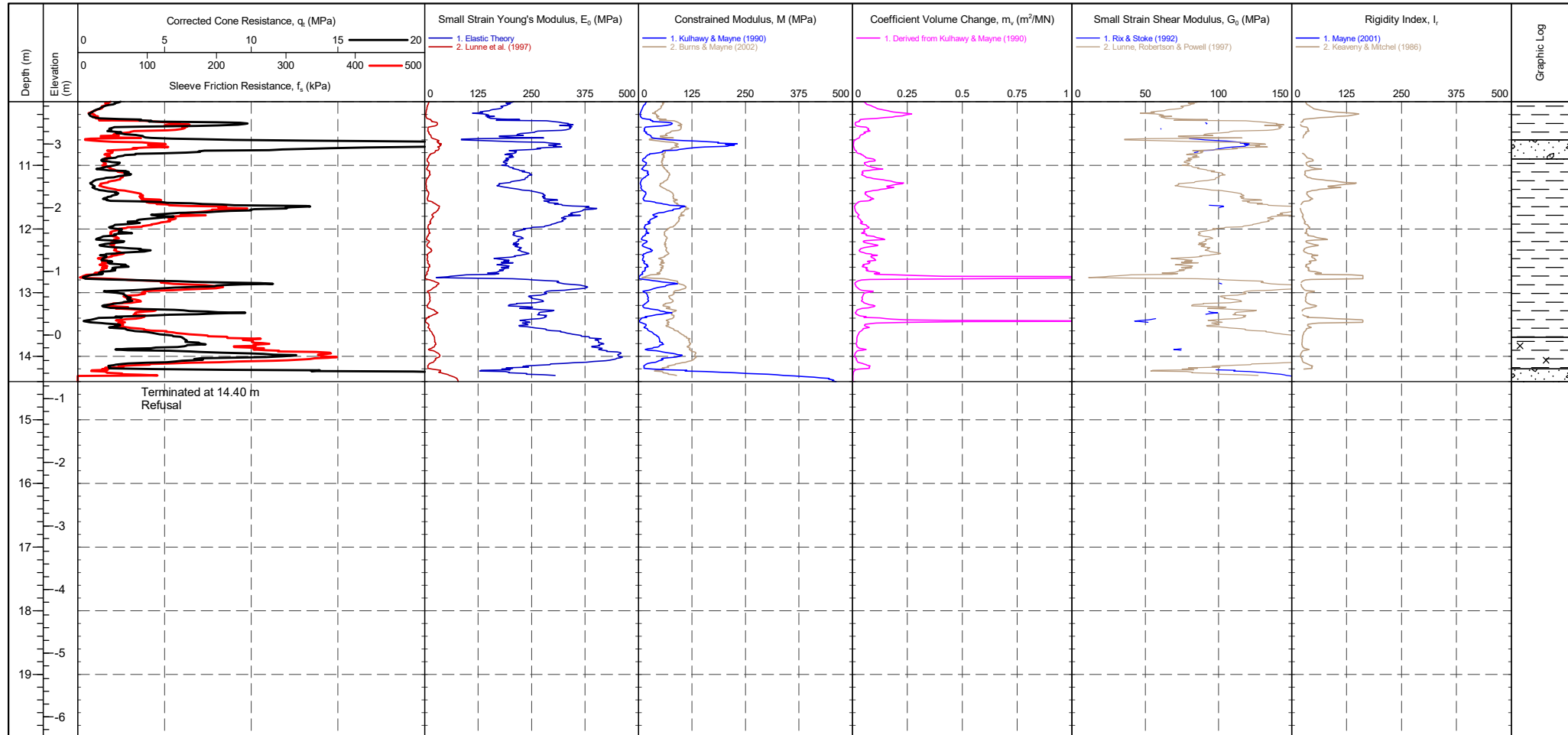
CPT108

CLIENT : Delta Simons
PROJECT : Brockhampton
LOCATION : Brockhampton
PROJECT No. : 1210220

EASTING : 470233.7 m
NORTHING : 105707.5 m
ELEVATION : 13.67 m OD
CHECKED BY : LD
TERMINATION REASON : Refusal

Remark:
Test refused on total pressure.

SHEET : 2 OF 2
STATUS : Final
TEST DATE : 30/03/2021
PLOT DATE : 25/05/2021
METHOD : ISO 22476-1:2012



CONE ID : DP15-CFPTxy.71069
CONE MODEL : Subtraction
CONE AREA : 15cm²
CONE AREA RATIO : 0.75
FILTER POSITION : u2
FILTER TYPE : HDPE

TEST TYPE : TE2
APPLICATION CLASS : 2
RIG : CPT 022
OPERATOR : AL
FRICTION REDUCER : None
WEATHER : Overcast & Mild

CPTU ZERO VALUES

Transducer	Pre	Post	Difference
Tip (MPa)	0.460	0.468	-0.008077
Sleeve (kPa)	0.0918	0.0928	-0.001076
u2 (kPa)	-0.00656	0.00902	-0.01558
Inclinometer 1 (°)	-1.73	-1.38	-0.343481
Inclinometer 2 (°)	-0.872	-0.954	0.082234

Groundwater Level
Dissipation Test