California High-Speed Train Project

Request for Proposal for Design-Build Services

RFP No.: HSR 11-16
Geotechnical Data Report
Clinton Ave to East American Ave

Appendix C
Cone Penetration Test Records

Prepared for

CALIFORNIA High-Speed Rail Authority

Appendix C
Cone Penetration Test Records

Table C-1
Summary of CPT Locations, Depths, and In Situ Testing

CPT ID	Elevation (NAVD88) (ft)	Northing (NAD83) (ft)	Easting (NAD83) (ft)	Hand-Auger/Pre-Drill Depths (ft)	Measured Depth to (ft)	Total Depth (ft)	In Situ Testing	
							SCPT[1]	PPDT[2]
S0001CPT	2,165,095	6,316,493	296.60	0 to 5	-	80.2		✓
S0002CPT	2,164,037	6,317,351	293.70	0 to 5; 6 to 9	-	50.0		
S0003CPT	2,162,577	6,318,313	287.50	0 to 5	-	80.2		
S0004CPT	2,162,522	6,318,980	289.20	0 to 4.5	-	80.7		
S0005CPT	2,159,881	6,321,692	292.50	0 to 5	-	80.0		✓
S0006CPT	2,159,855	6,320,967	295.10	0 to 15	-	80.1		✓
S0006ACPT	2,158,797	6,322,193	290.10	0 to 5	-	52.5		
S0007CPT	2,157,330	6,323,012	287.10	0 to 5	-	76.4		
S0008CPT	2,156,854	6,324,017	285.30	0 to 5.5; 29 to 36	-	100.2		✓
S0009CPT	2,157,307	6,323,848	286.80	0 to 4.5	-	105.8	✓	✓
S0010CPT	2,156,609	6,324,306	283.40	0 to 4	-	59.2		
S0011CPT	2,156,092	6,324,747	284.40	0 to 6	-	66.6		
S0012CPT	2,155,038	6,324,548	288.90	0 to 4.5	-	102.7	✓	✓
S0013CPT	2,155,267	6,325,407	285.10	0 to 4.5; 9 to 11; 14 to 24	-	101.2		
S0014CPT	2,154,687	6,325,494	287.60	0 to 5	-	52.2		
S0015CPT	2,153,499	6,326,261	286.10	0 to 5	-	114.7		
S0016CPT	2,152,083	6,327,476	285.40	0 to 5	-	67.3		✓
S0017CPT	2,151,787	6,327,731	286.30	0 to 5	-	80.4		
S0018CPT	2,150,922	6,328,346	286.00	0 to 5	-	80.4		
S0019CPT	2,150,638	6,329,493	289.10	0 to 5	-	81.5	✓	
S0020CPT	2,150,349	6,329,144	289.00	0 to 5	-	80.1		
S0021CPT	2,148,902	6,330,415	292.60	0 to 5	-	80.4		
S0022CPT	2,149,159	6,330,712	293.00	0 to 5	-	80.1		✓
S0023CPT	2,165,095	6,316,493	285.00	0 to 5	94.5	150.6		✓
S0024CPT	2,164,037	6,317,351	284.70	0 to 5	95.0	103.8	✓	✓
S0025CPT	2,162,577	6,318,313	284.70	0 to 5	-	150.6		✓
S0026CPT	2,162,522	6,318,980	283.80	0 to 5	-	64.0		
S0027CPT	2,159,881	6,321,692	286.60	0 to 5	-	80.4		
S0028CPT	2,159,855	6,320,967	286.80	0 to 5	-	45.1		
S0029CPT	2,158,797	6,322,193	287.90	0 to 5	-	80.0		✓
S0030CPT	2,157,330	6,323,012	288.90	0 to 5	-	64.1	✓	
S0031CPT	2,156,854	6,324,017	289.30	0 to 5.5	-	150.4		✓
S0032CPT	2,157,307	6,323,848	290.10	0 to 4.5	-	90.7		✓
S0033CPT	2,156,609	6,324,306	290.50	0 to 15	-	75.1	✓	
S0034CPT	2,156,092	6,324,747	297.00	0 to 5	-	84.0		
S0034ACPT	2,155,038	6,324,548	303.70	0 to 5	-	95.1	✓	✓

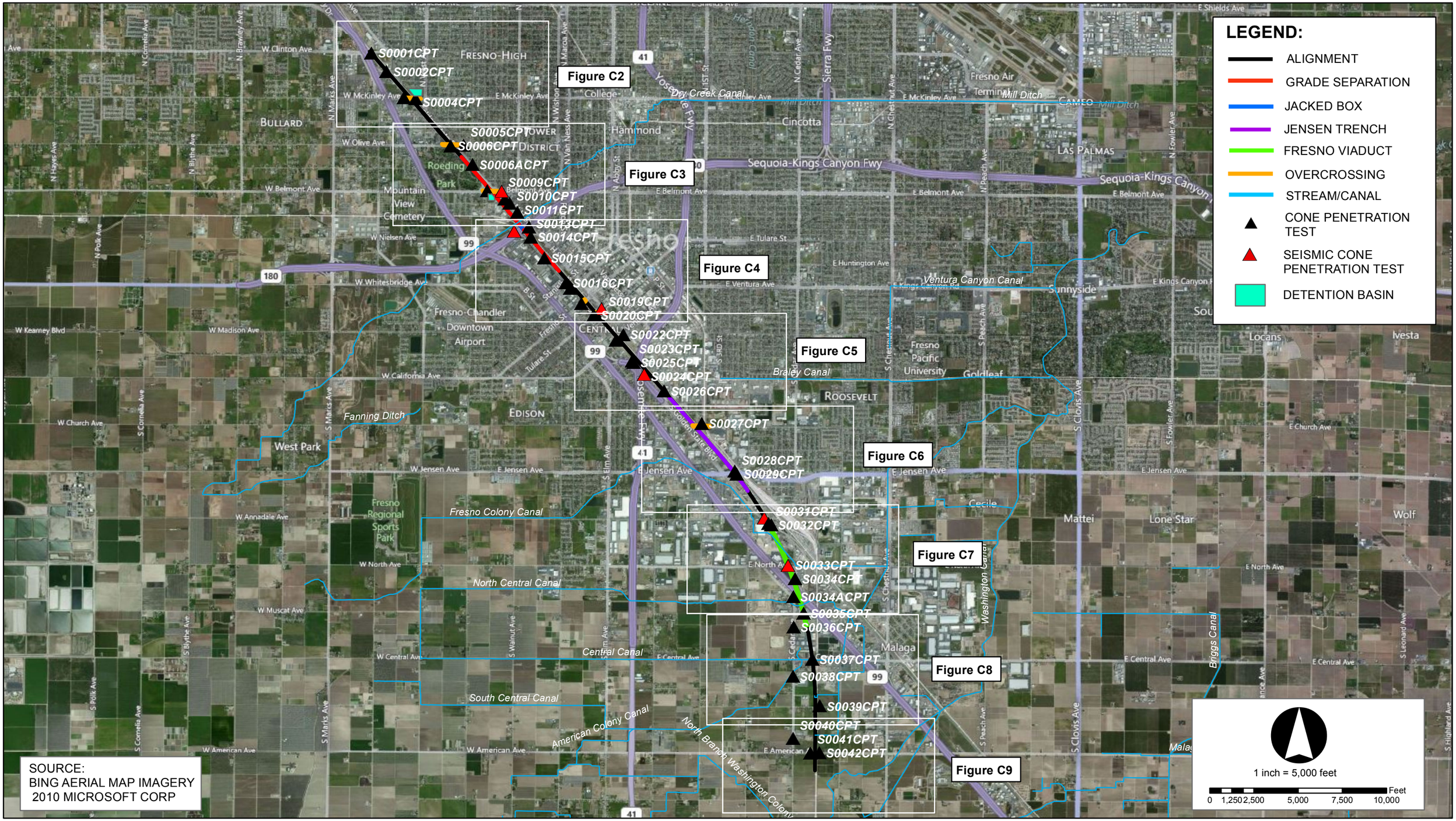
Table C-1

Summary of CPT Locations, Depths, and In Situ Testing

CPT ID	Elevation (NAVD88) (ft)	Northing (NAD83) (ft)	Easting (NAD83) (ft)	Hand-Auger/Pre-Drill Depths (ft)	Measured Depth to (ft)	Total Depth (ft)	In Situ Testing	
							SCPT[1]	PPDT[2]
S0035CPT	2,155,267	6,325,407	289.20	0 to 5	61.0	100.2		✓
S0036CPT	2,154,687	6,325,494	288.00	0 to 5; 13 to 22	96.0	100.2		✓
S0037CPT	2,153,499	6,326,261	289.30	0 to 5	31.0	80.0		✓
S0038CPT	2,152,083	6,327,476	287.30	0 to 5	-	50.2		
S0039CPT	2,151,787	6,327,731	290.40	0 to 5	-	50.3		
S0040CPT	2,150,922	6,328,346	289.20	0 to 5	-	55.6		
S0041CPT	2,150,638	6,329,493	293.10	0 to 5	60.9	80.2		✓
S0042CPT	2,150,349	6,329,144	291.50	0 to 5	66.0	80.0		

[1] SCPT: seismic cone penetration test

[2] PPDT: pore pressure dissipation test



SOURCE:
BING AERIAL MAP IMAGERY
2010 MICROSOFT CORP

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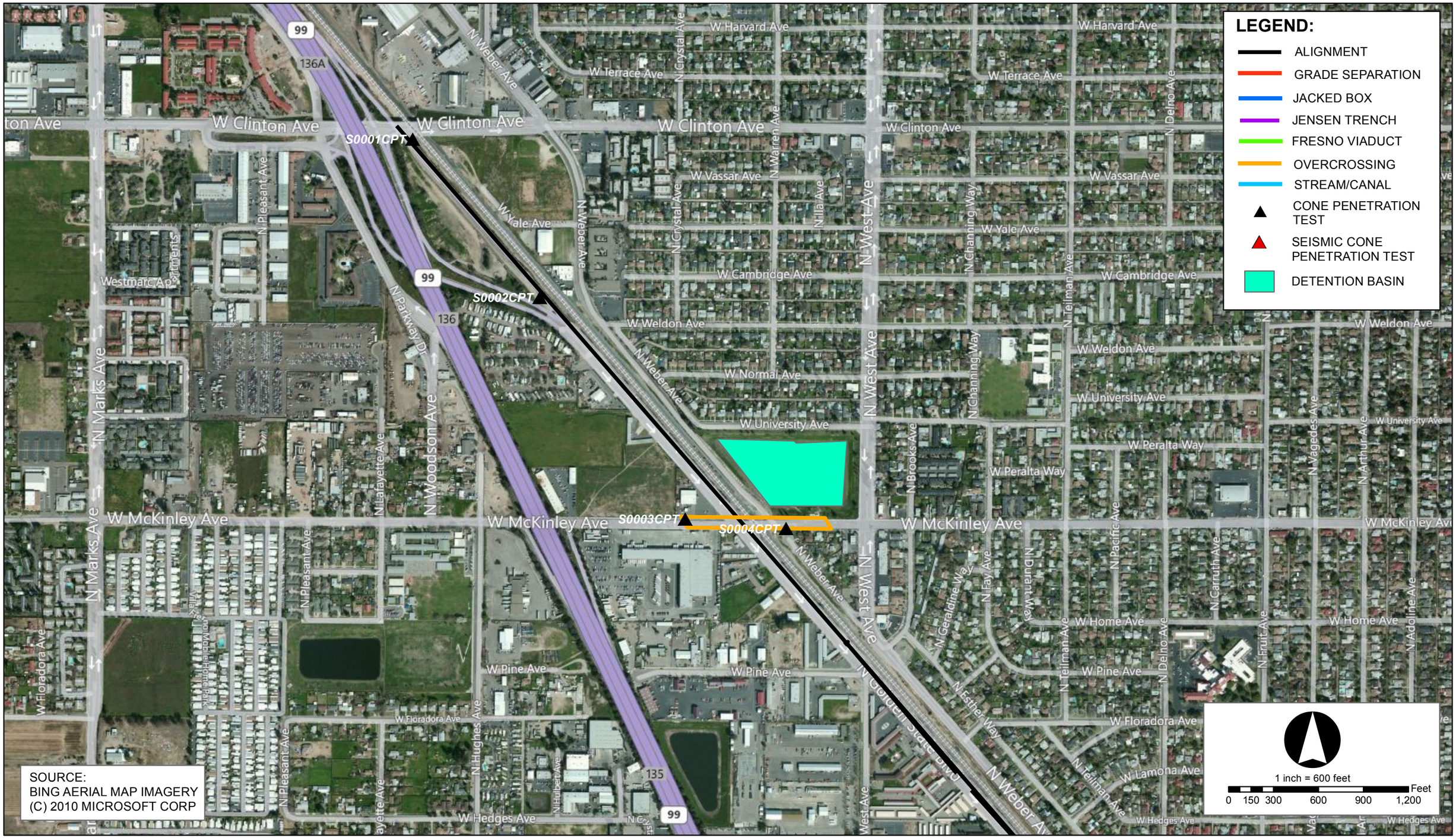
High-Speed Rail Authority

CONE PENETRATION TEST INDEX SHEET
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C1
February 2012



SOURCE:
BING AERIAL MAP IMAGERY
(C) 2010 MICROSOFT CORP

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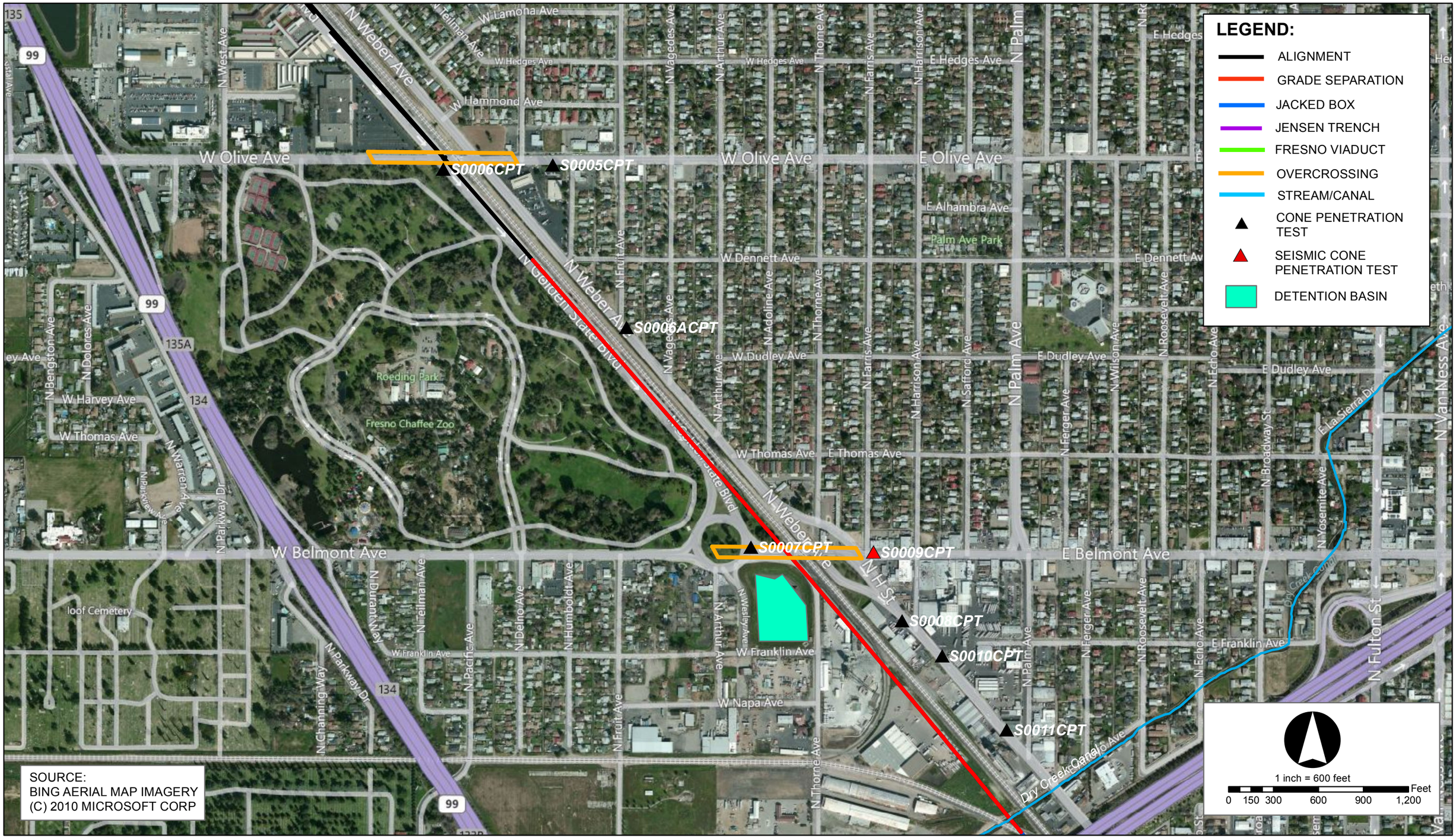
CALIFORNIA
High-Speed Rail Authority

CONE PENETRATION TEST INDEX SHEET
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C2
February 2012



SOURCE:
BING AERIAL MAP IMAGERY
(C) 2010 MICROSOFT CORP

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High-Speed Rail Authority

CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
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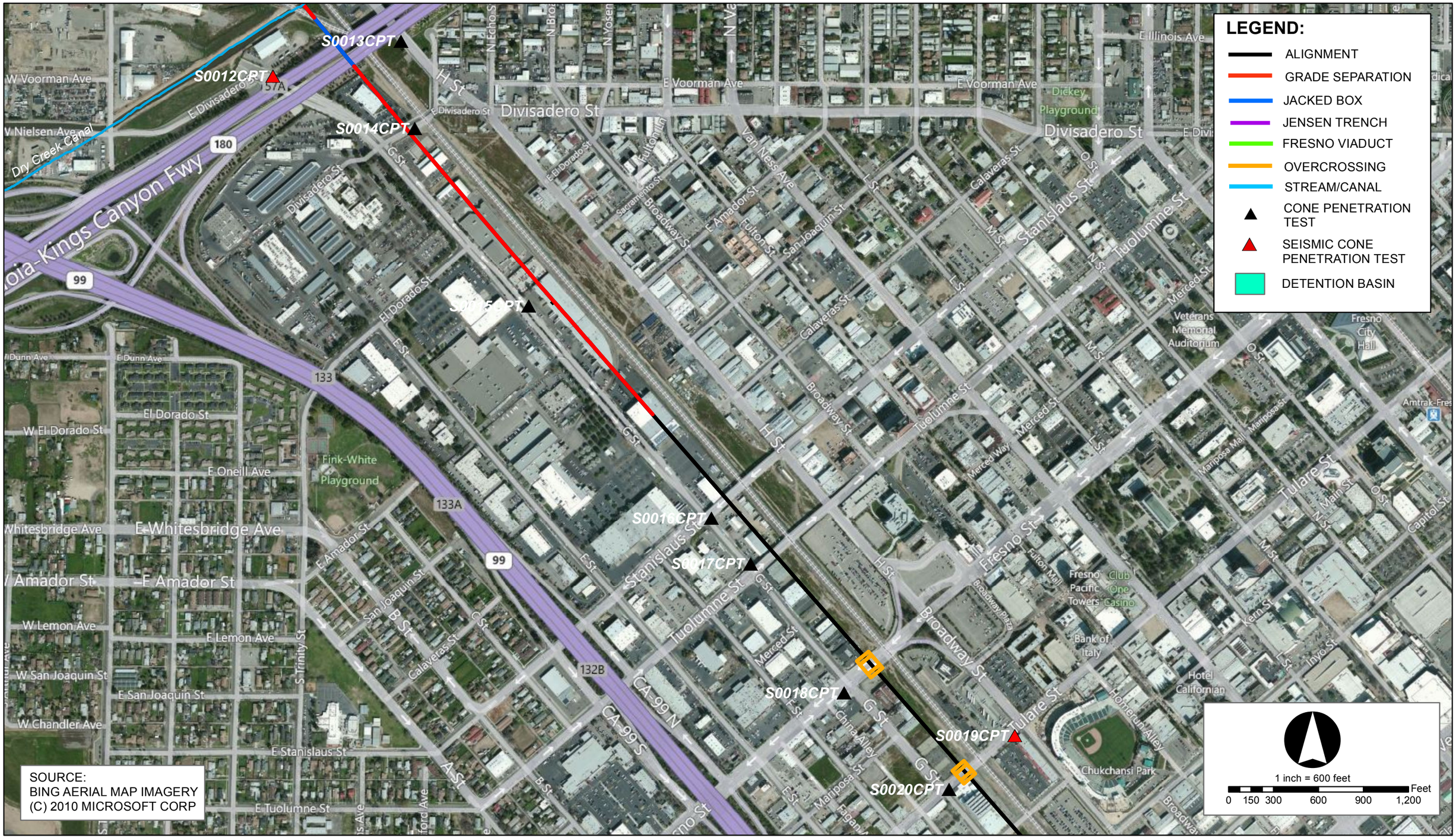
Figure No. C3
February 2012



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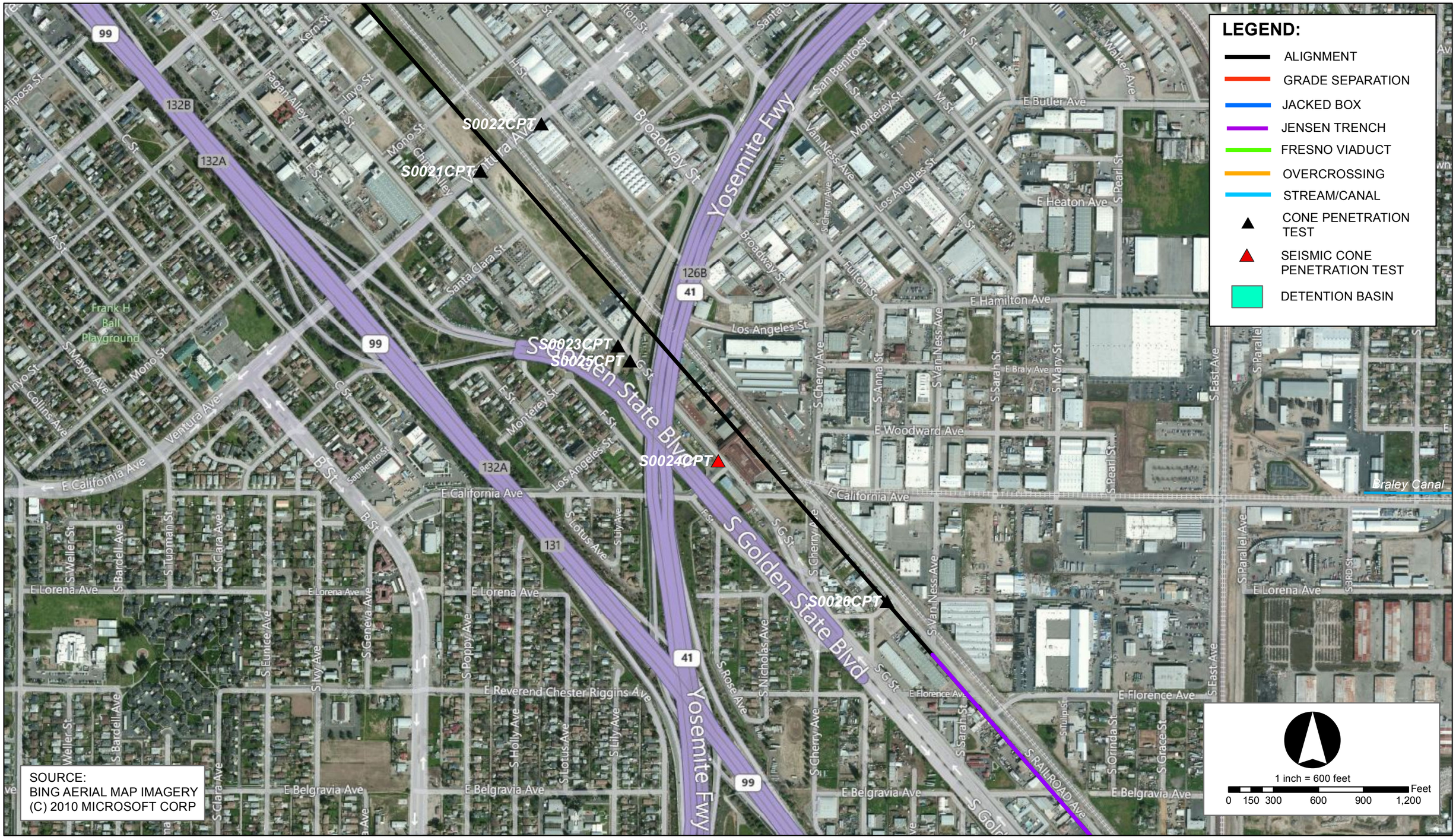
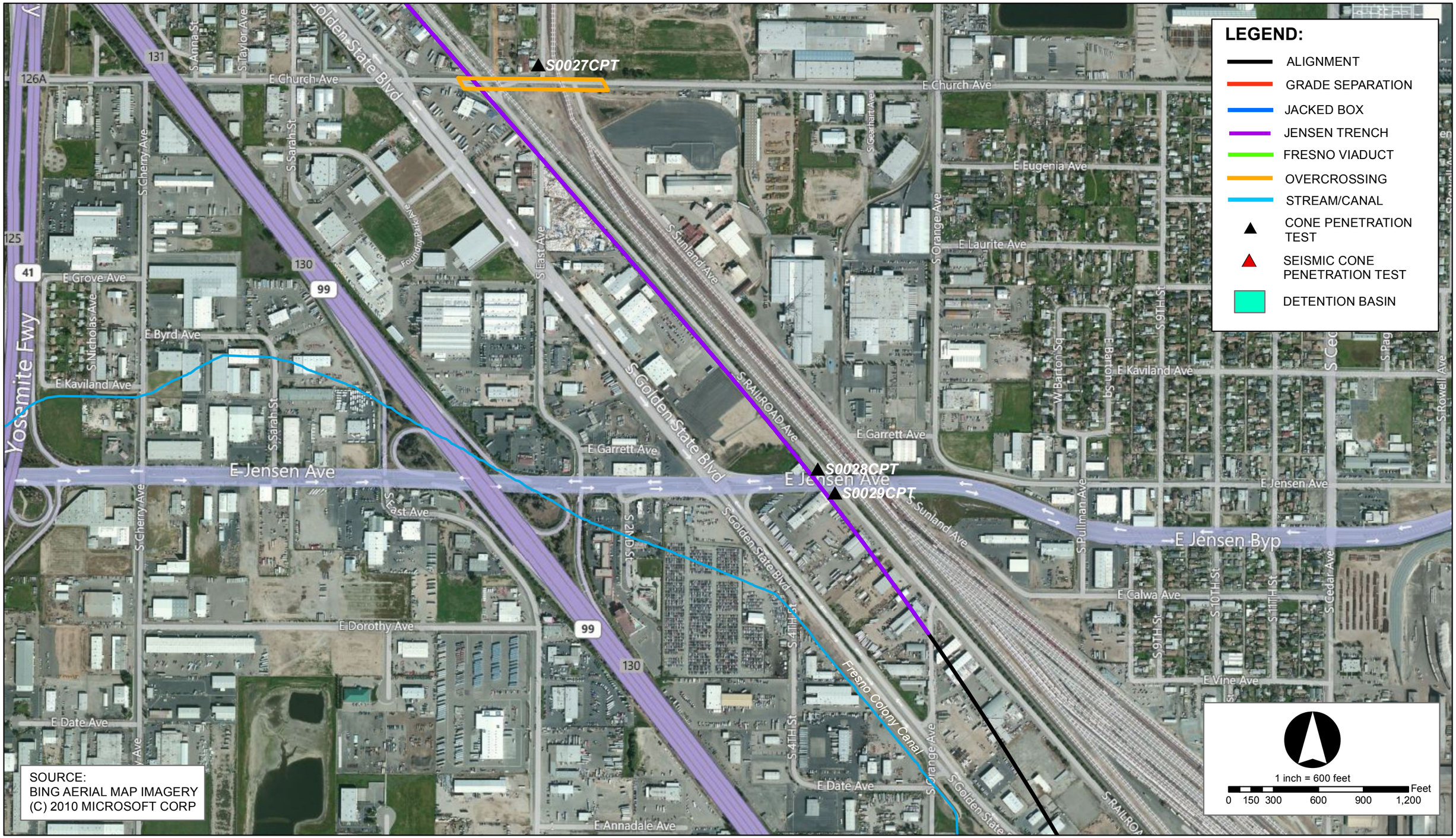
CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C4
February 2012



CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C5
February 2012



SOURCE:
BING AERIAL MAP IMAGERY
(C) 2010 MICROSOFT CORP

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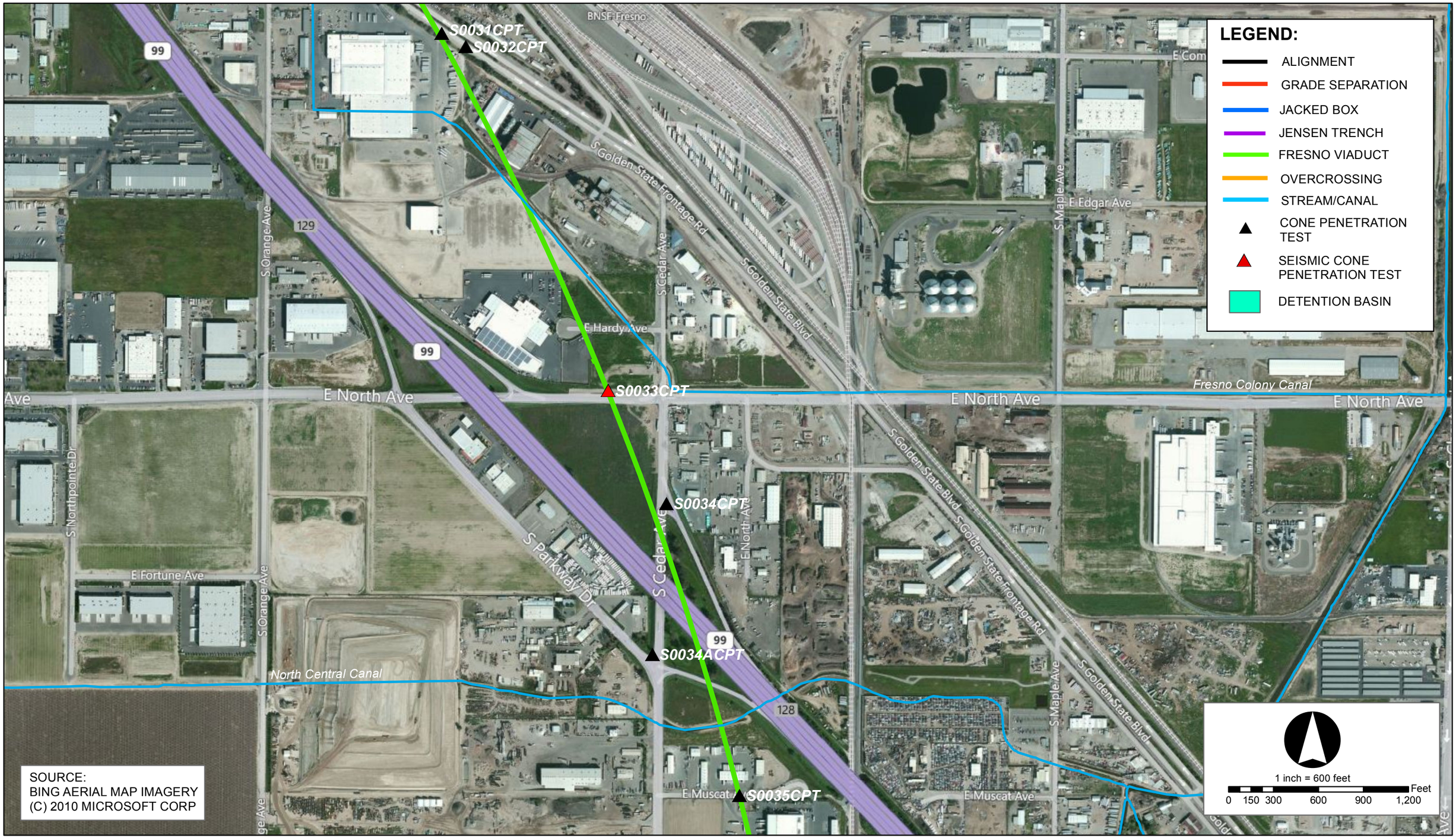
CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C6
February 2012



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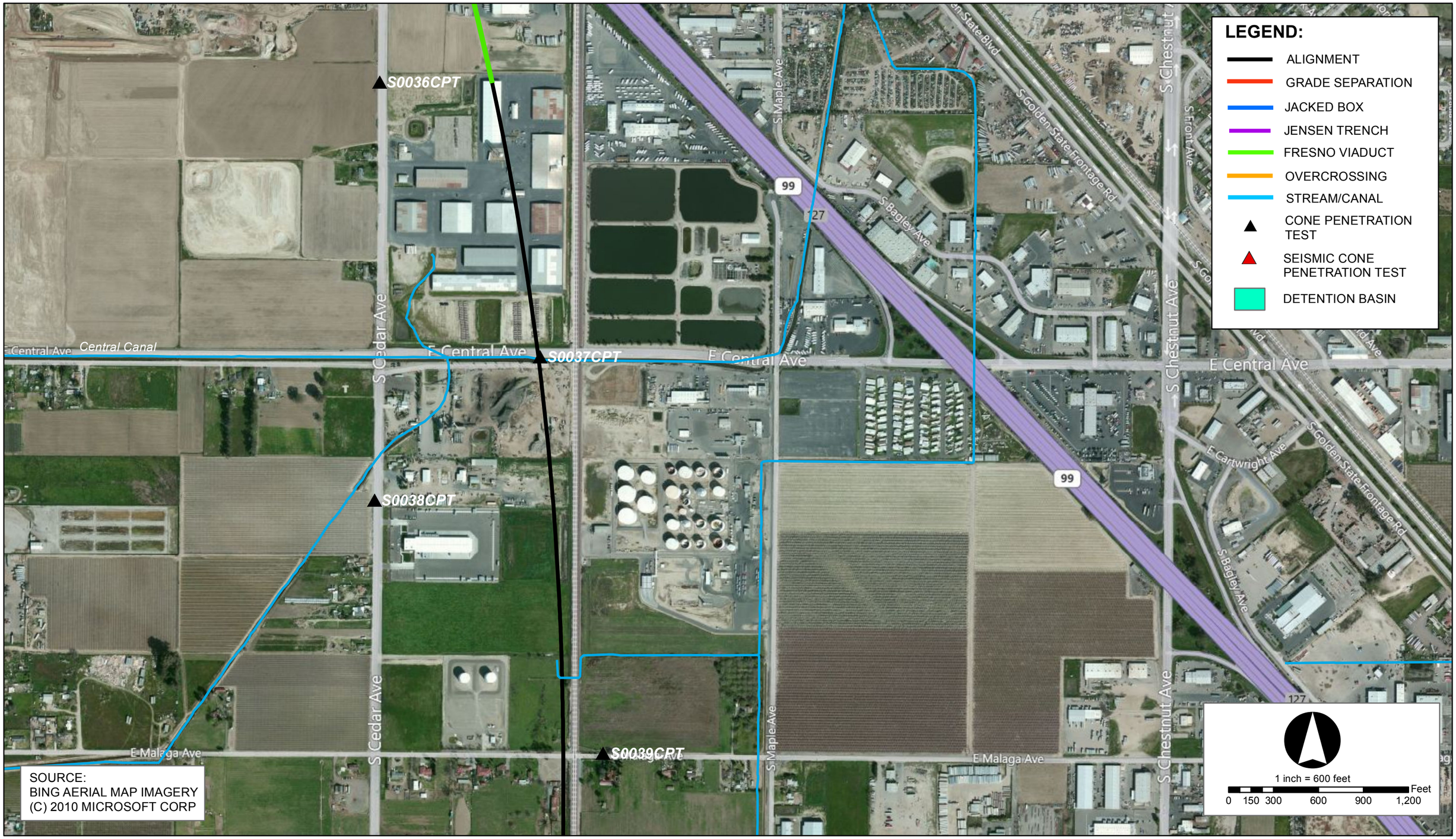
CALIFORNIA High-Speed Rail Authority

CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C7
February 2012



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CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA High-Speed Rail Authority

CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

Figure No. C8
February 2012

SOURCE:
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(C) 2010 MICROSOFT CORP

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CALIFORNIA
High-Speed Rail Authority

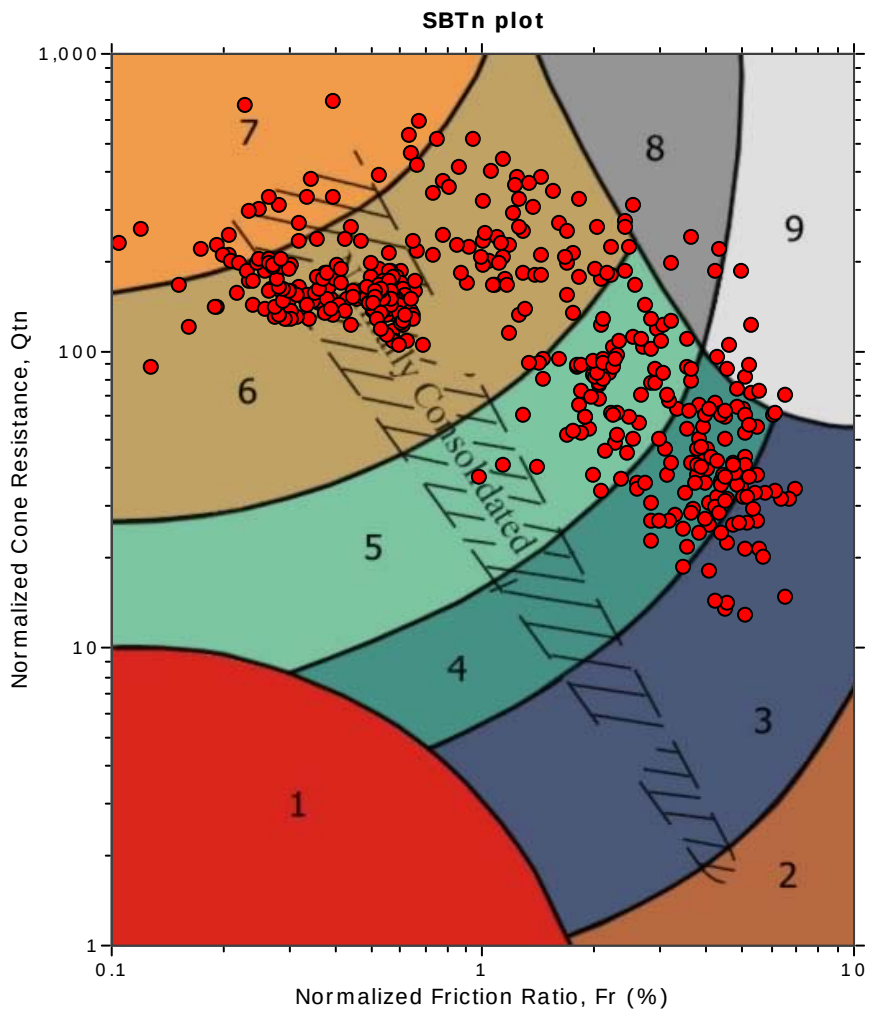
CONE PENETRATION TEST LOCATION MAP
California High Speed Train
Fresno to Bakersfield
Geotechnical Data Report - Package 1

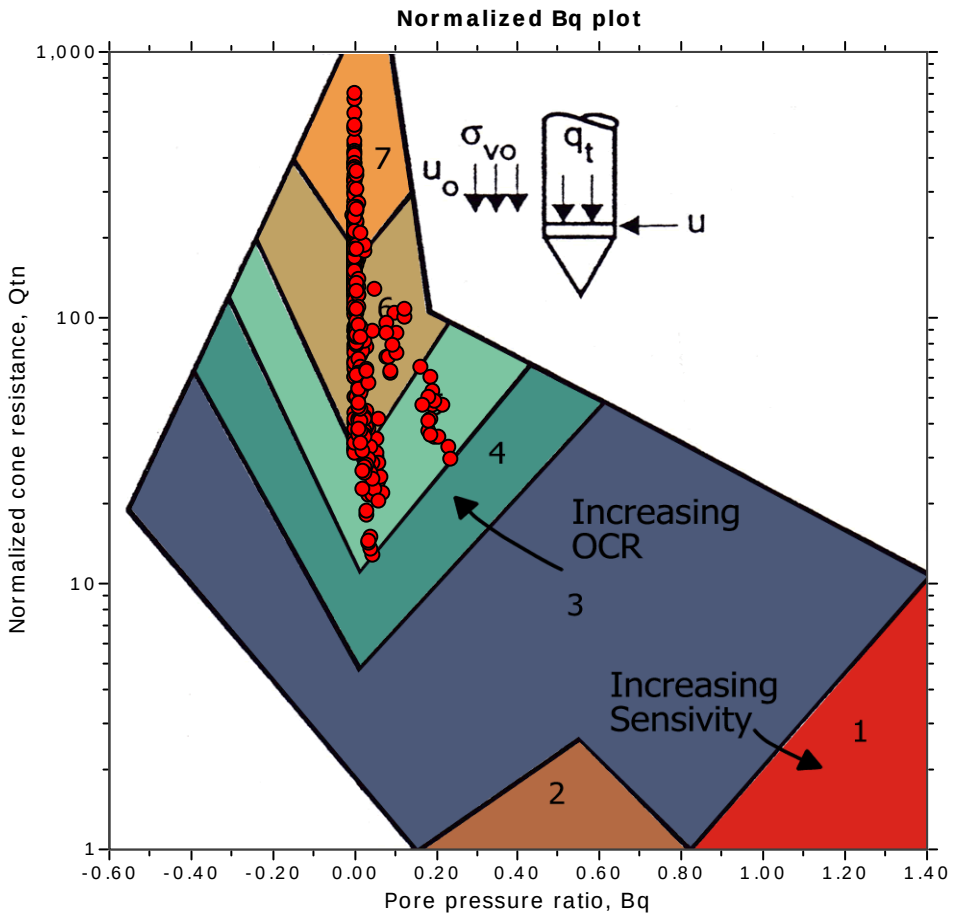
Figure No. C9
February 2012

CPT: S0001CPT
Total depth: 80.22 ft
Surface Elevation: 296.62 ft
Coords: X:6316493.00, Y:2165094.75
Cone Type: GDC-27
Cone Operator: T.Patterson

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0001CPT

Total depth: 80.22 ft

Surface Elevation: 296.62 ft

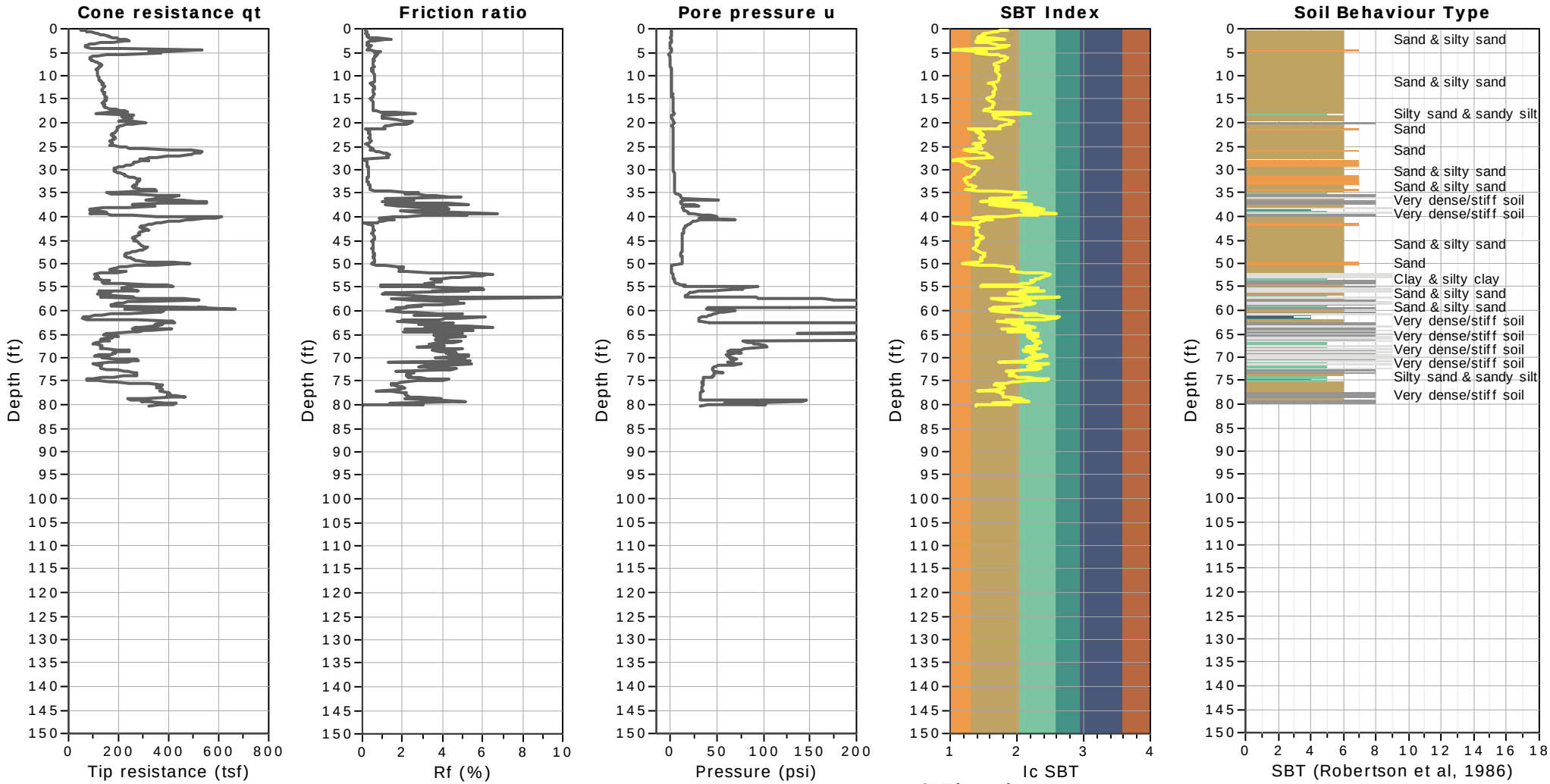
Coords: X:6316493.00, Y:2165094.75

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0001CPT

Total depth: 80.22 ft

Surface Elevation: 296.62 ft

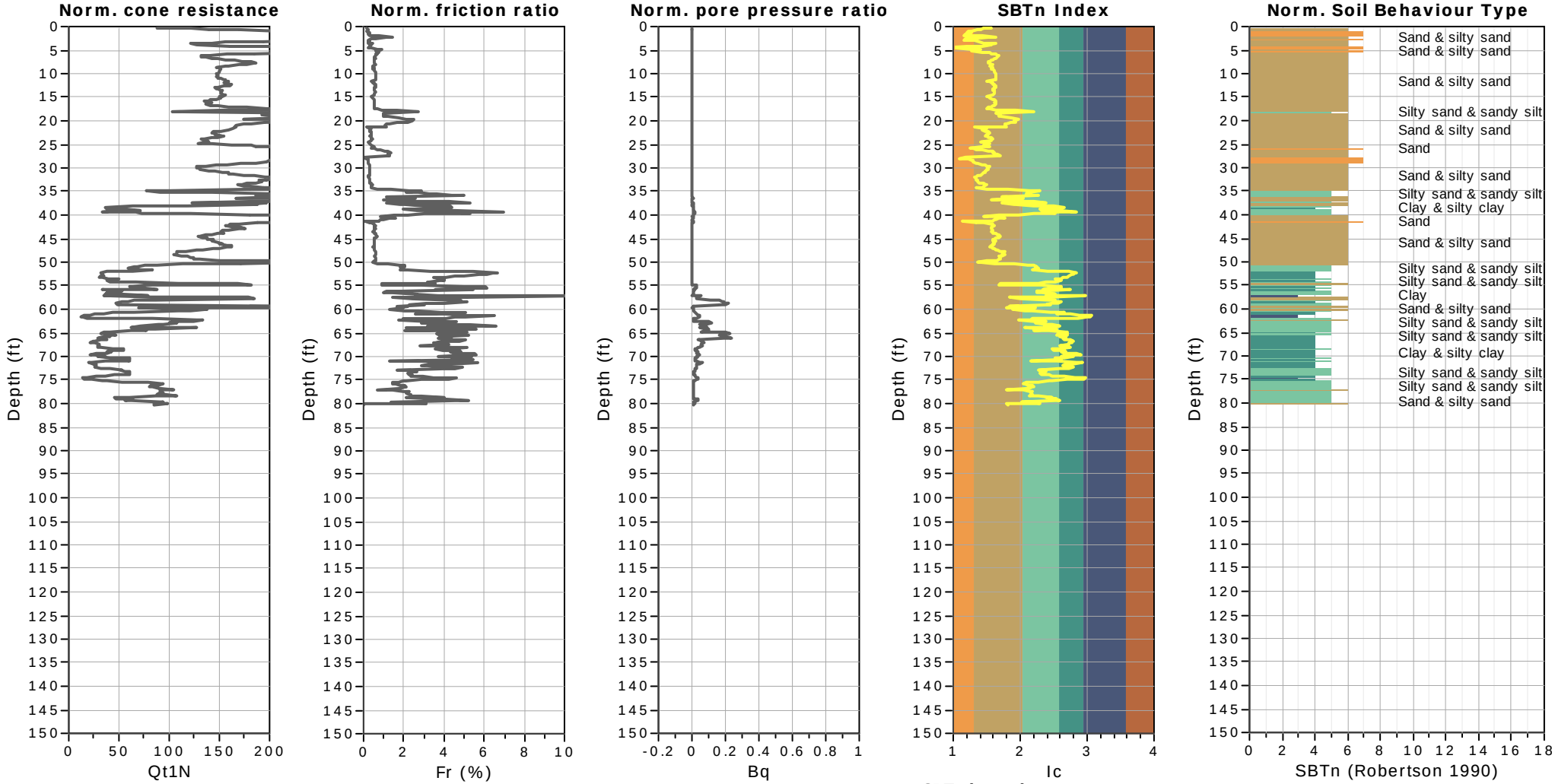
Coords: X:6316493.00, Y:2165094.75

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

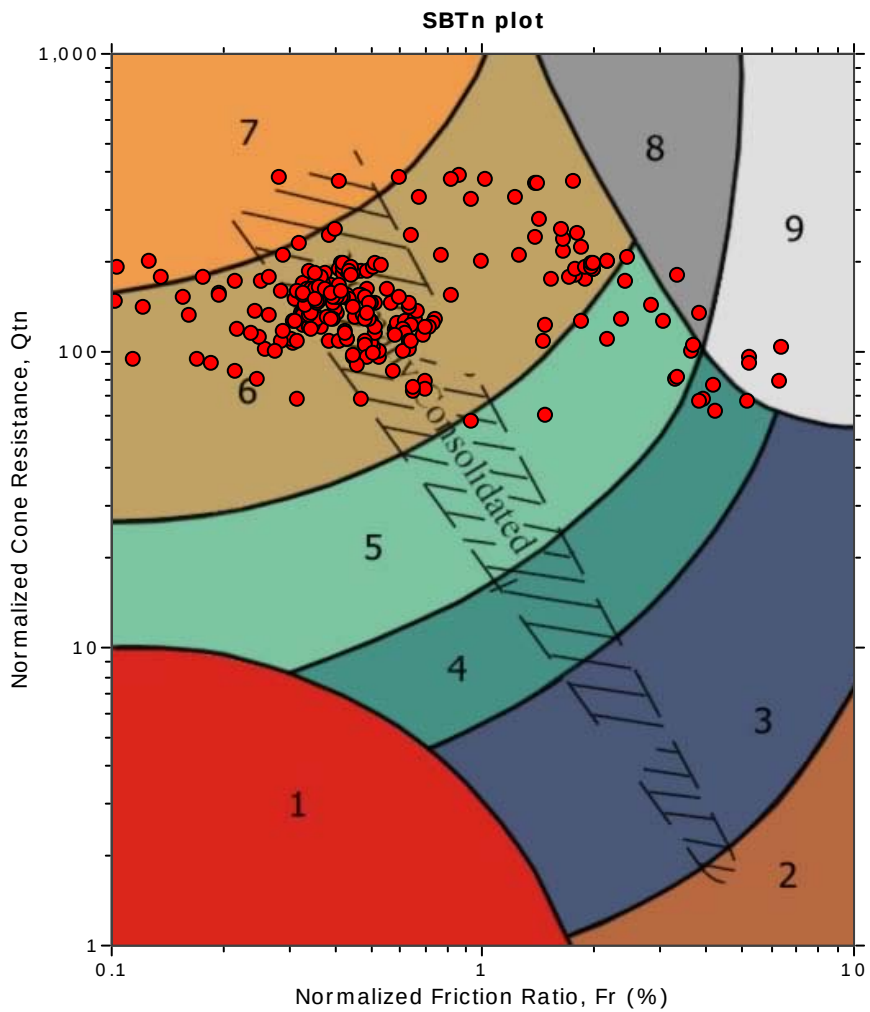
Location: Fresno, CA

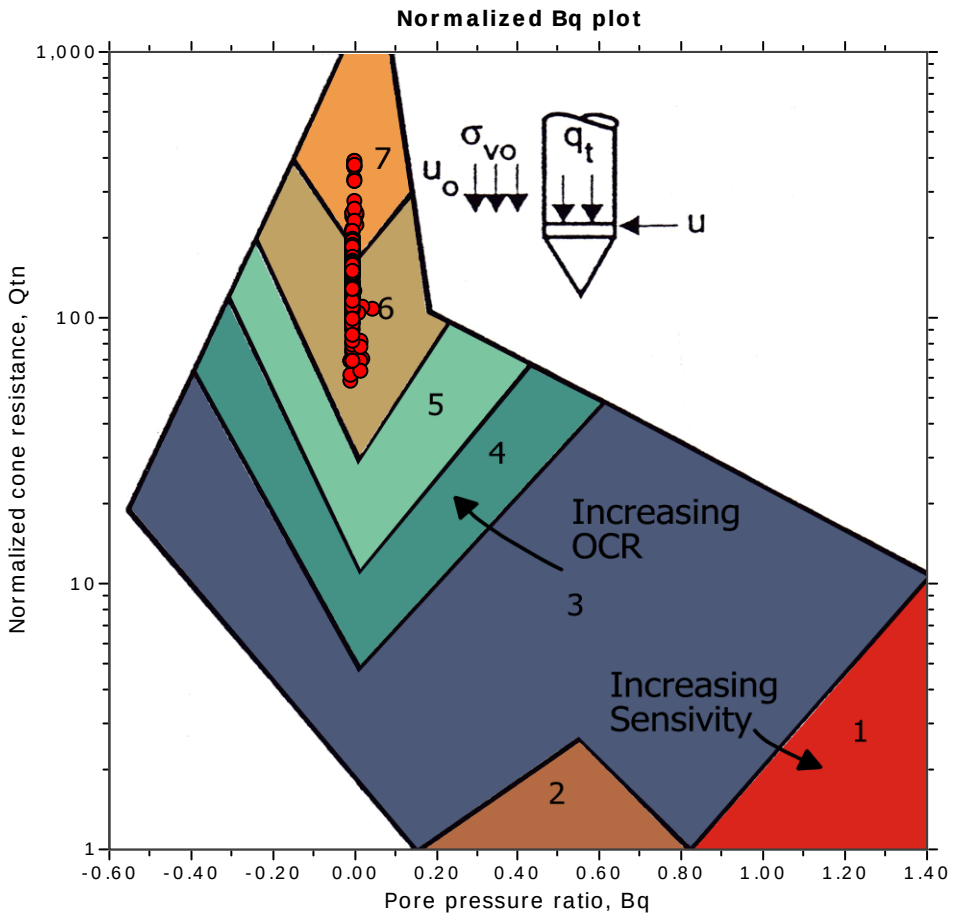


CPT: S0002CPT
Total depth: 50.03 ft
Surface Elevation: 293.72 ft
Coords: X:6317351.00, Y:2164037.00
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0002CPT

Total depth: 50.03 ft

Surface Elevation: 293.72 ft

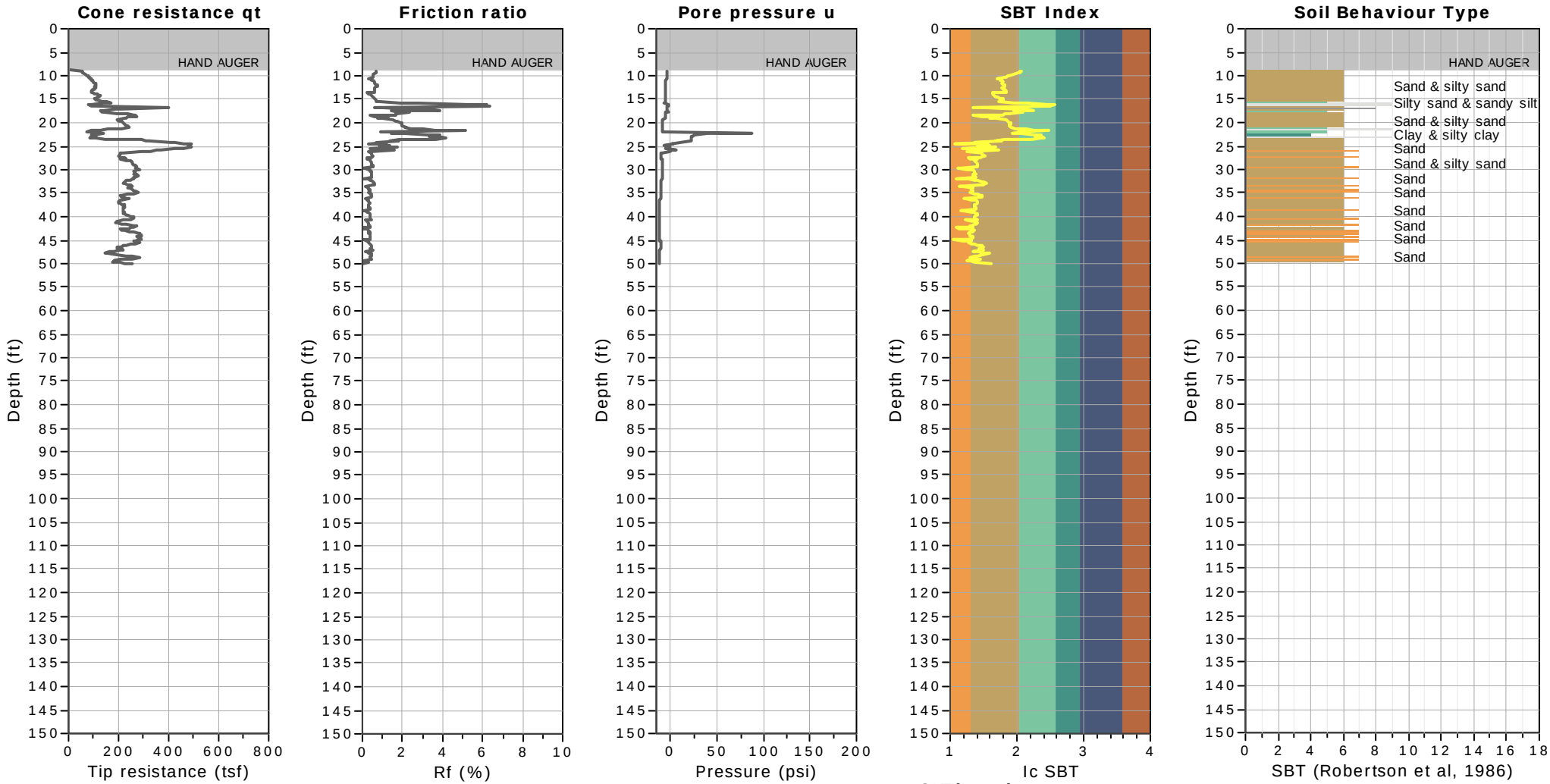
Coords: X:6317351.00, Y:2164037.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0002CPT

Total depth: 50.03 ft

Surface Elevation: 293.72 ft

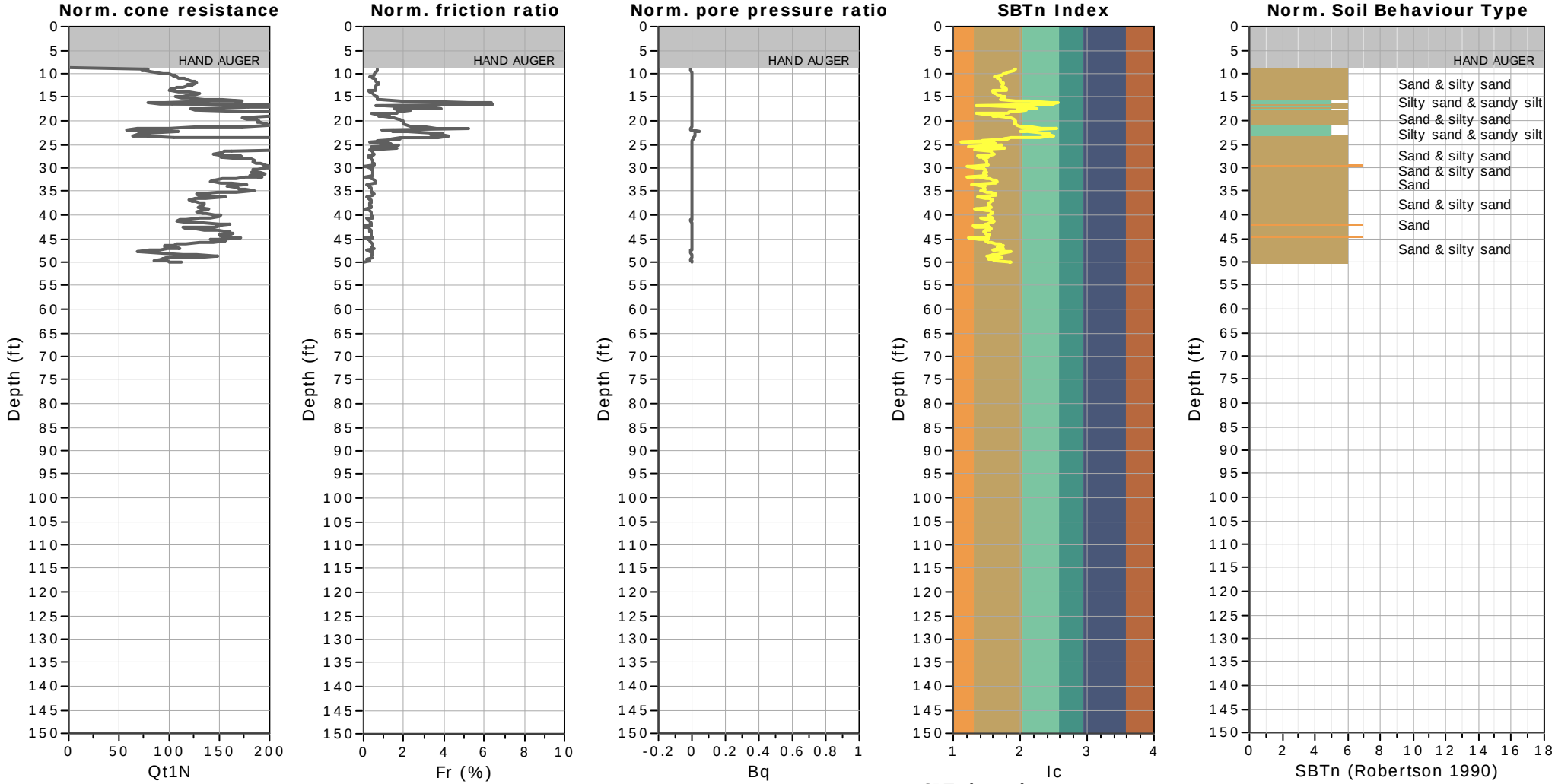
Coords: X:6317351.00, Y:2164037.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



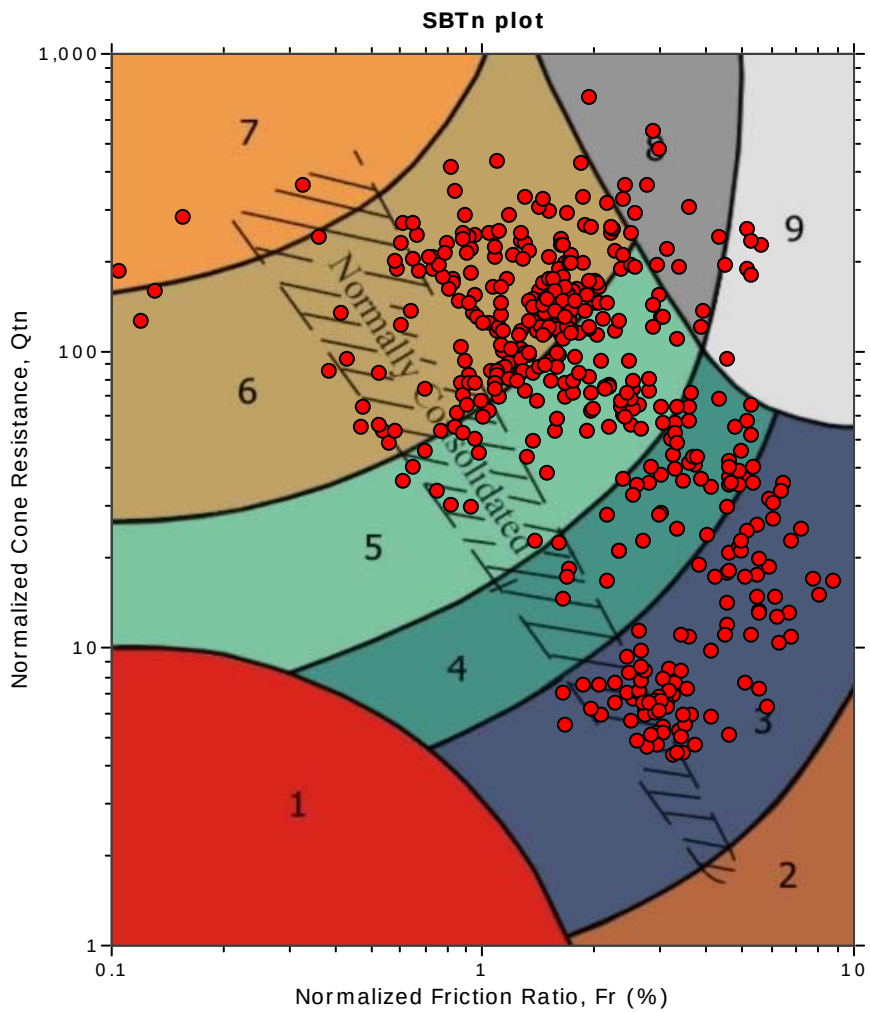
SBTn legend

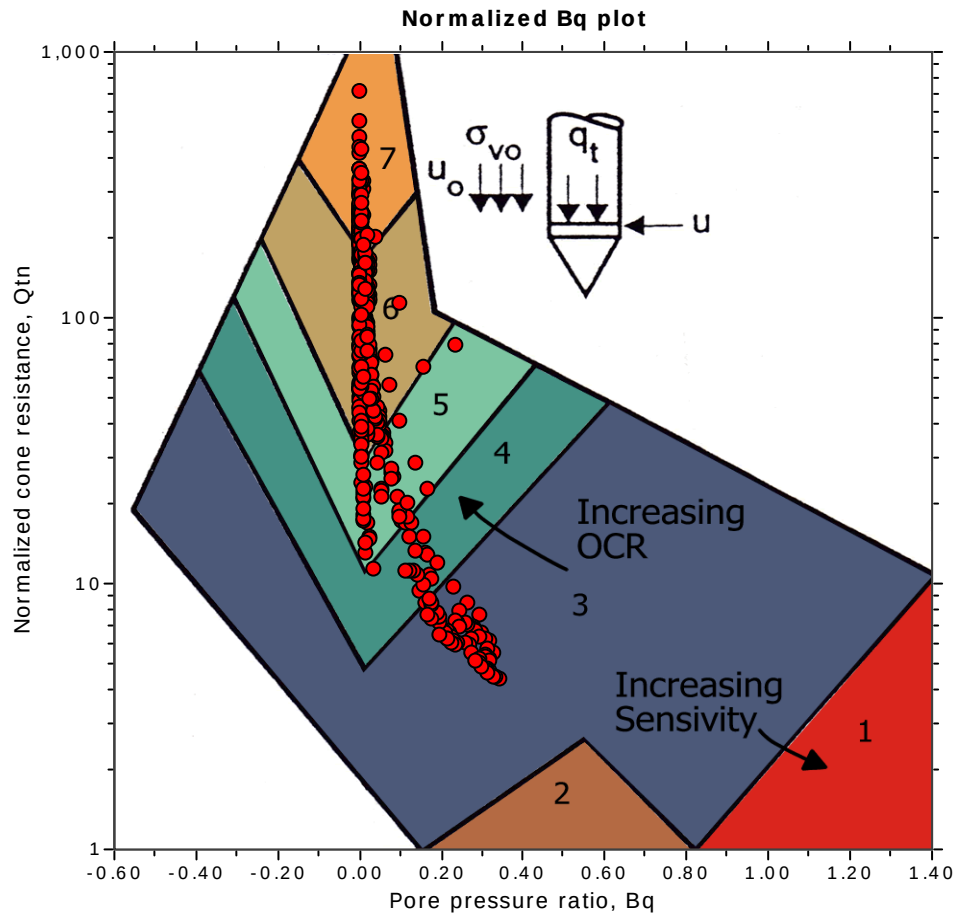
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0003CPT
Total depth: 80.22 ft
Surface Elevation: 287.52 ft
Coords: X:6318312.50, Y:2162577.25
Cone Type: GDC-27
Cone Operator: T.Patterson

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0003CPT

Total depth: 80.22 ft

Surface Elevation: 287.52 ft

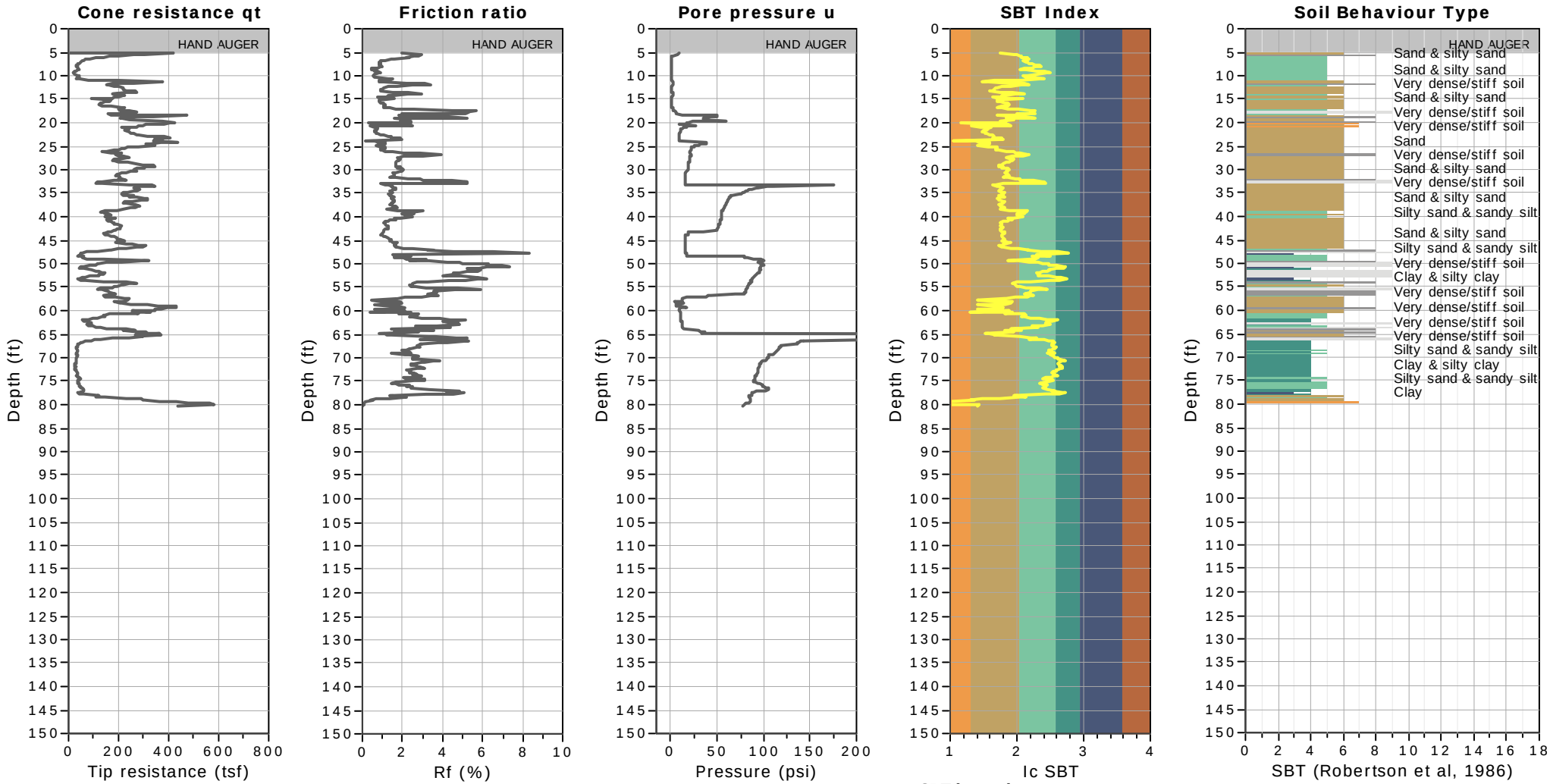
Coords: X:6318312.50, Y:2162577.25

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0003CPT

Total depth: 80.22 ft

Surface Elevation: 287.52 ft

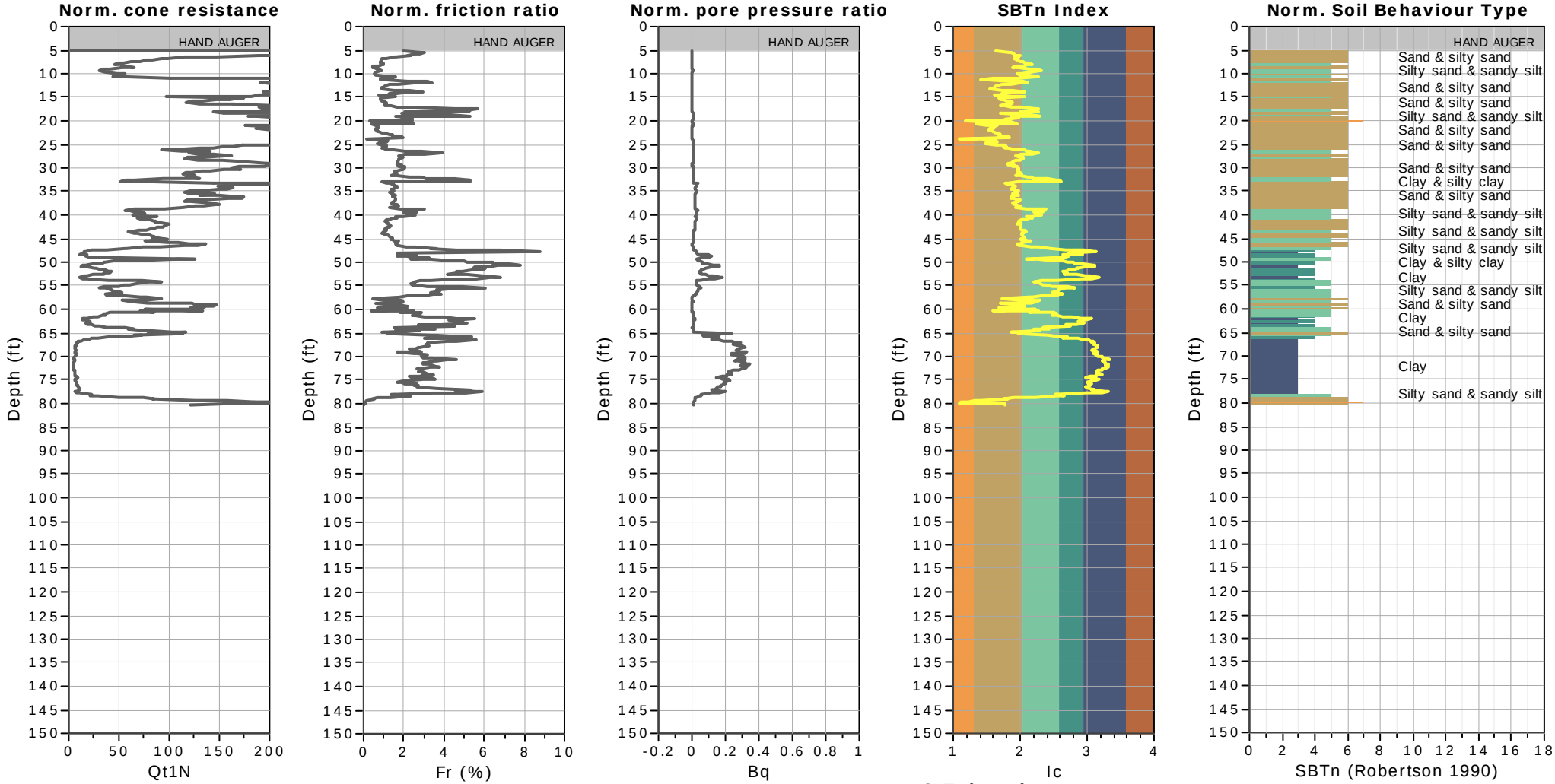
Coords: X:6318312.50, Y:2162577.25

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

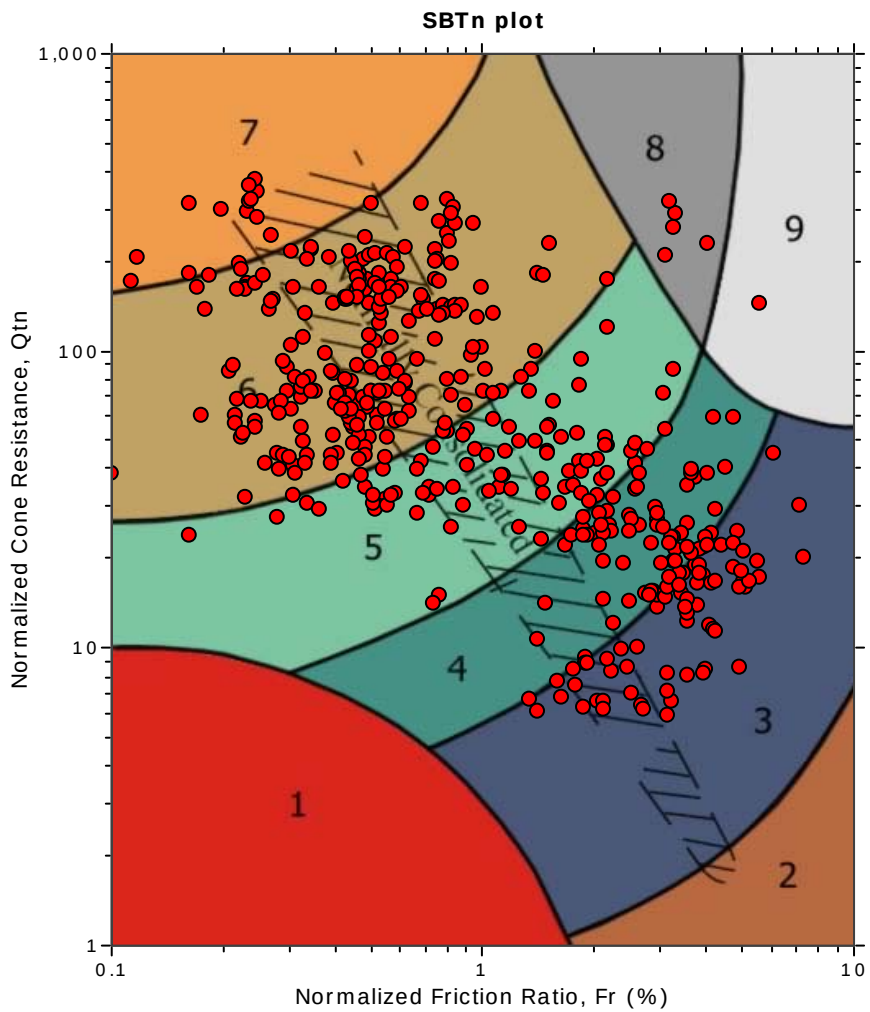


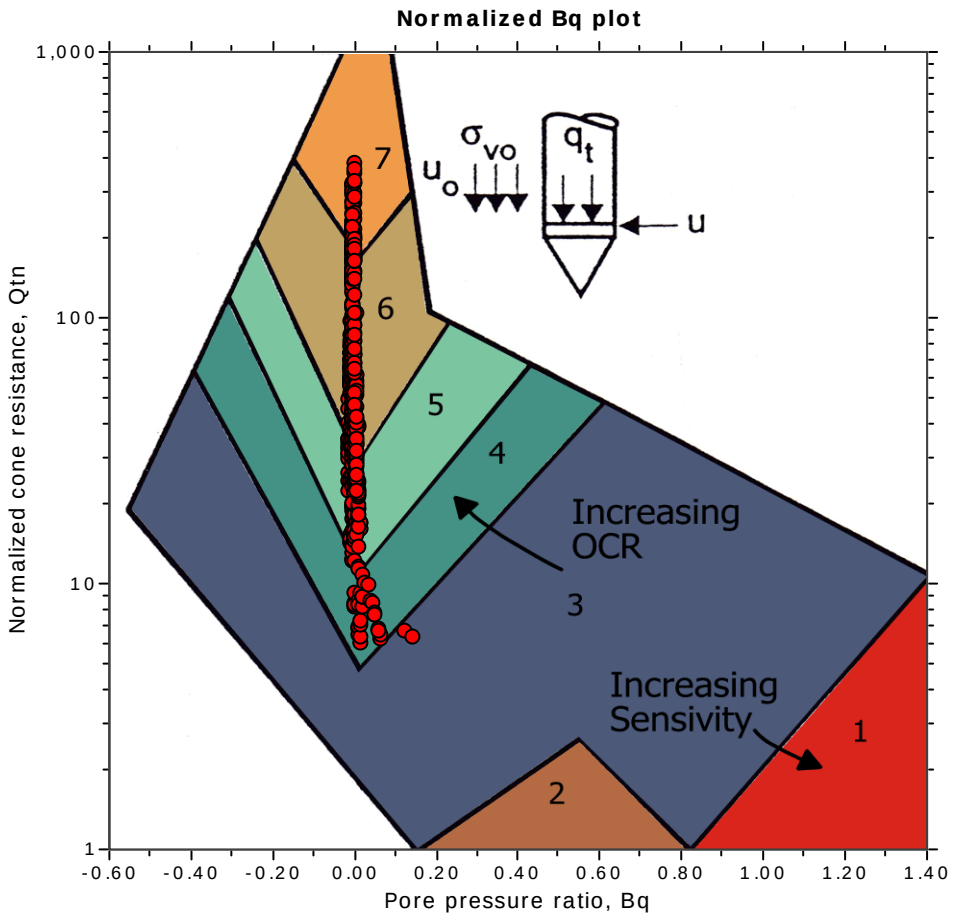
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0004CPT

Total depth: 80.71 ft

Surface Elevation: 289.24 ft

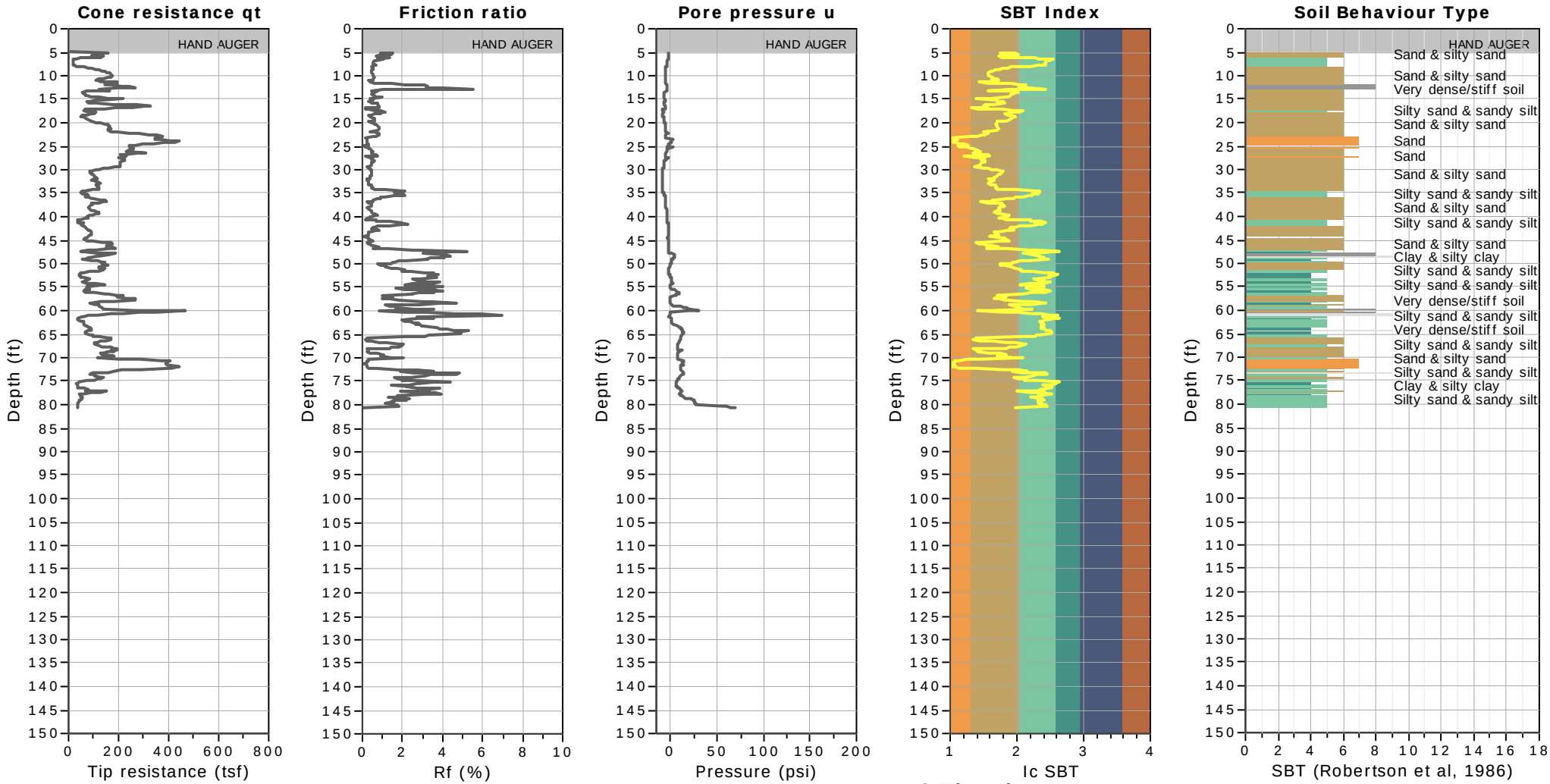
Coords: X:6318980.00, Y:2162522.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0004CPT

Total depth: 80.71 ft

Surface Elevation: 289.24 ft

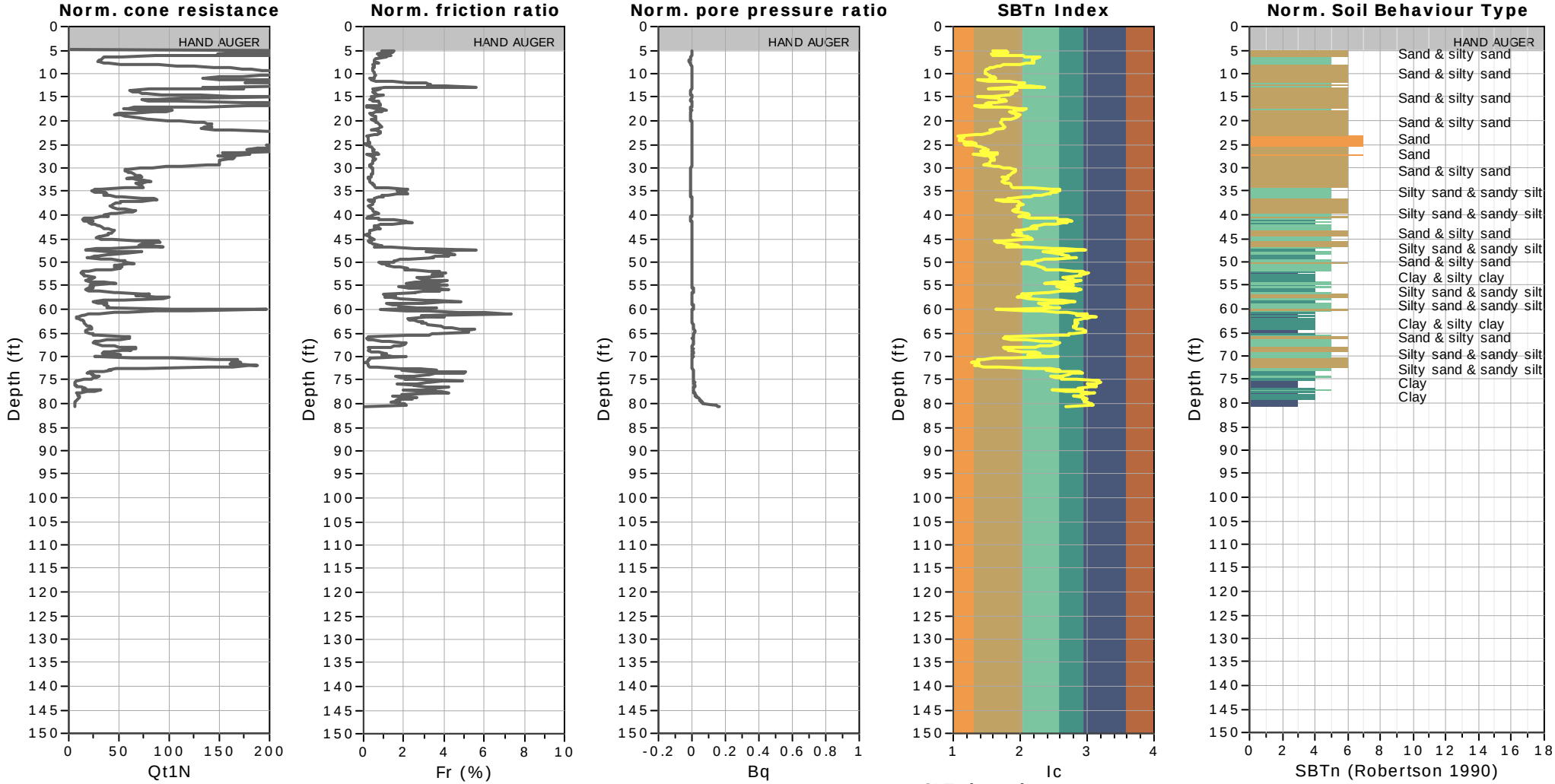
Coords: X:6318980.00, Y:2162522.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

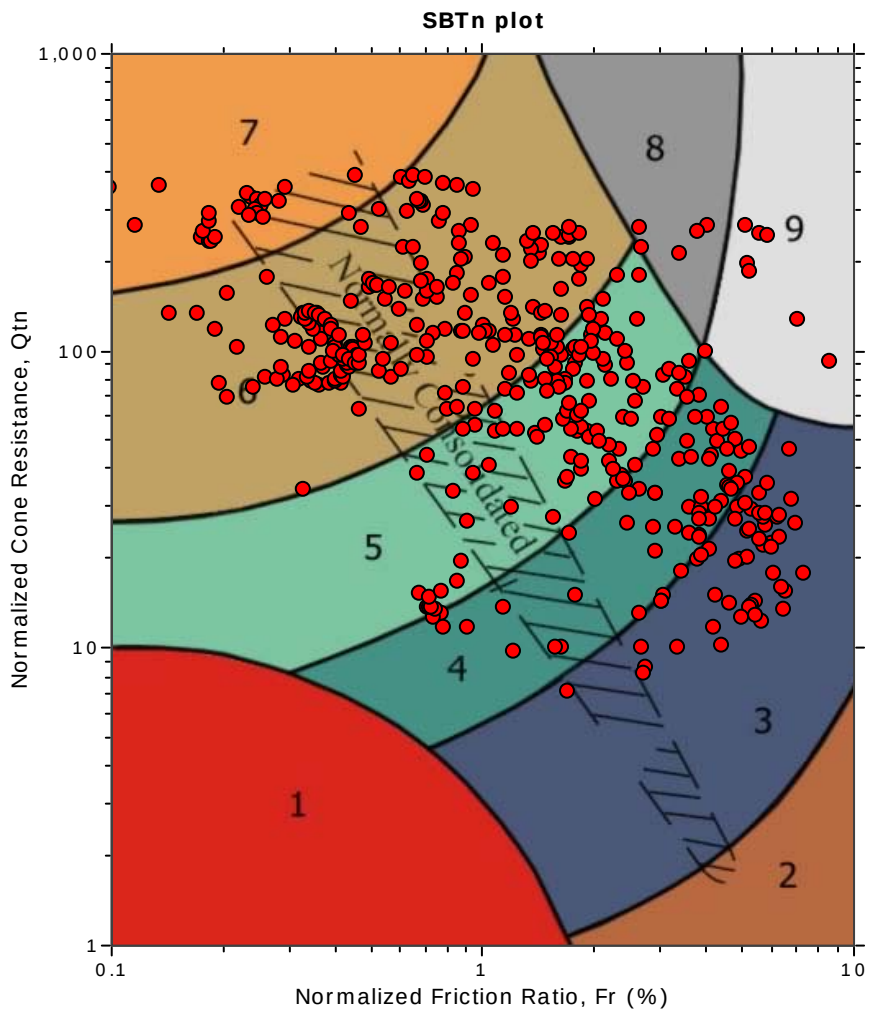


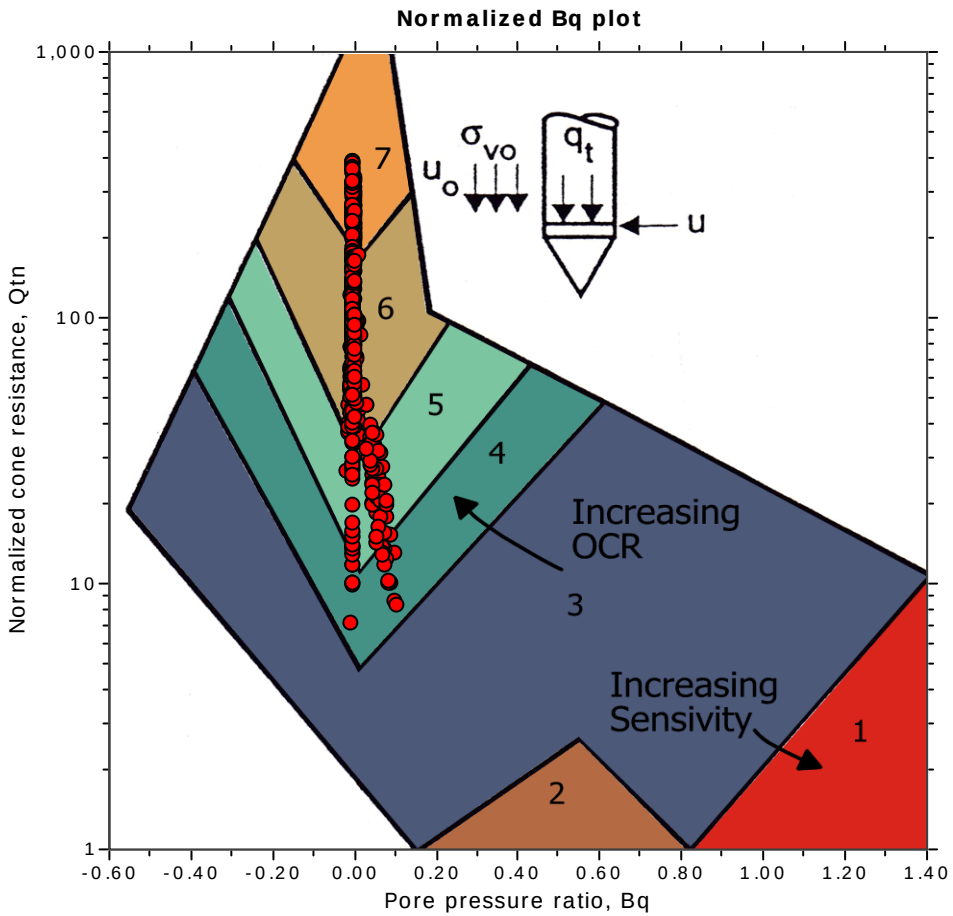
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0005CPT

Total depth: 80.05 ft

Surface Elevation: 292.46 ft

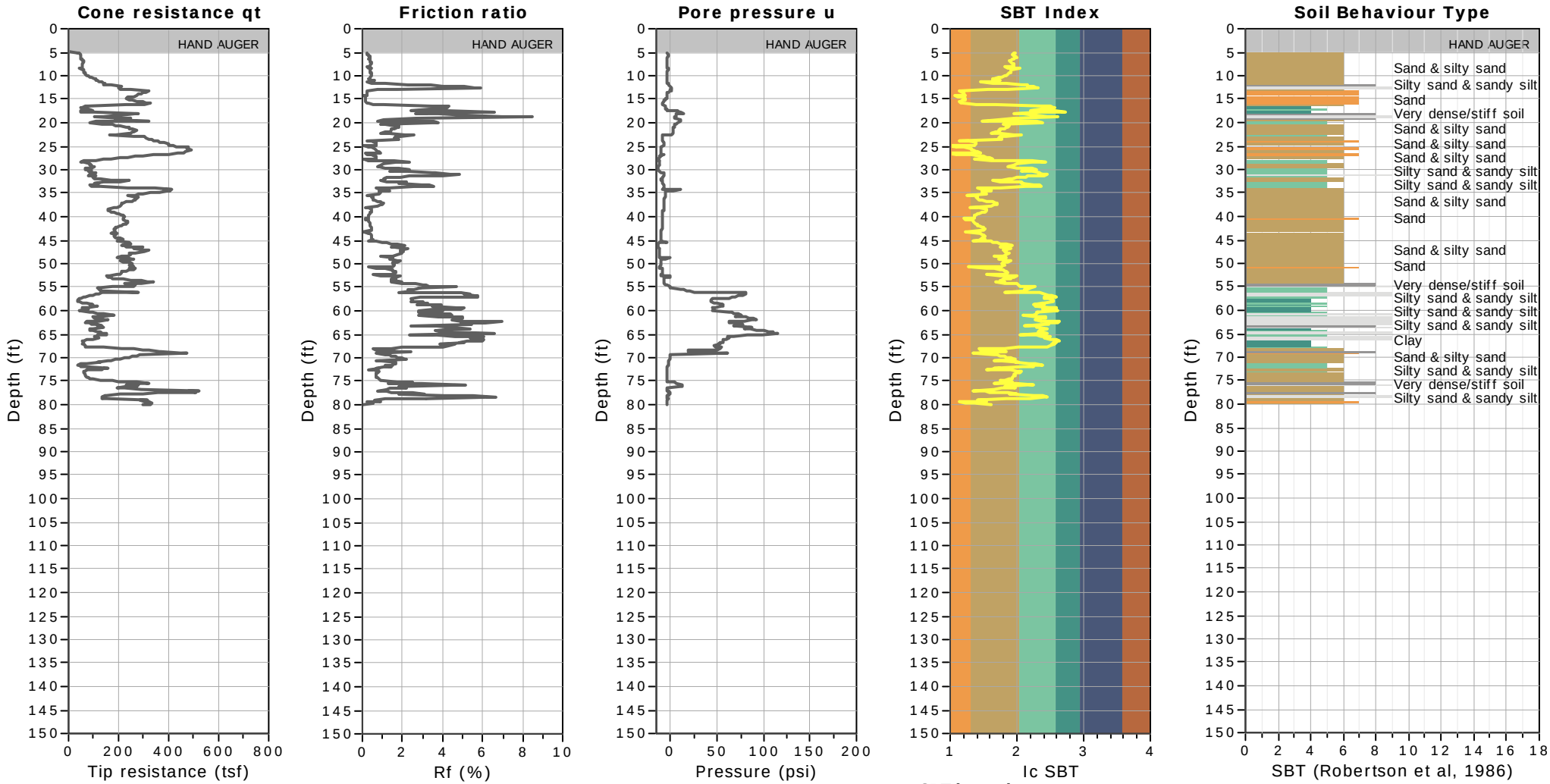
Coords: X:6321691.50, Y:2159881.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0005CPT

Total depth: 80.05 ft

Surface Elevation: 292.46 ft

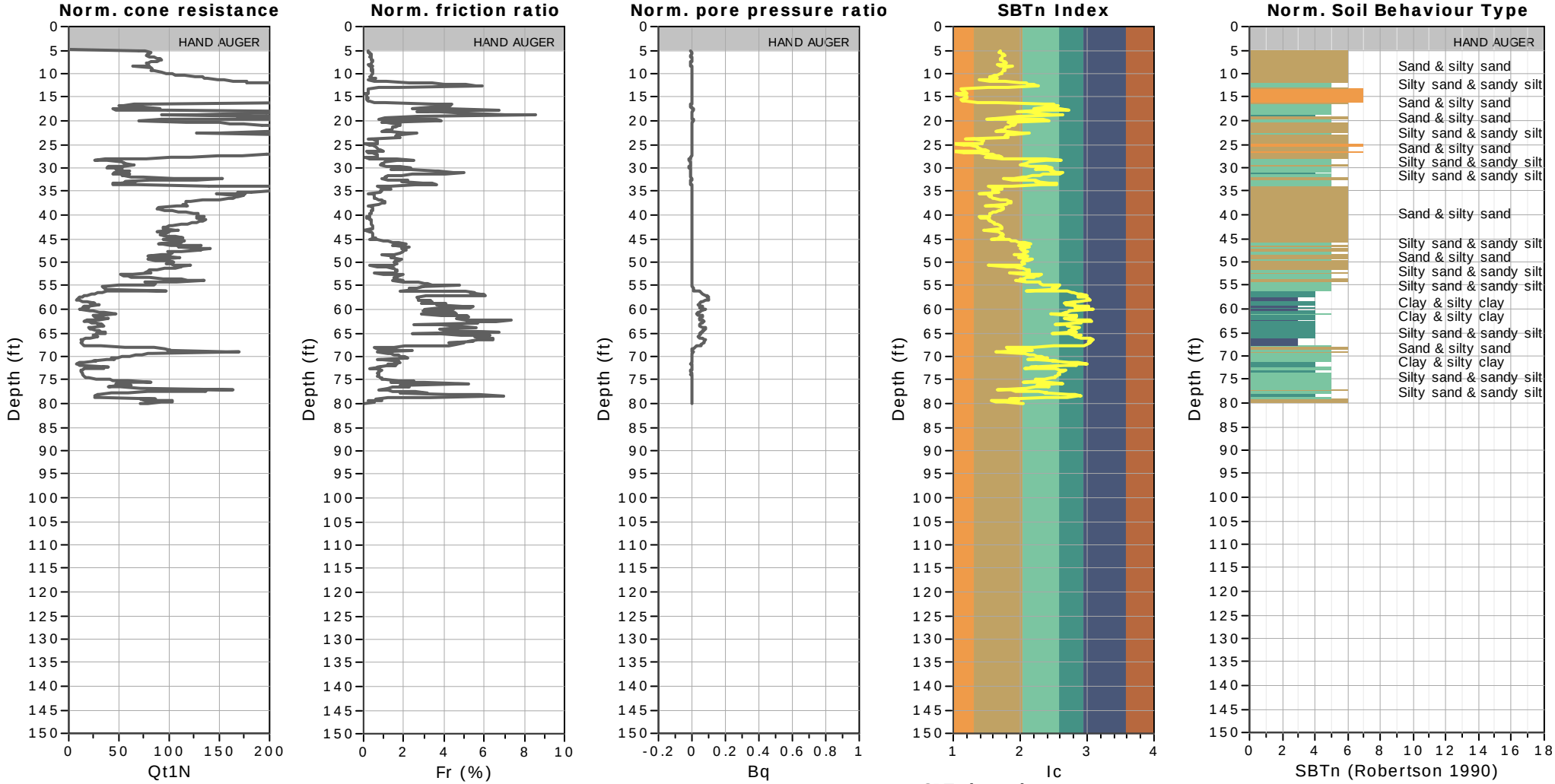
Coords: X:6321691.50, Y:2159881.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

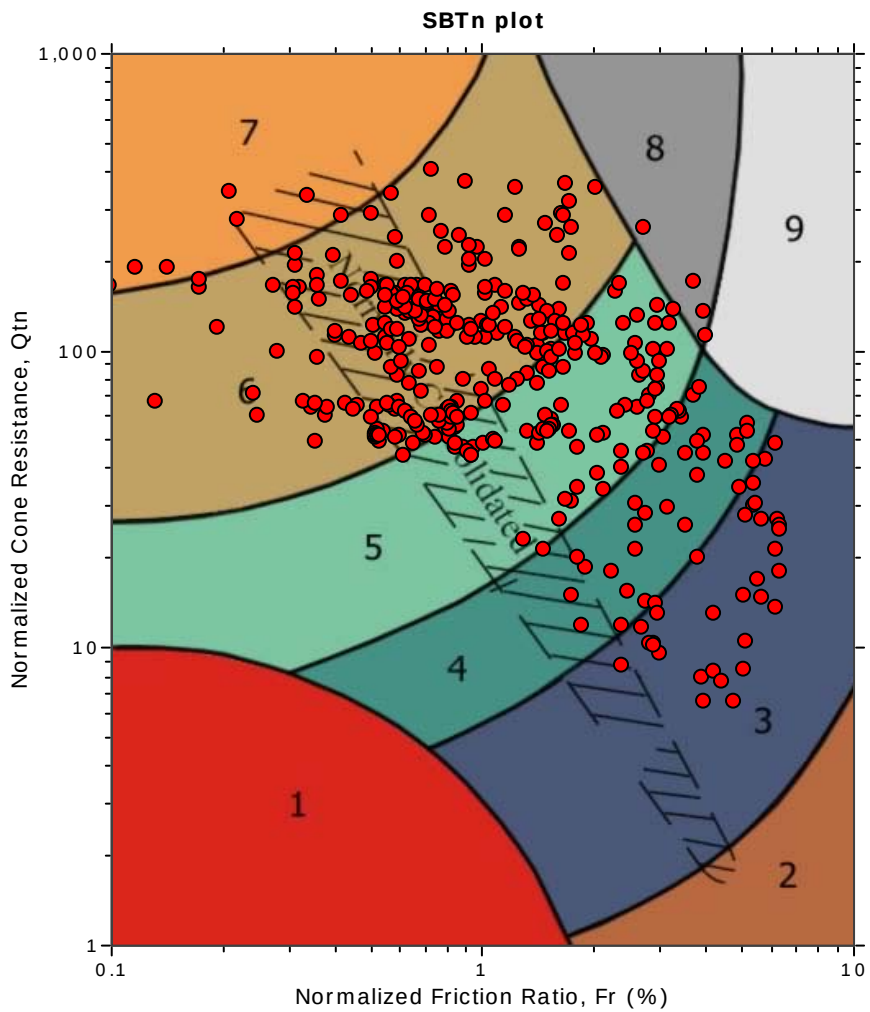


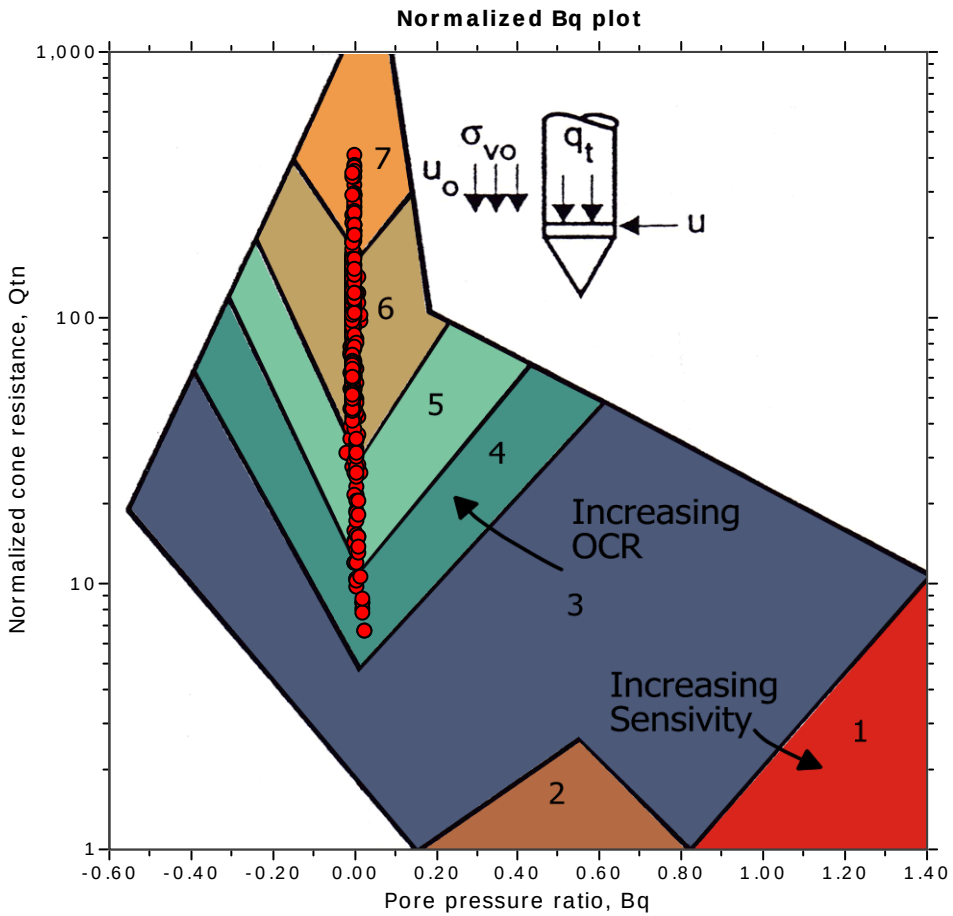
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0006CPT

Total depth: 80.05 ft

Surface Elevation: 295.07 ft

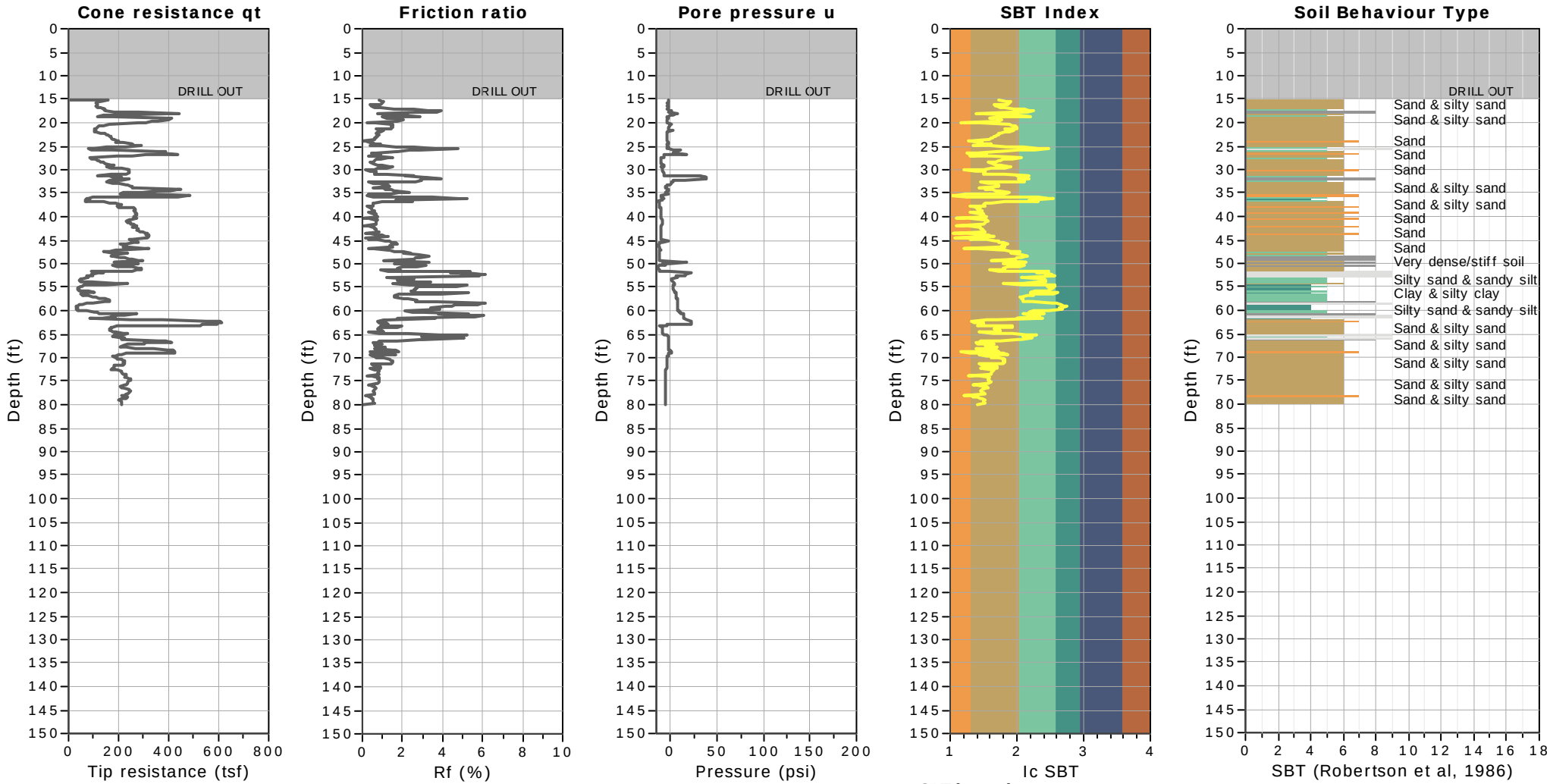
Coords: X:6320967.00, Y:2159855.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0006CPT

Total depth: 80.05 ft

Surface Elevation: 295.07 ft

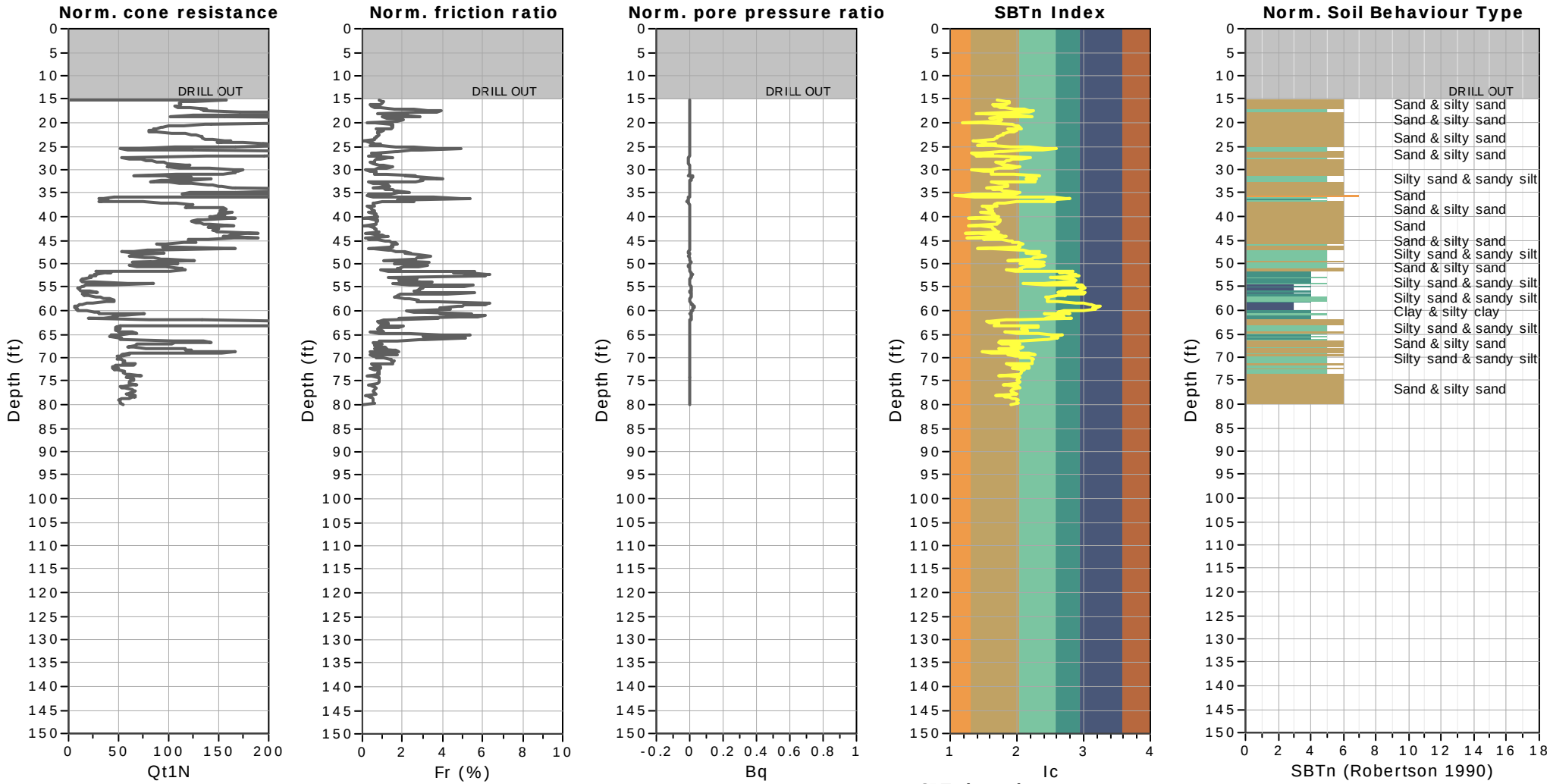
Coords: X:6320967.00, Y:2159855.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

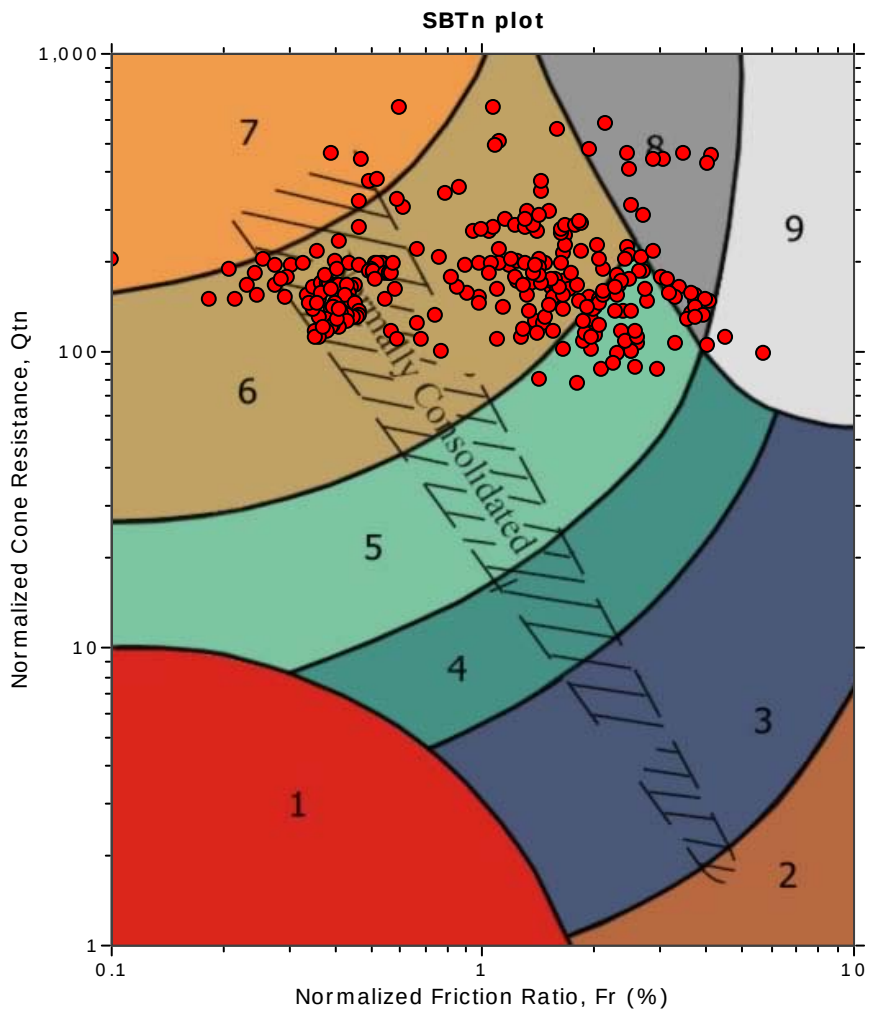


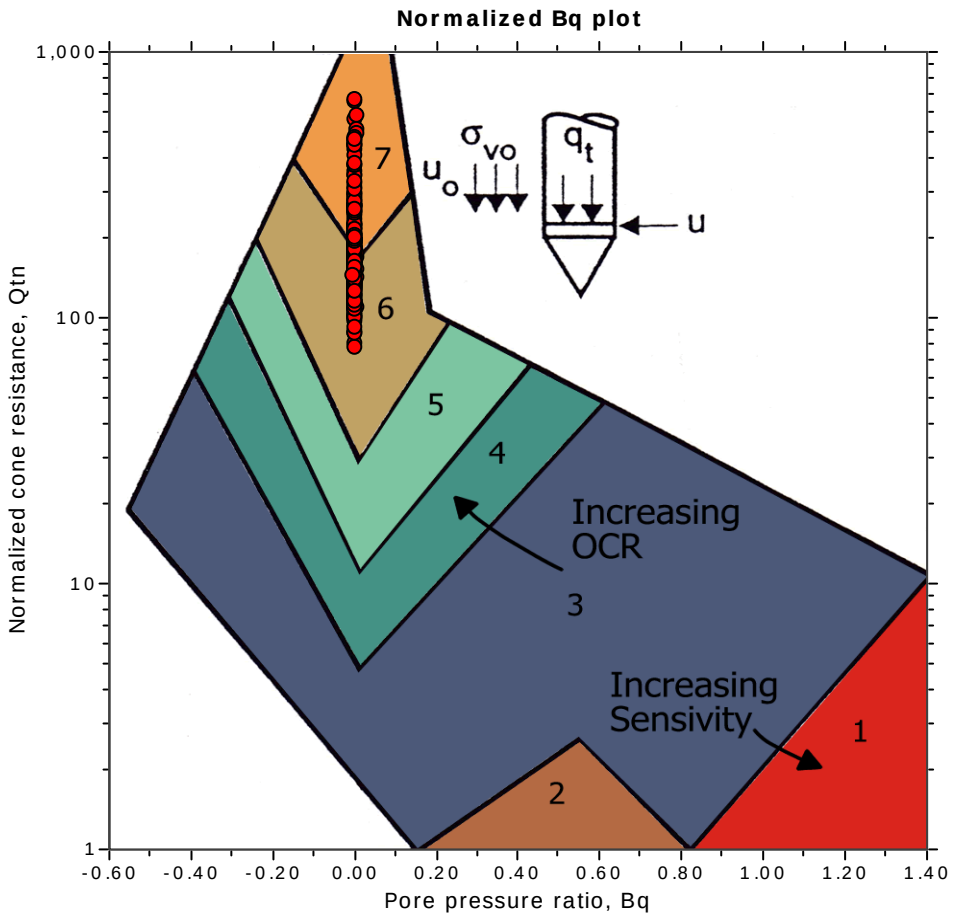
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0006ACPT

Total depth: 52.49 ft

Surface Elevation: 290.05 ft

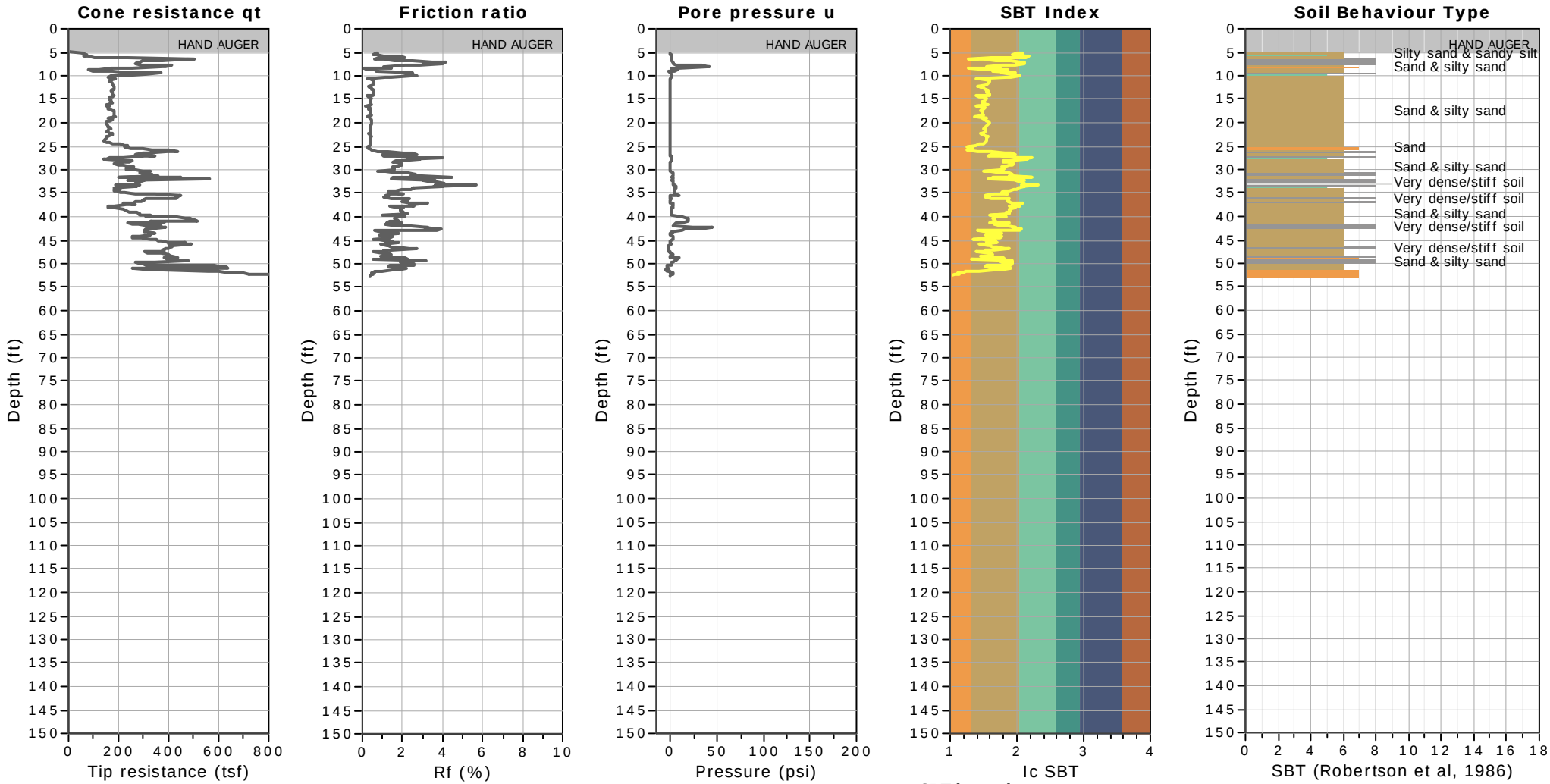
Coords: X:6322193.50, Y:2158796.75

Cone Type: GDC-24

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0006ACPT

Total depth: 52.49 ft

Surface Elevation: 290.05 ft

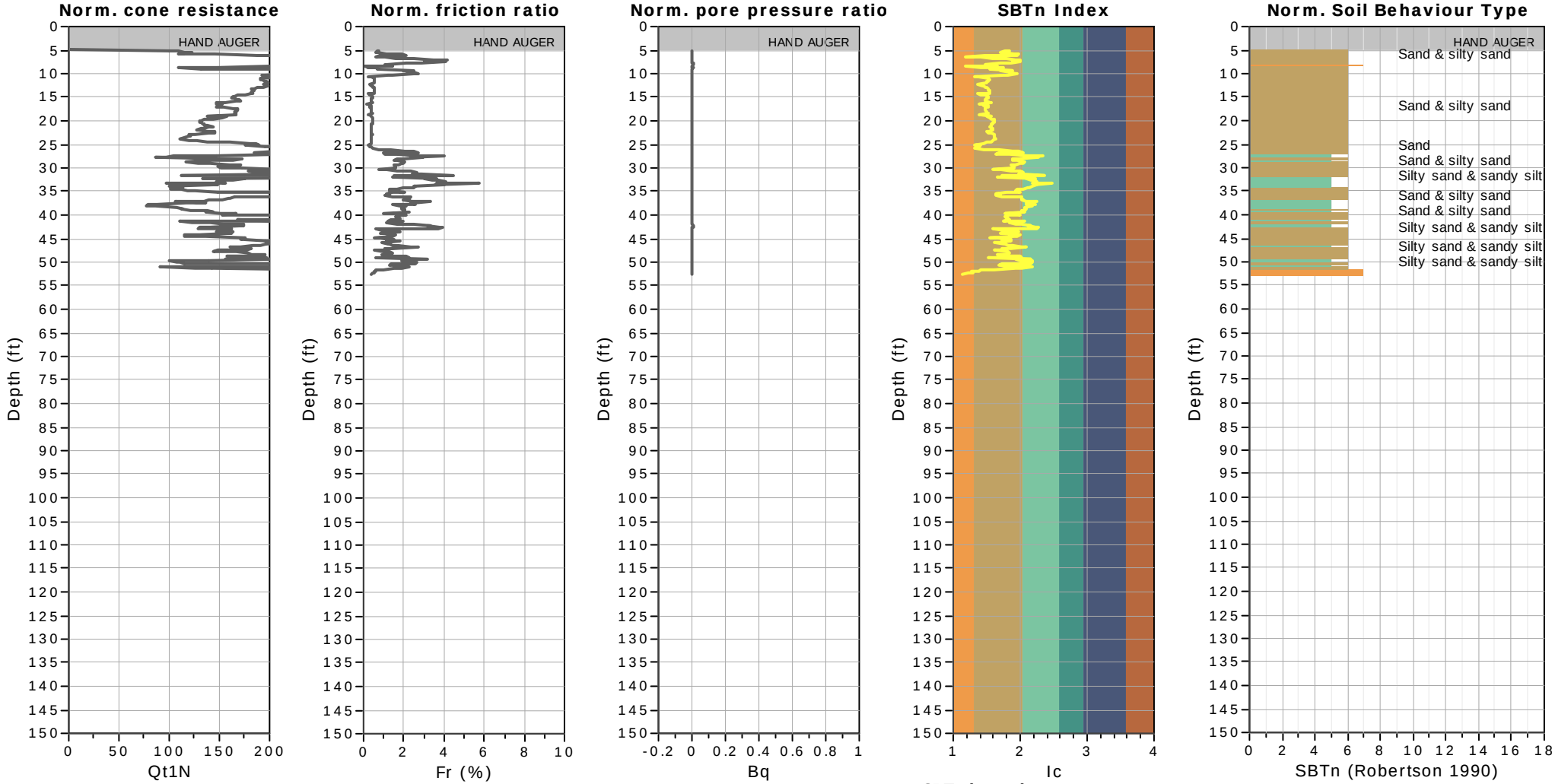
Coords: X:6322193.50, Y:2158796.75

Cone Type: GDC-24

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

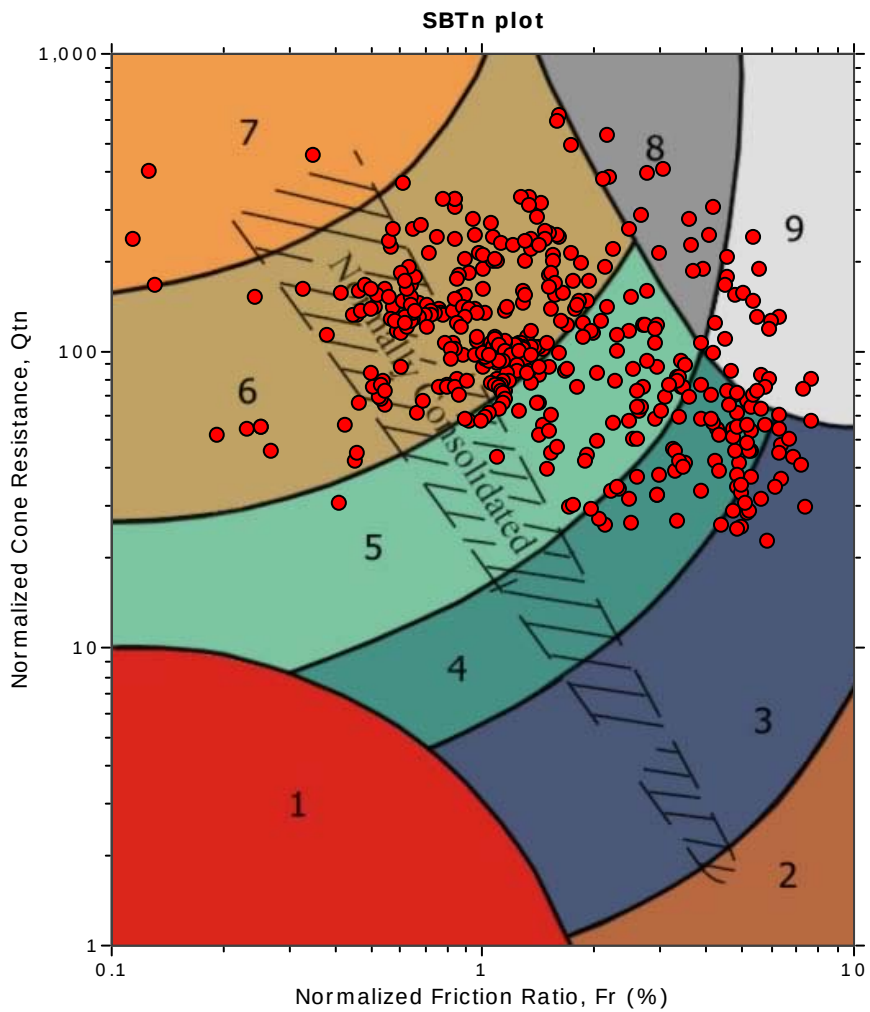


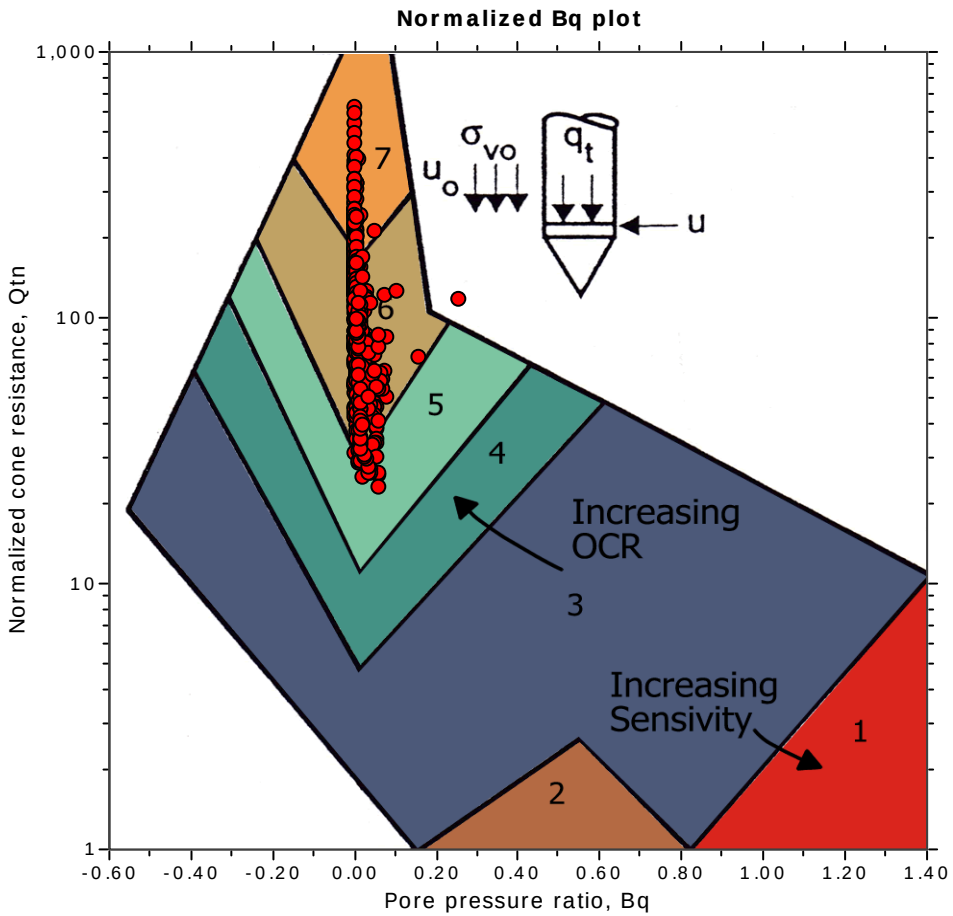
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0007CPT

Total depth: 76.44 ft

Surface Elevation: 287.06 ft

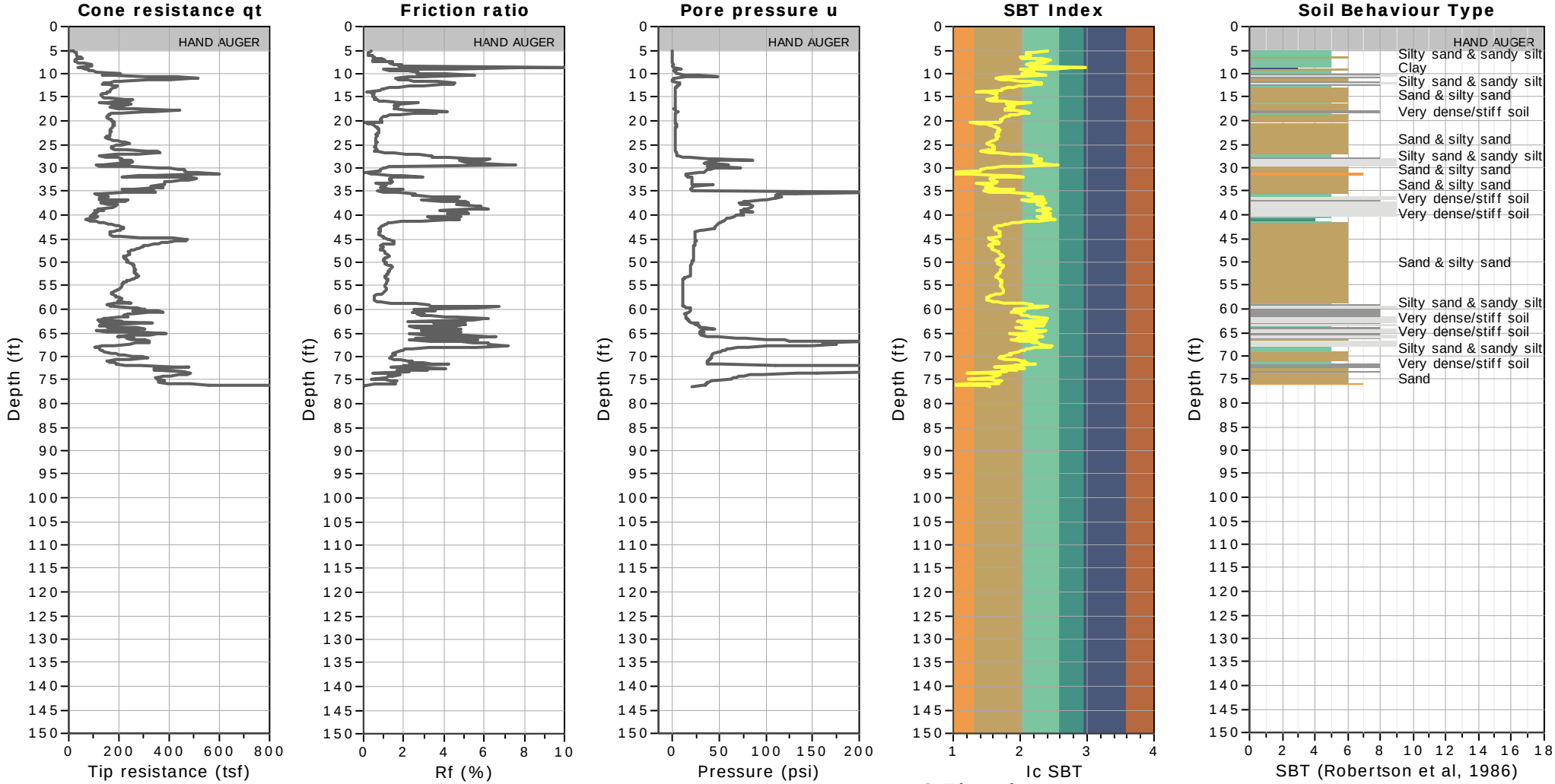
Coords: X:6323012.00, Y:2157330.25

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0007CPT

Total depth: 76.44 ft

Surface Elevation: 287.06 ft

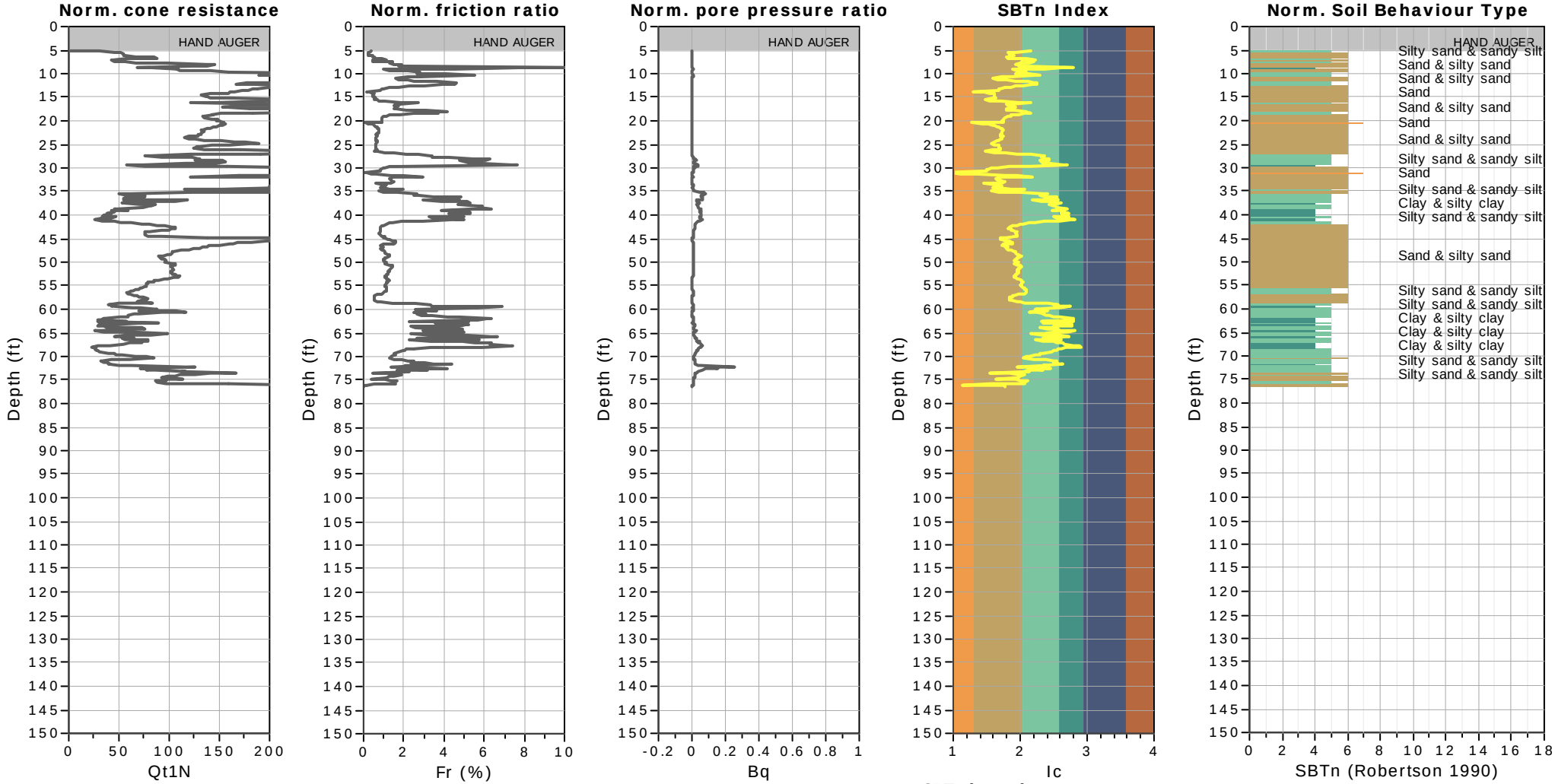
Coords: X:6323012.00, Y:2157330.25

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

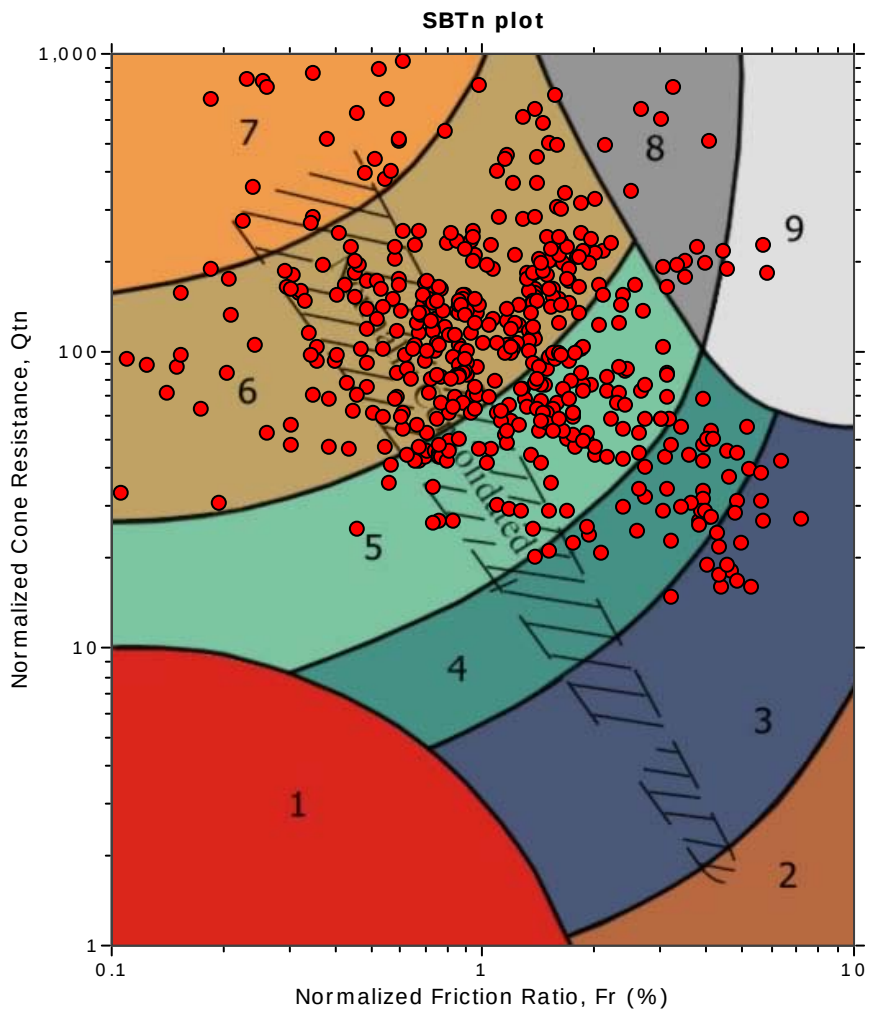


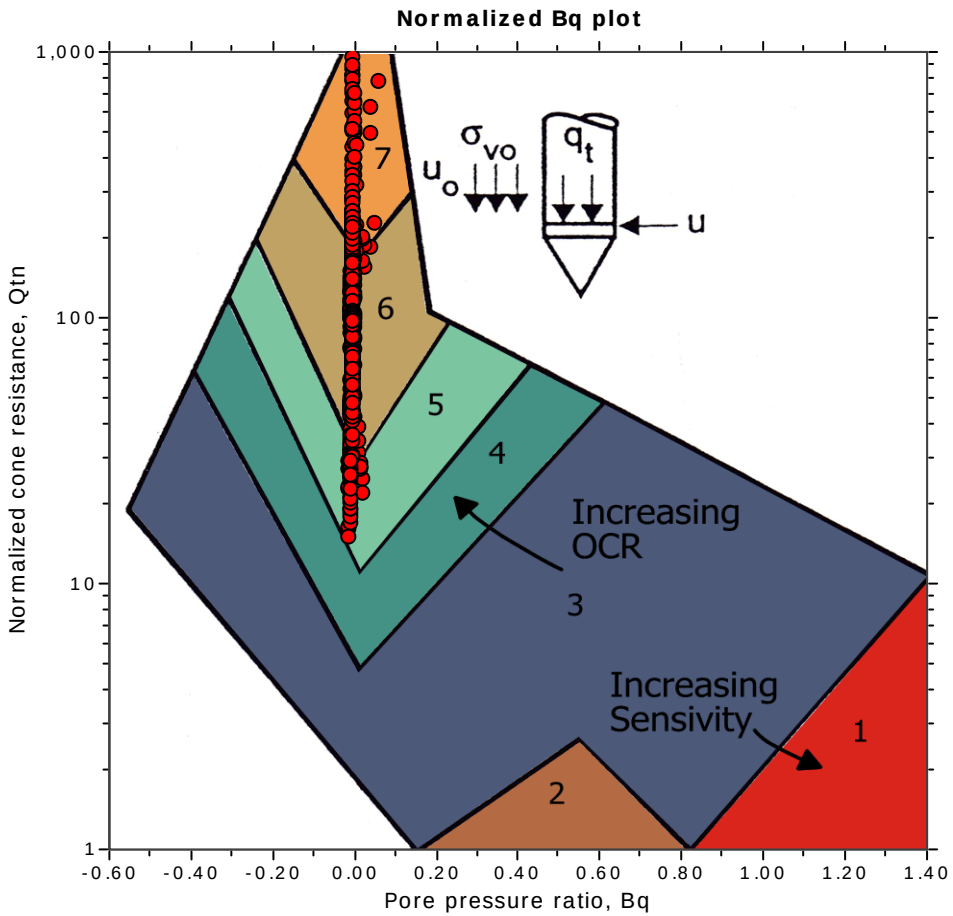
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





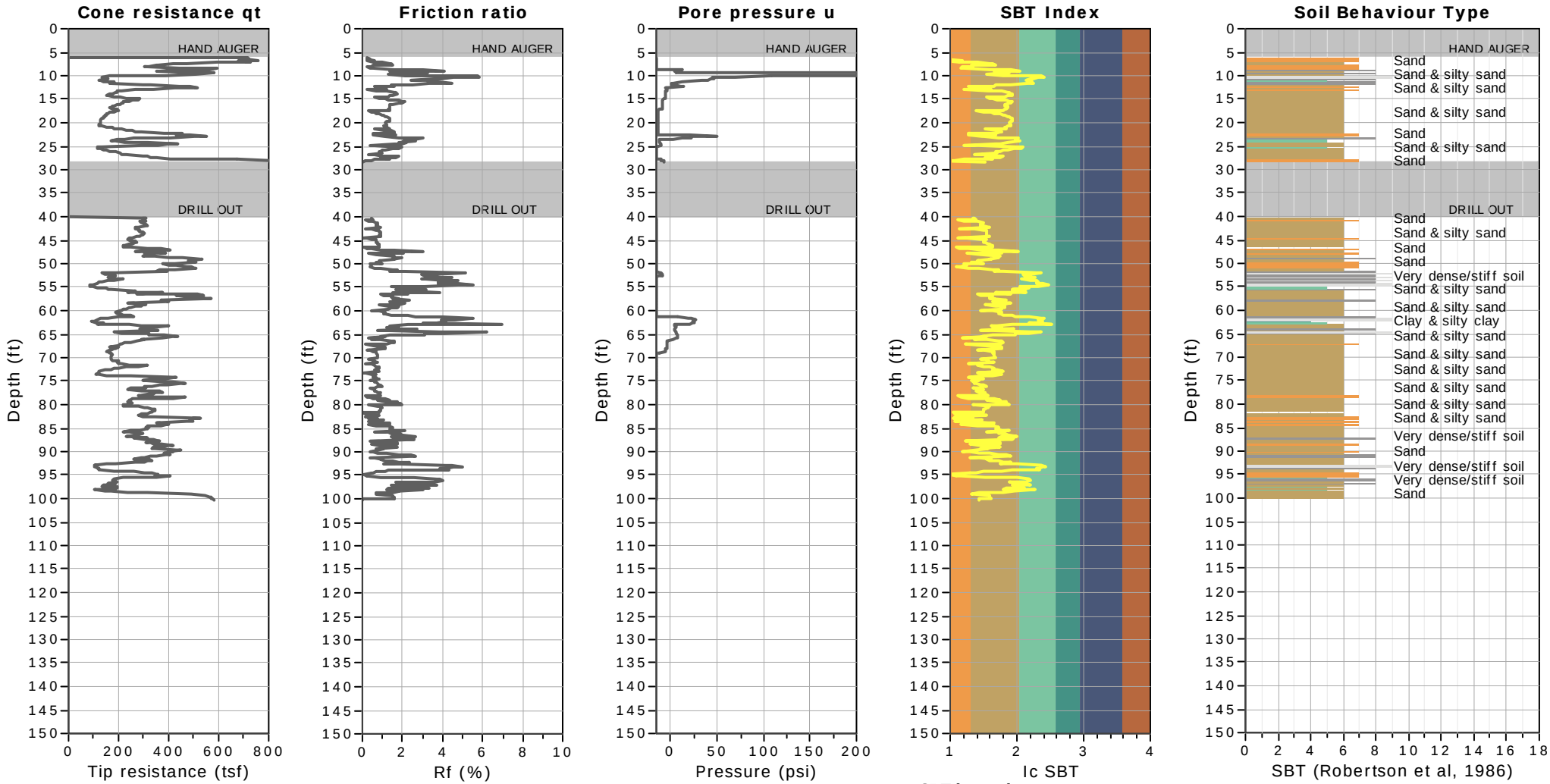
SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0008CPT

Total depth: 100.23 ft
Surface Elevation: 285.31 ft
Coords: X:6324017.00, Y:2156853.75
Cone Type: GDC-52
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0008CPT

Total depth: 100.23 ft

Surface Elevation: 285.31 ft

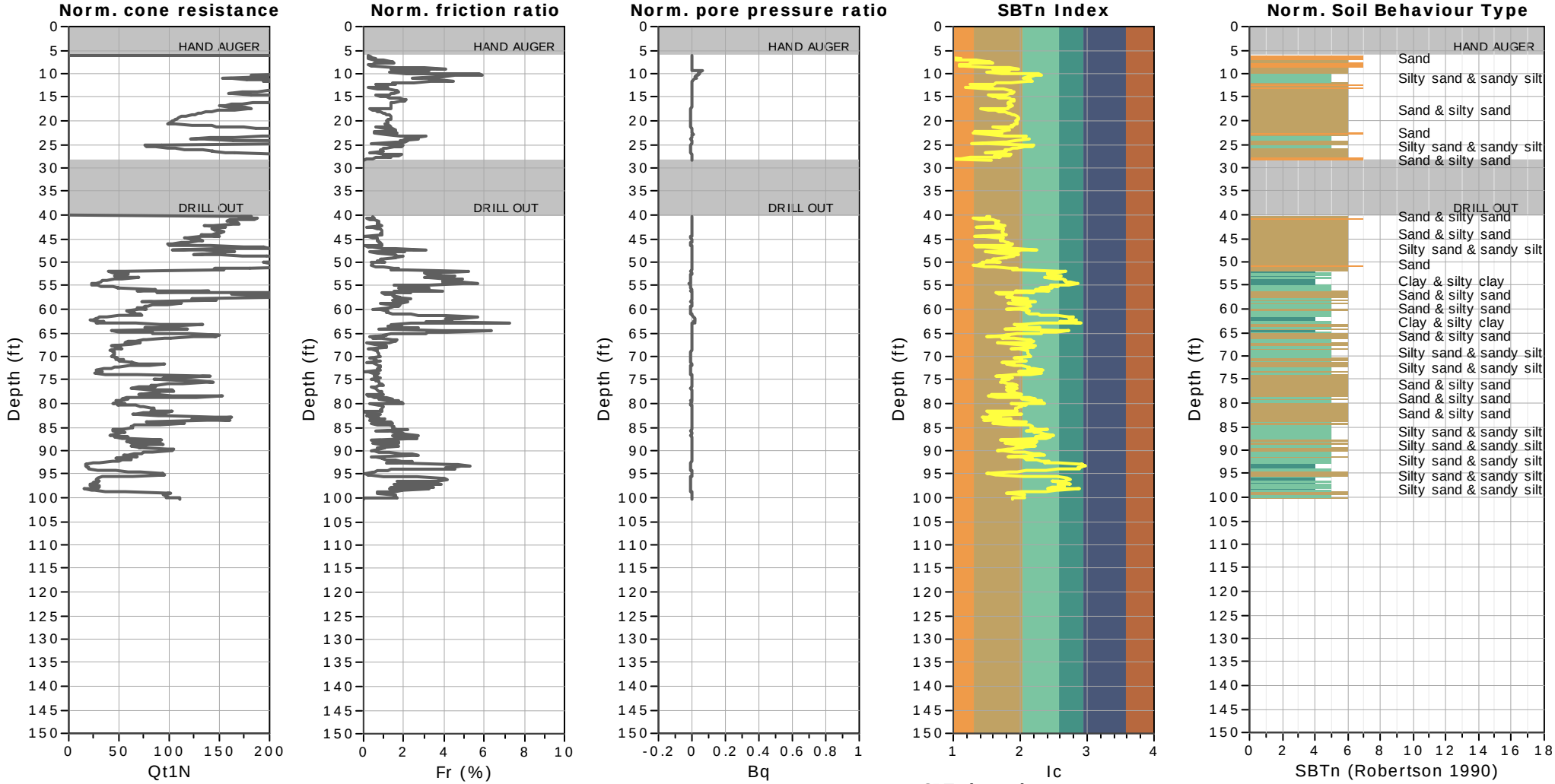
Coords: X:6324017.00, Y:2156853.75

Cone Type: GDC-52

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



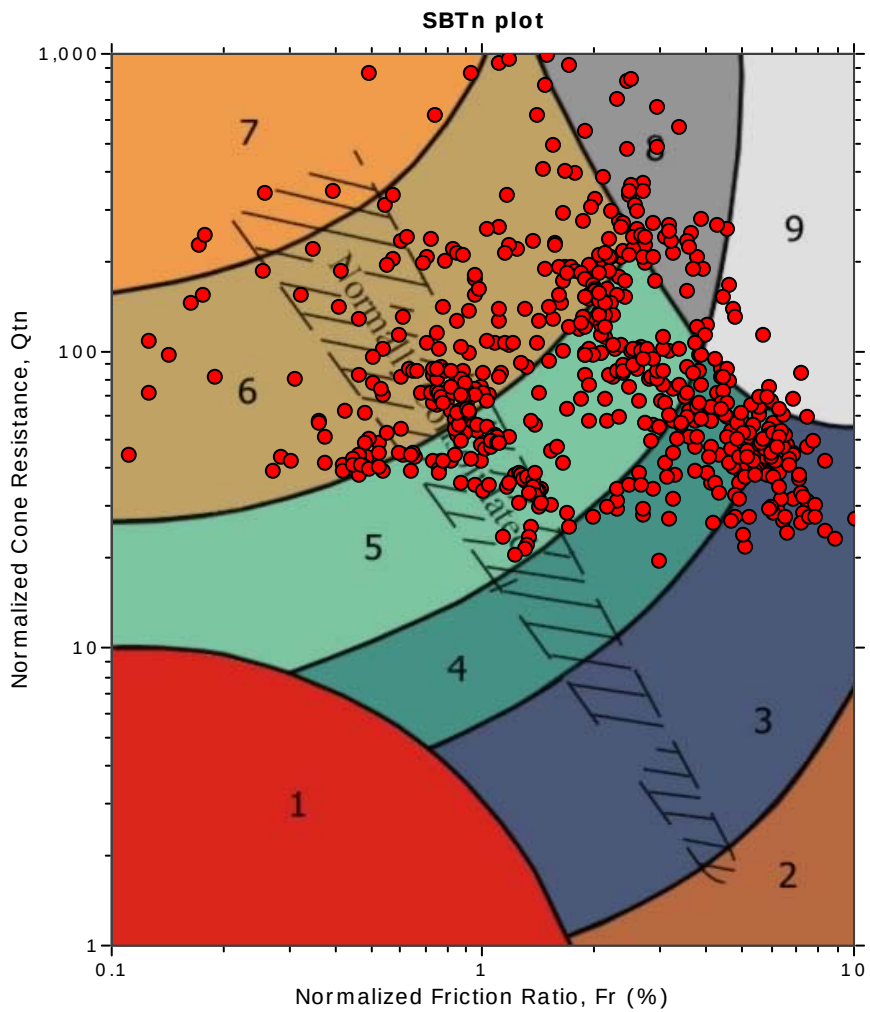
SBTn legend

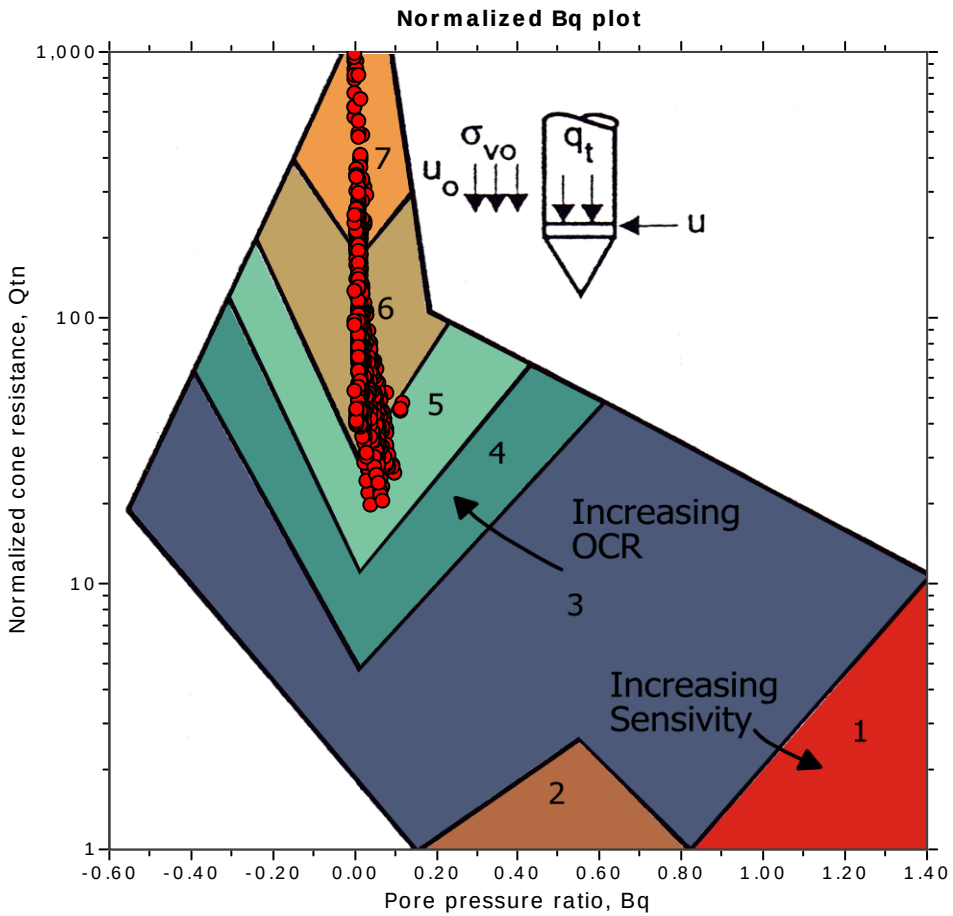
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0009CPT
Total depth: 105.81 ft
Surface Elevation: 286.75 ft
Coords: X:6323848.00, Y:2157307.00
Cone Type: GDC-27
Cone Operator: T.Patterson

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0009CPT

Total depth: 105.81 ft

Surface Elevation: 286.75 ft

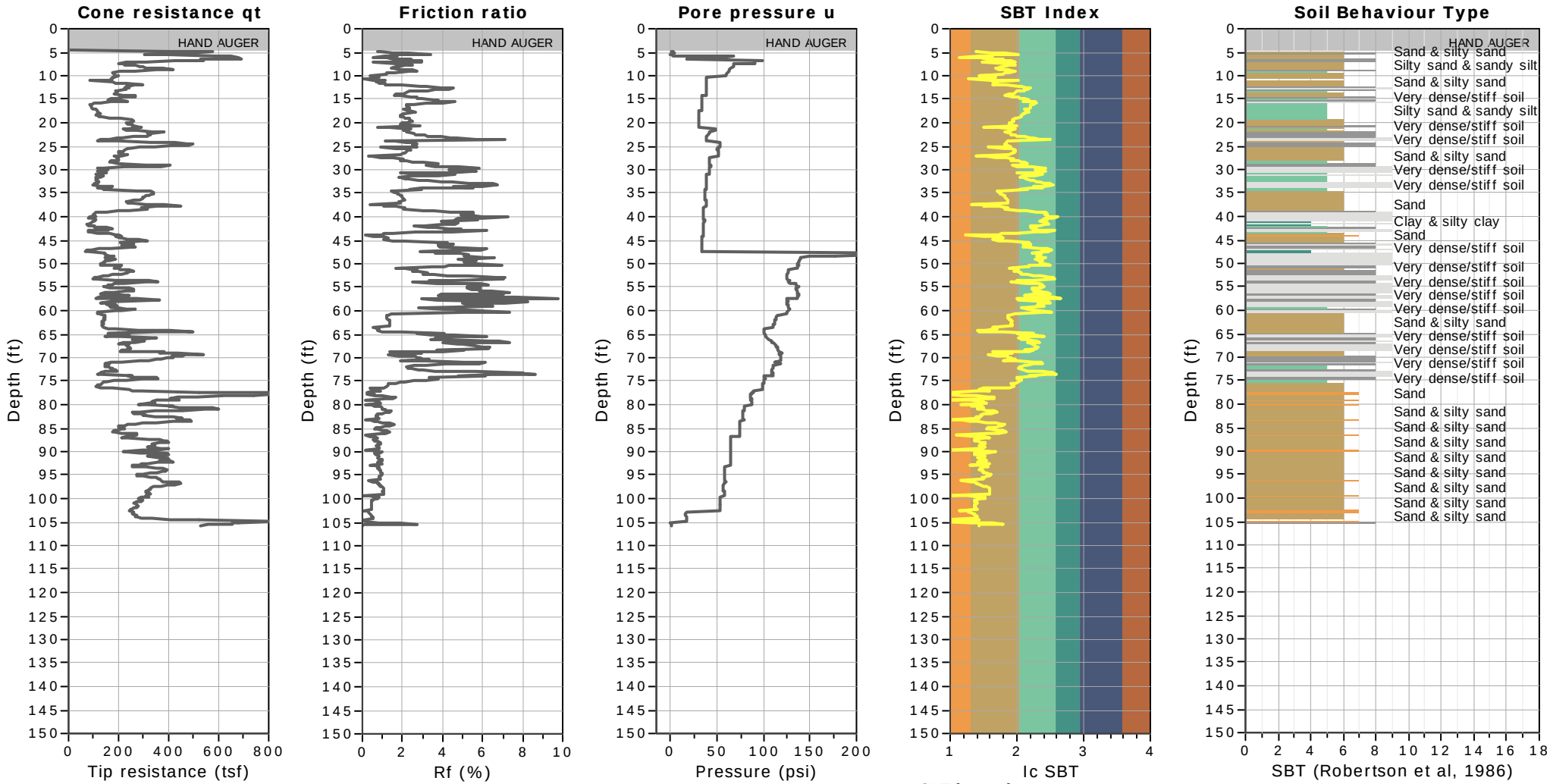
Coords: X:6323848.00, Y:2157307.00

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0009CPT

Total depth: 105.81 ft

Surface Elevation: 286.75 ft

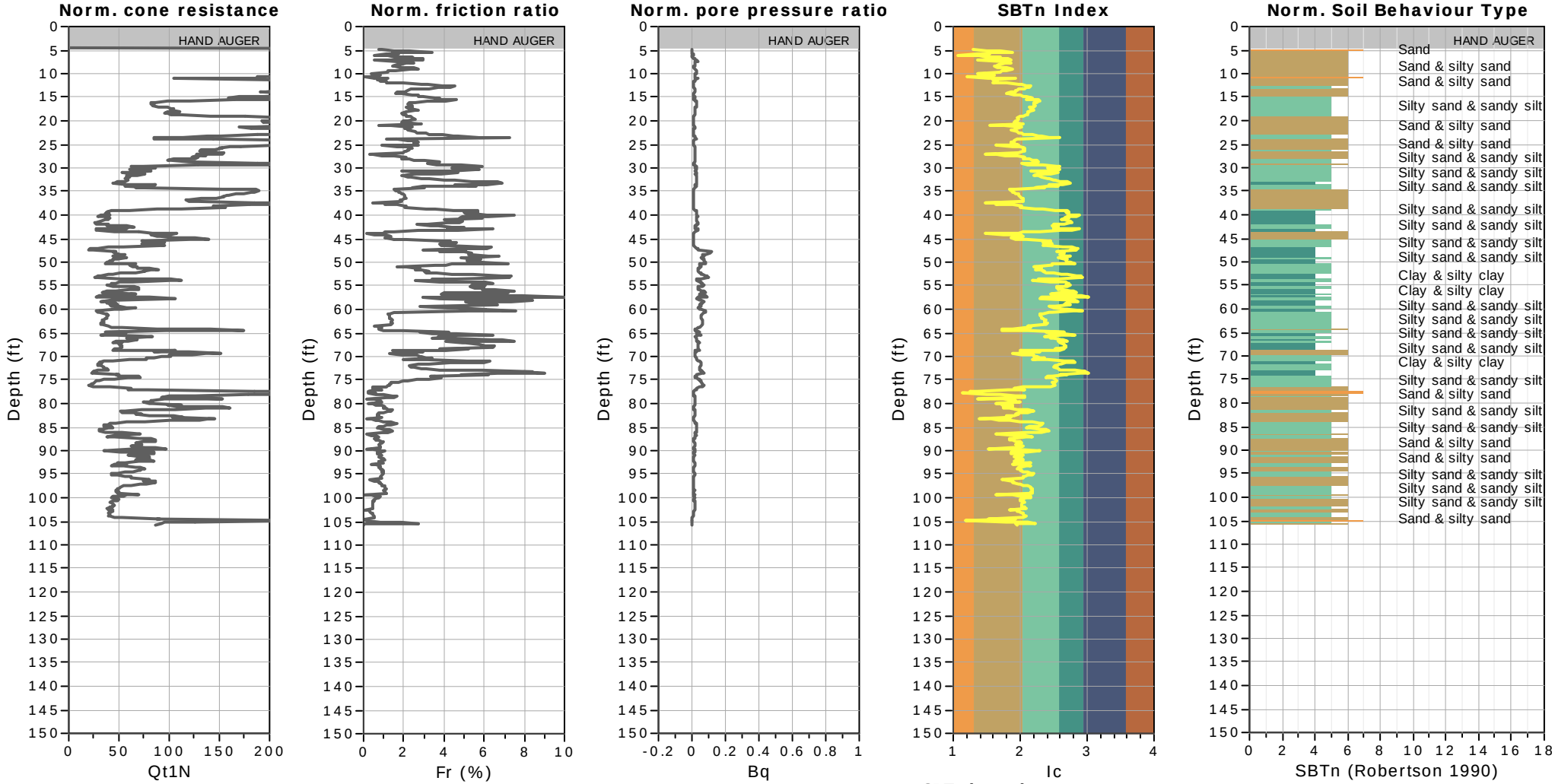
Coords: X:6323848.00, Y:2157307.00

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

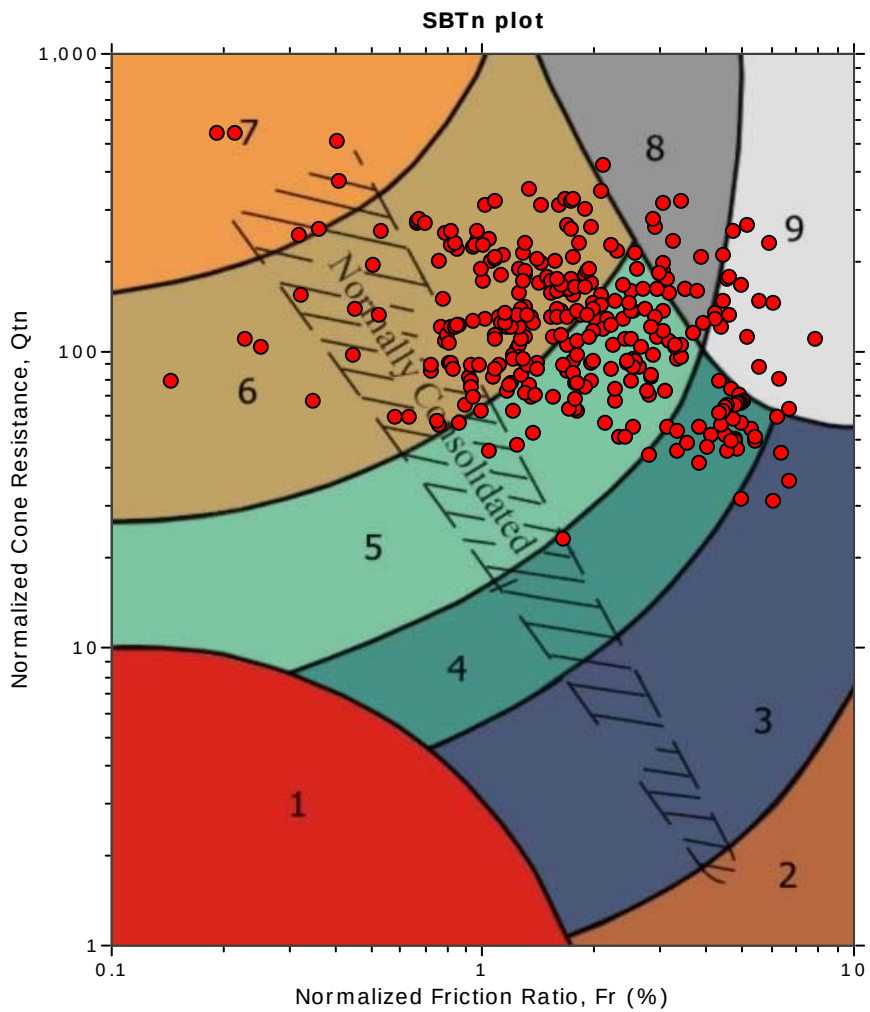


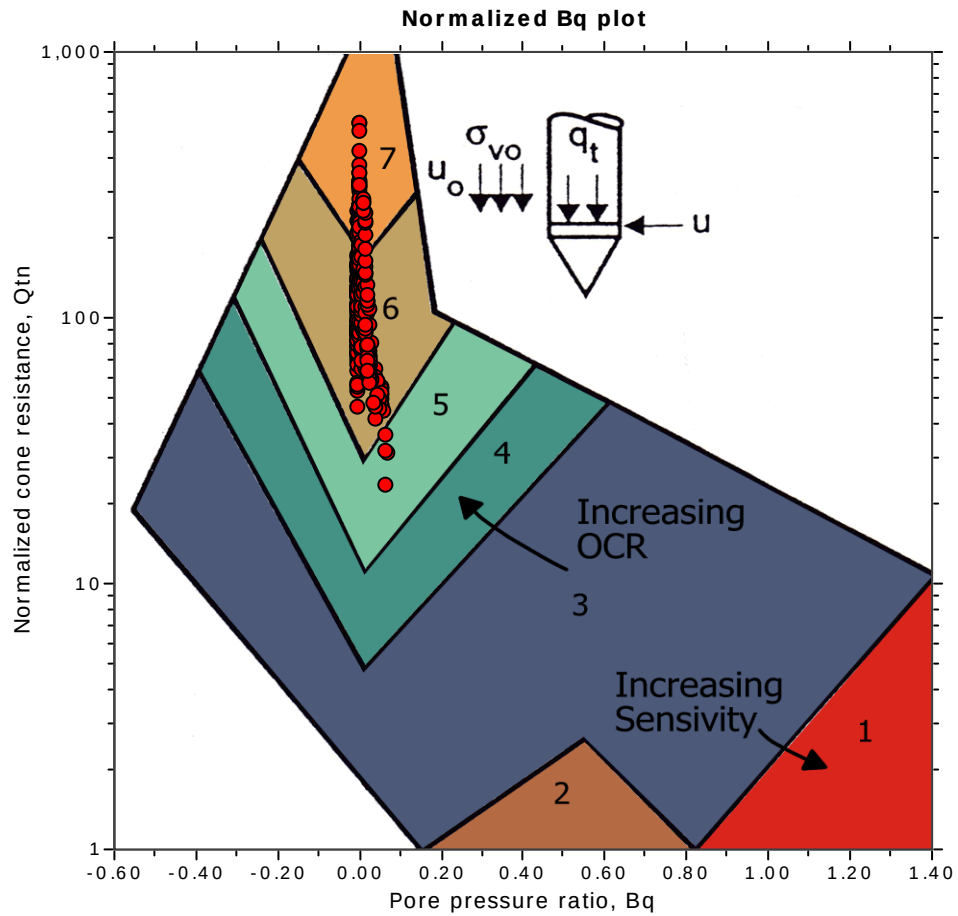
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0010CPT

Total depth: 59.22 ft

Surface Elevation: 283.43 ft

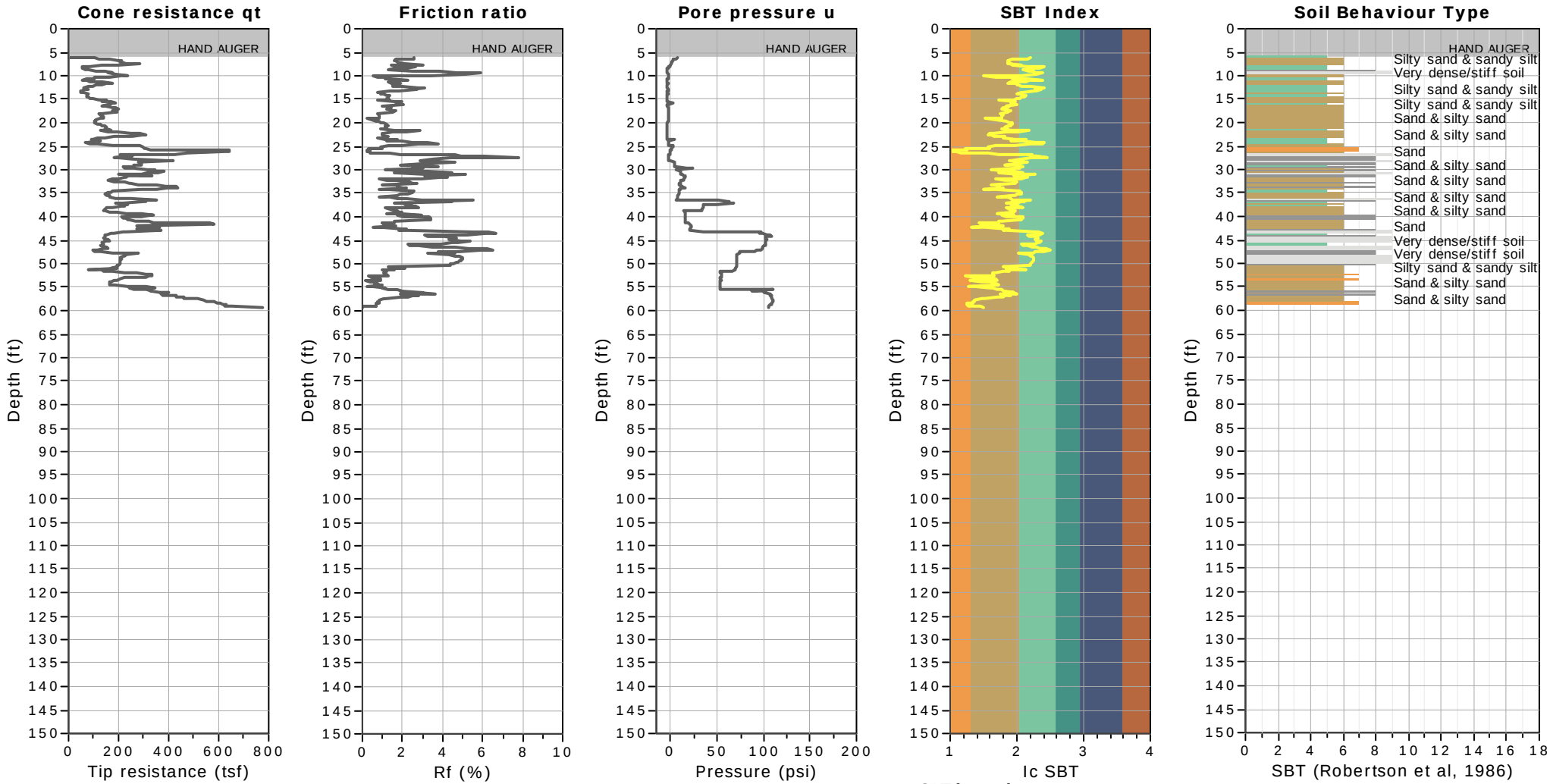
Coords: X:6324305.50, Y:2156608.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0010CPT

Total depth: 59.22 ft

Surface Elevation: 283.43 ft

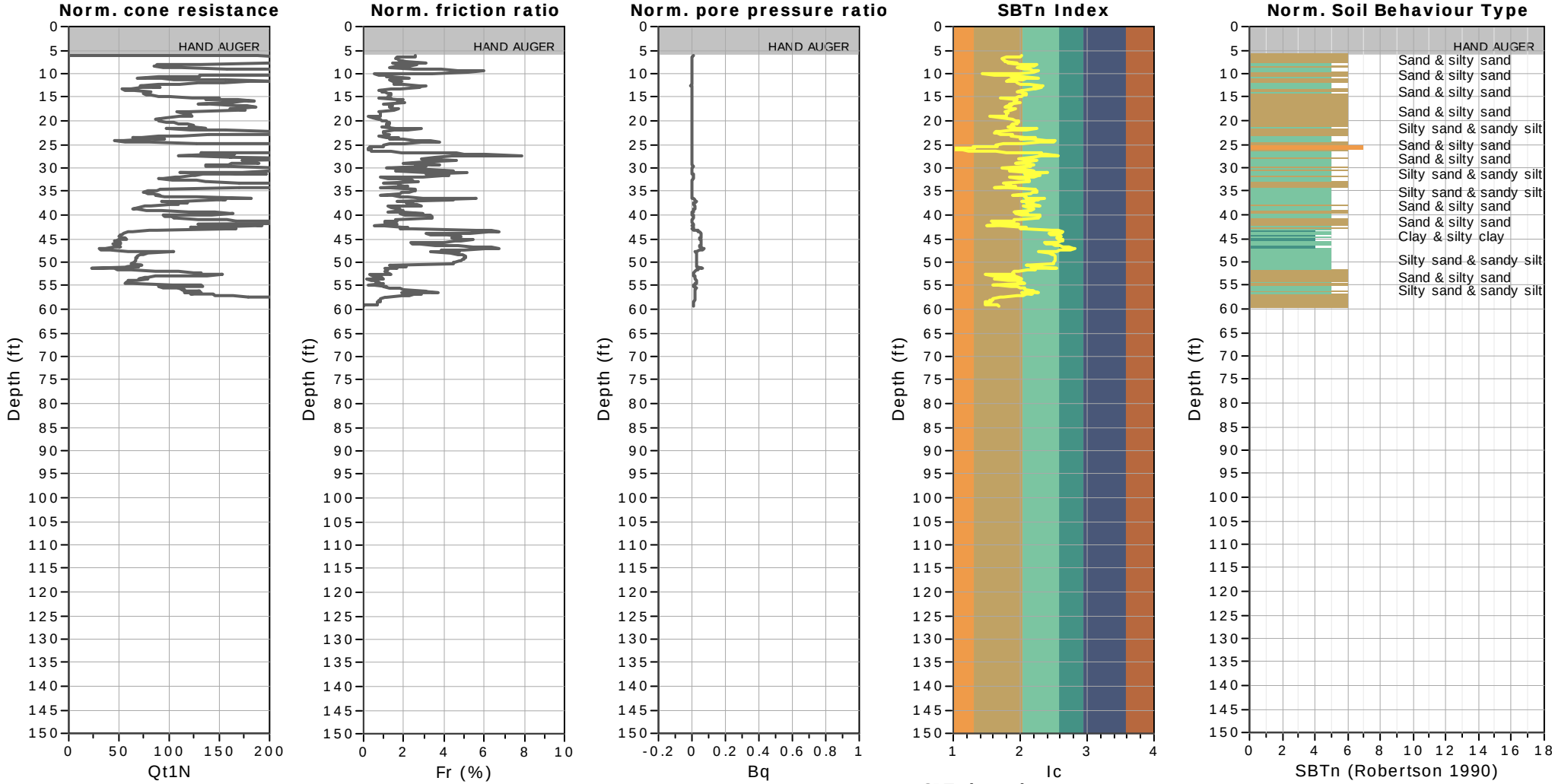
Coords: X:6324305.50, Y:2156608.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

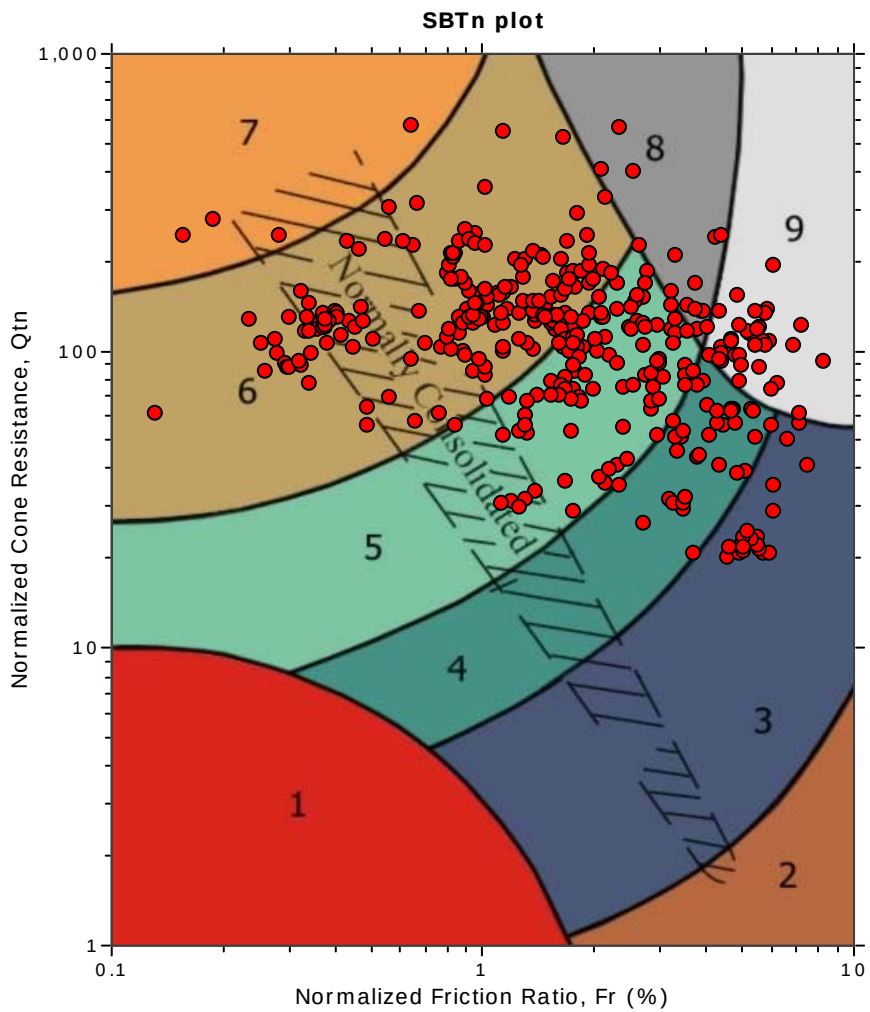


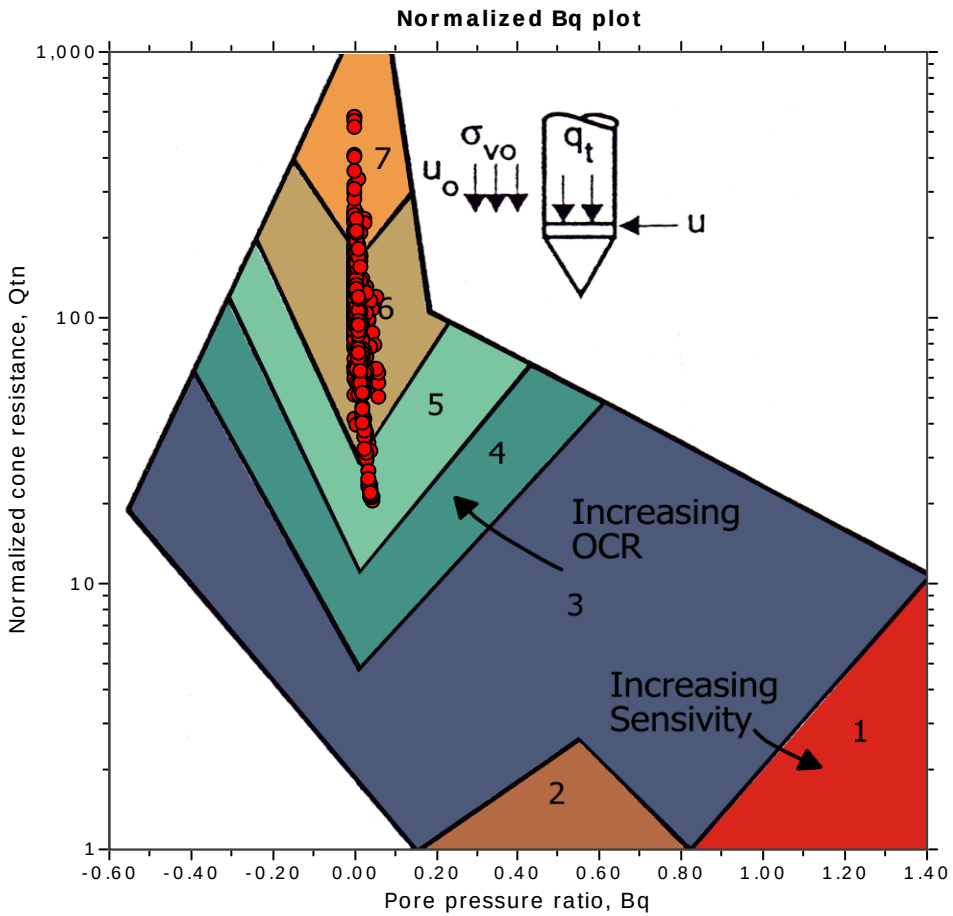
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0011CPT

Total depth: 66.60 ft

Surface Elevation: 284.44 ft

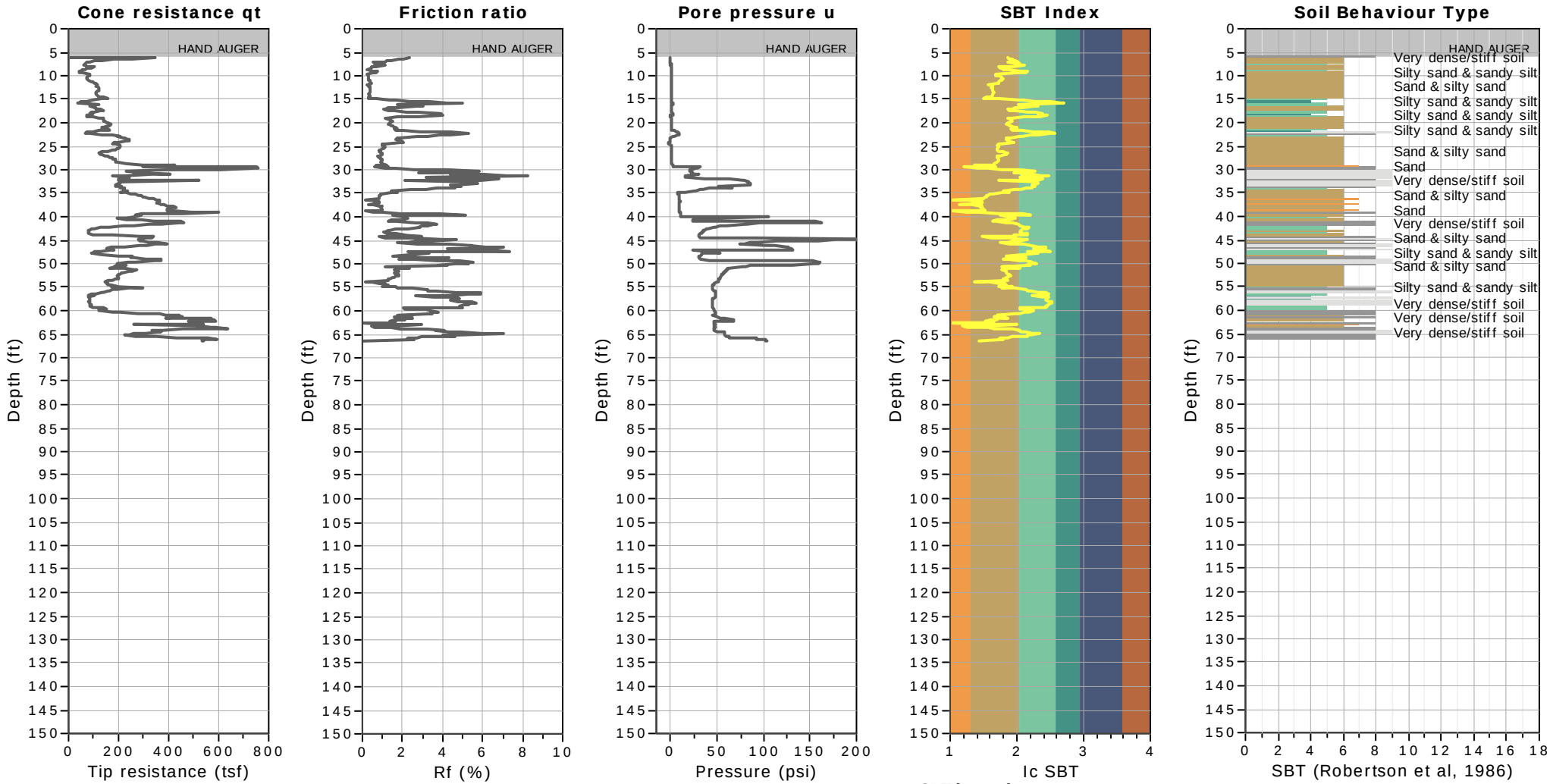
Coords: X:6324747.00, Y:2156091.75

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0011CPT

Total depth: 66.60 ft

Surface Elevation: 284.44 ft

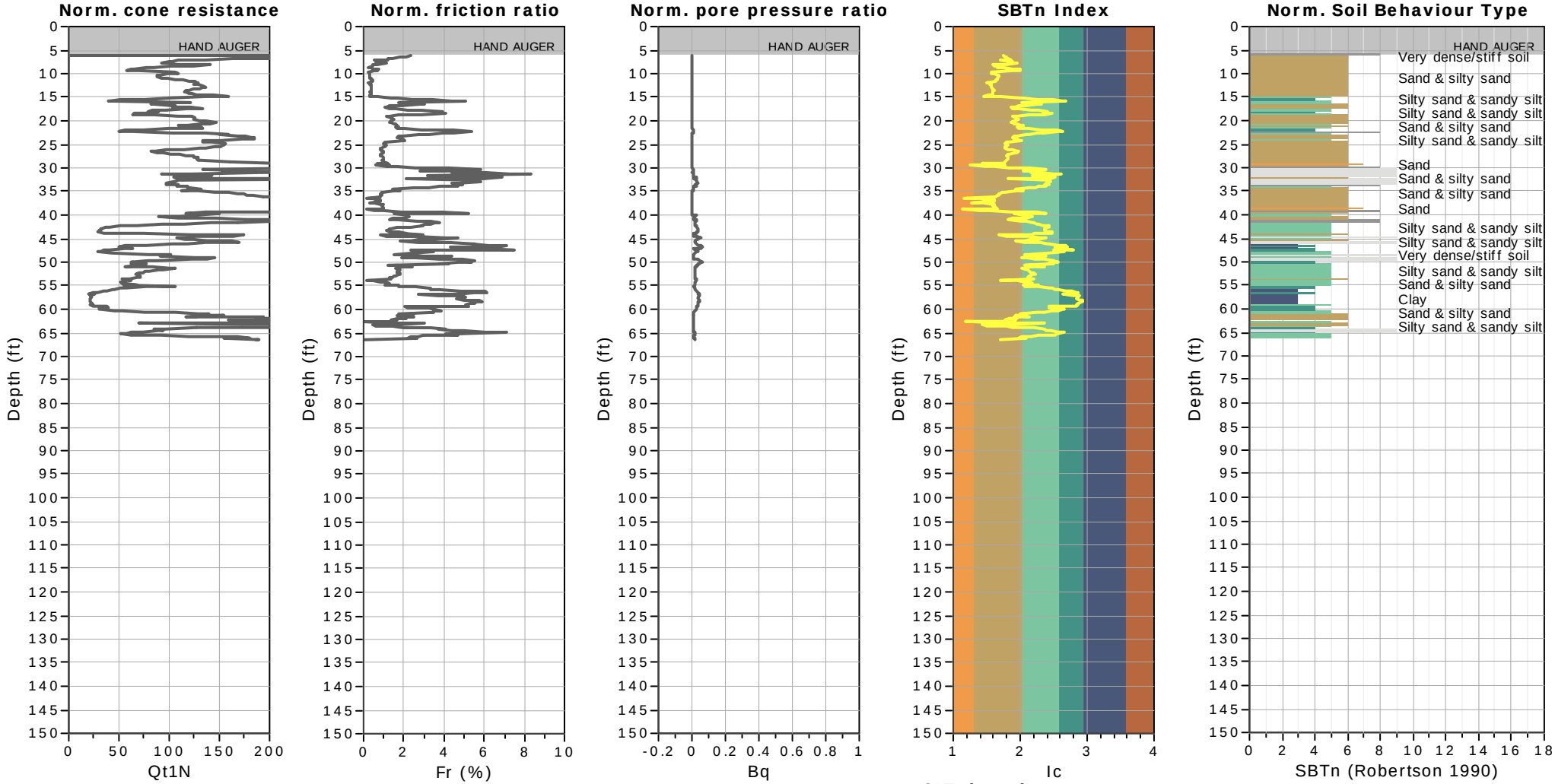
Coords: X:6324747.00, Y:2156091.75

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

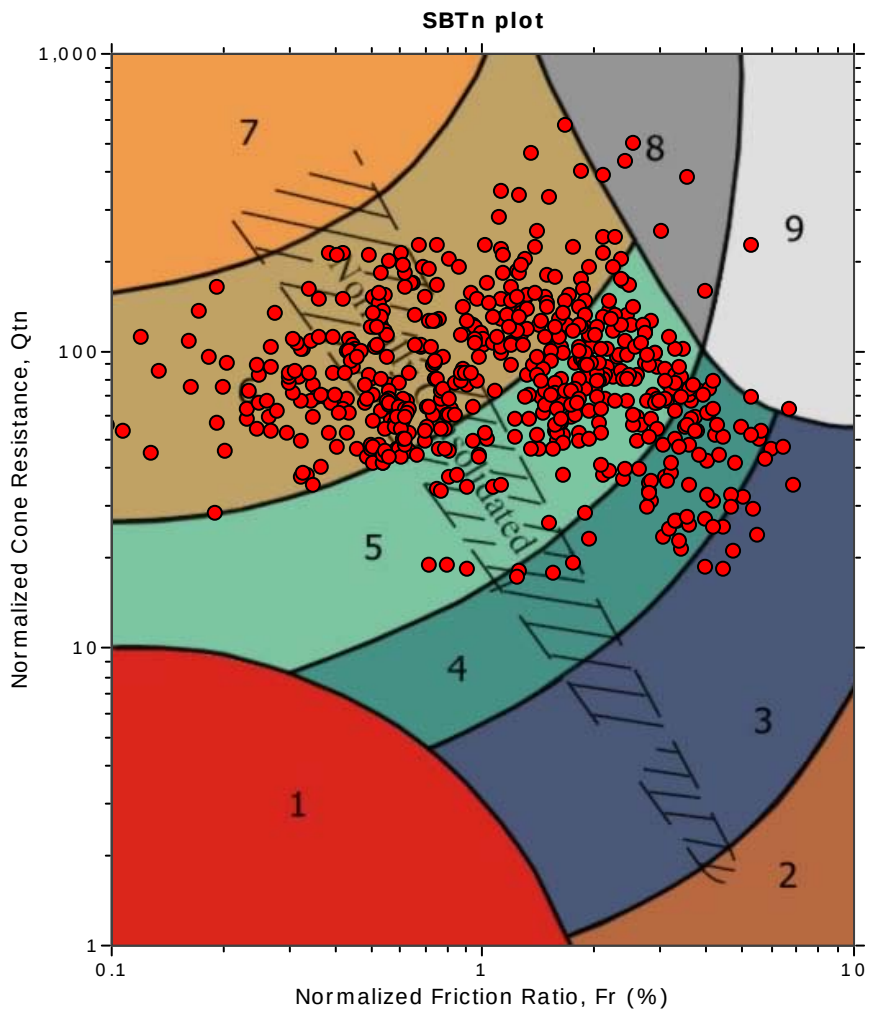


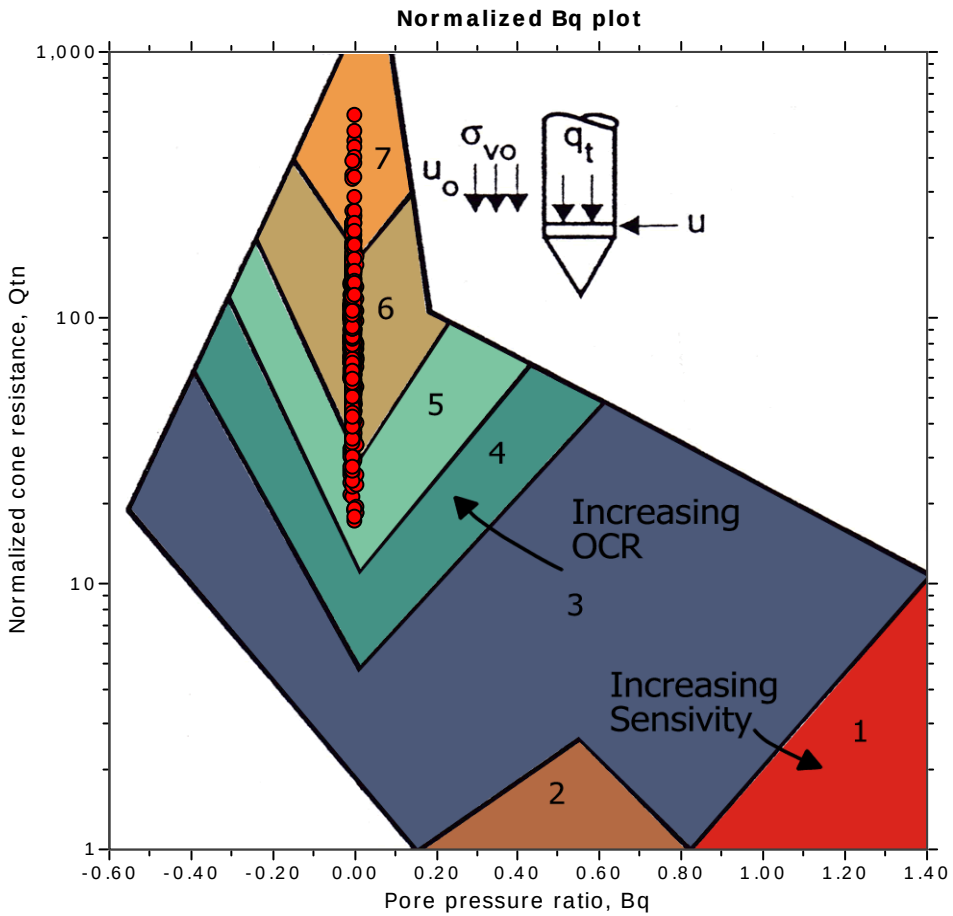
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0012CPT

Total depth: 102.69 ft

Surface Elevation: 288.85 ft

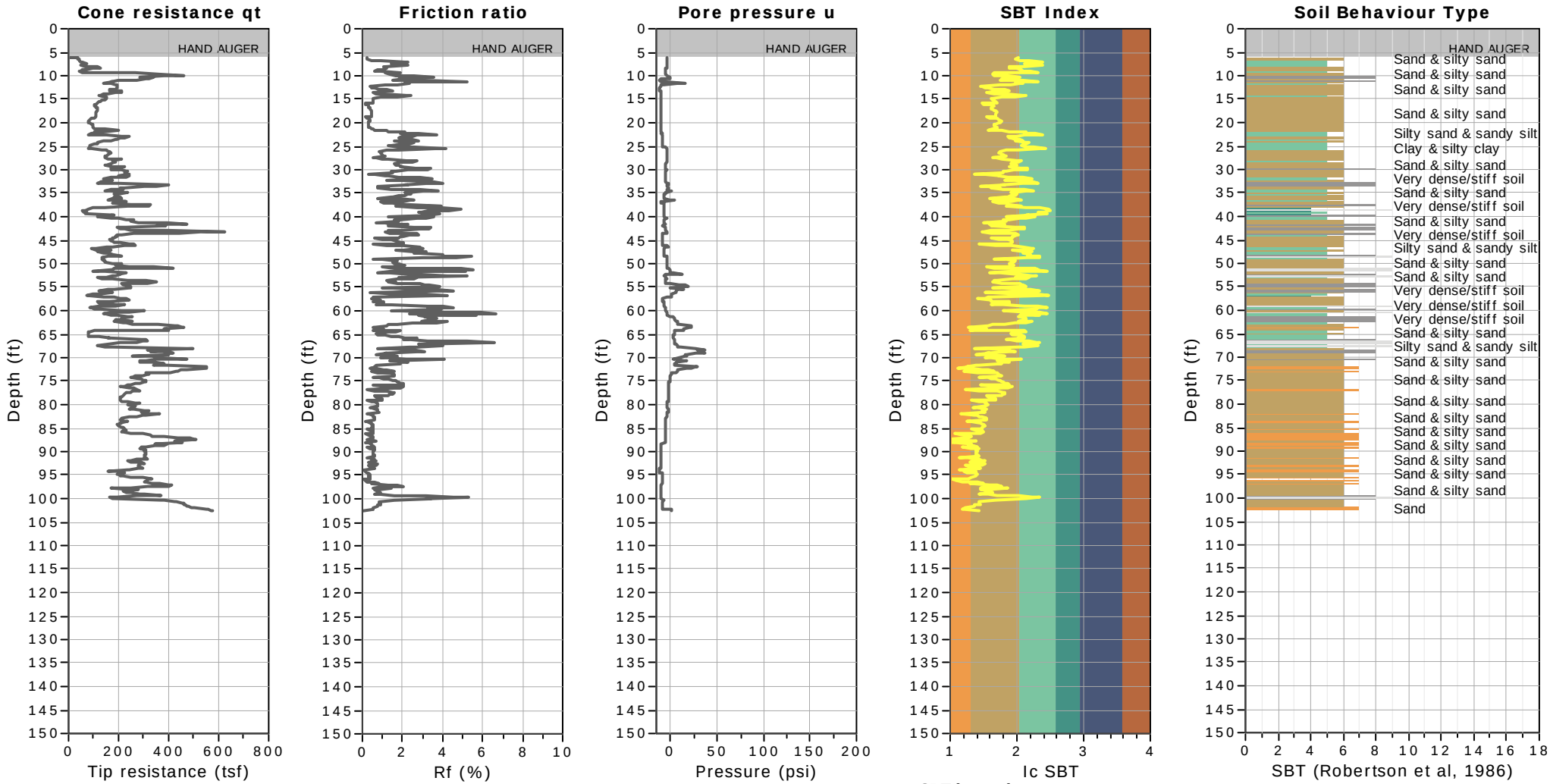
Coords: X:6324548.50, Y:2155038.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0012CPT

Total depth: 102.69 ft

Surface Elevation: 288.85 ft

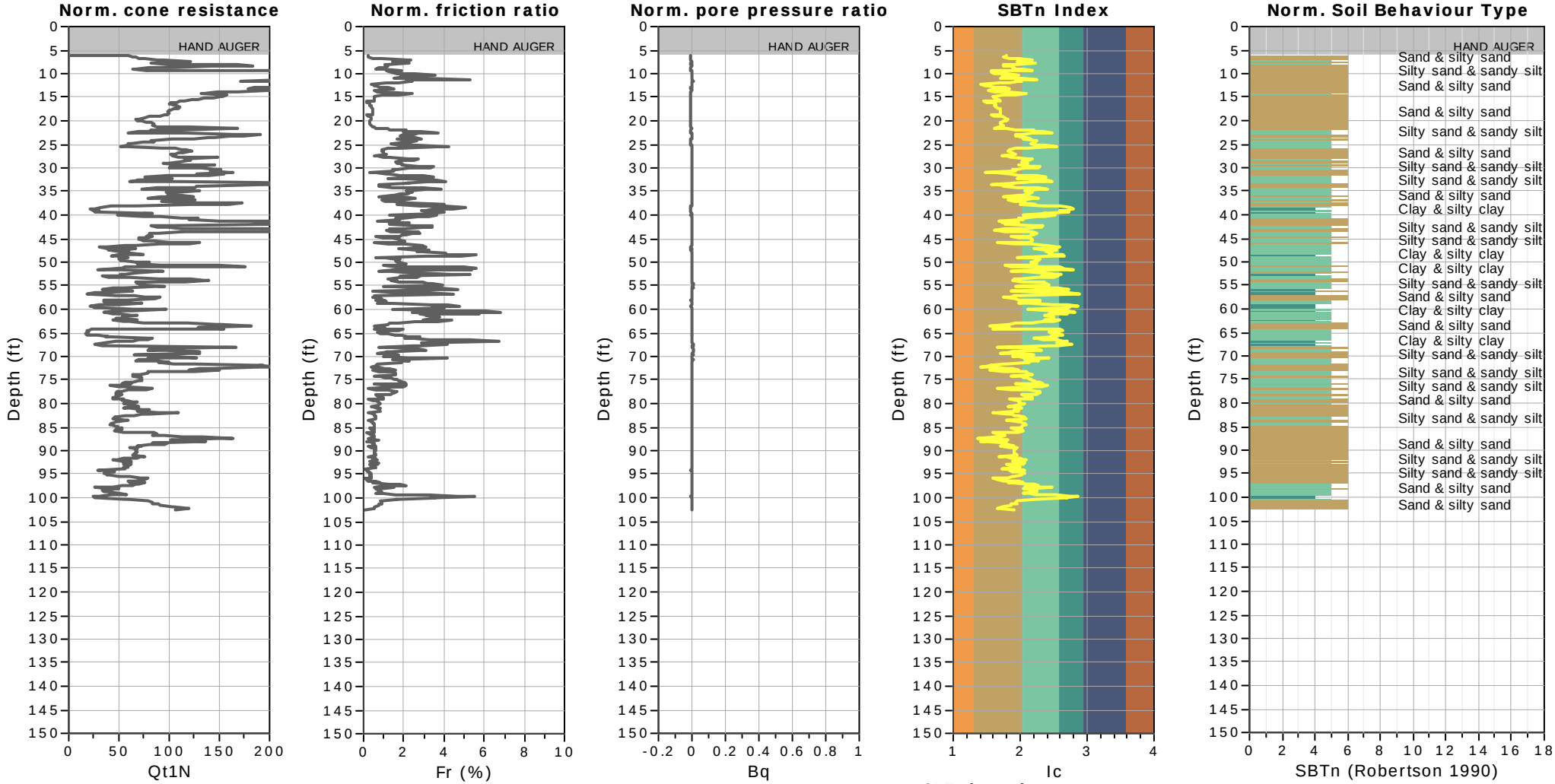
Coords: X:6324548.50, Y:2155038.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

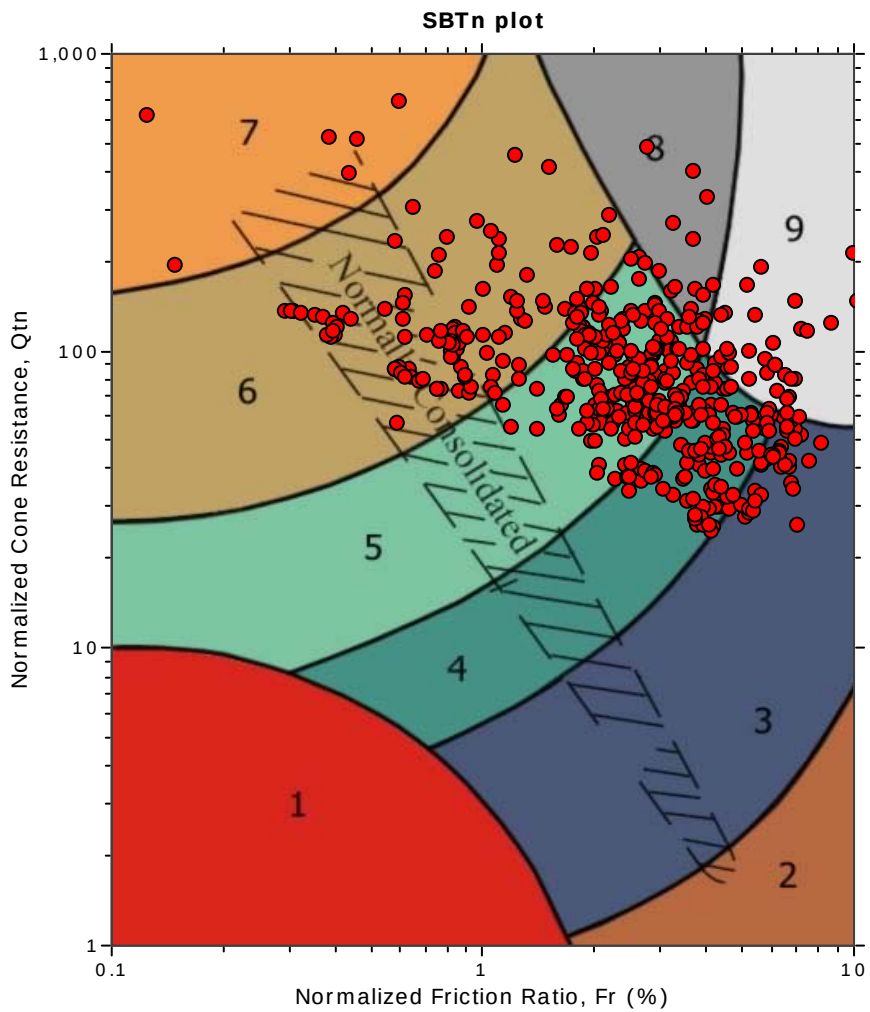
Location: Fresno, CA

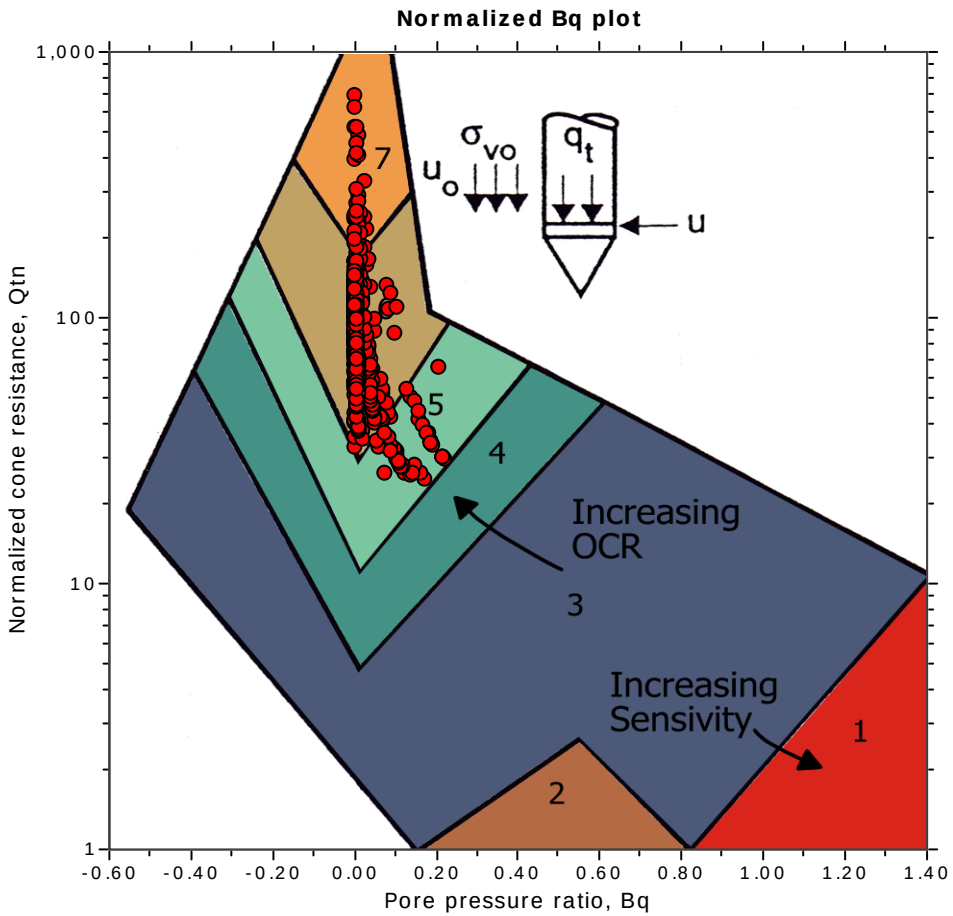


SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0013CPT

Total depth: 101.21 ft

Surface Elevation: 285.05 ft

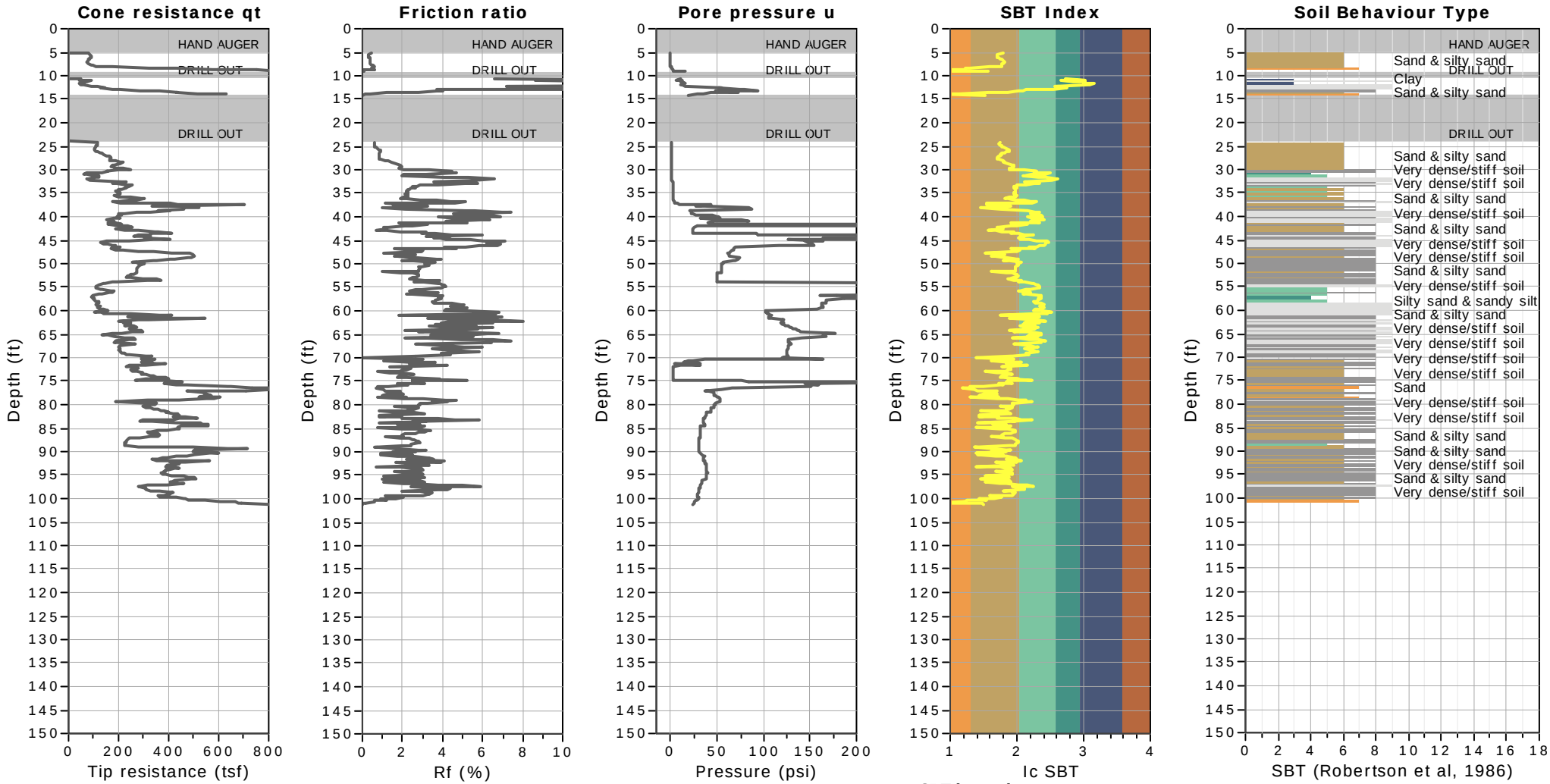
Coords: X:6325407.00, Y:2155267.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0013CPT

Total depth: 101.21 ft

Surface Elevation: 285.05 ft

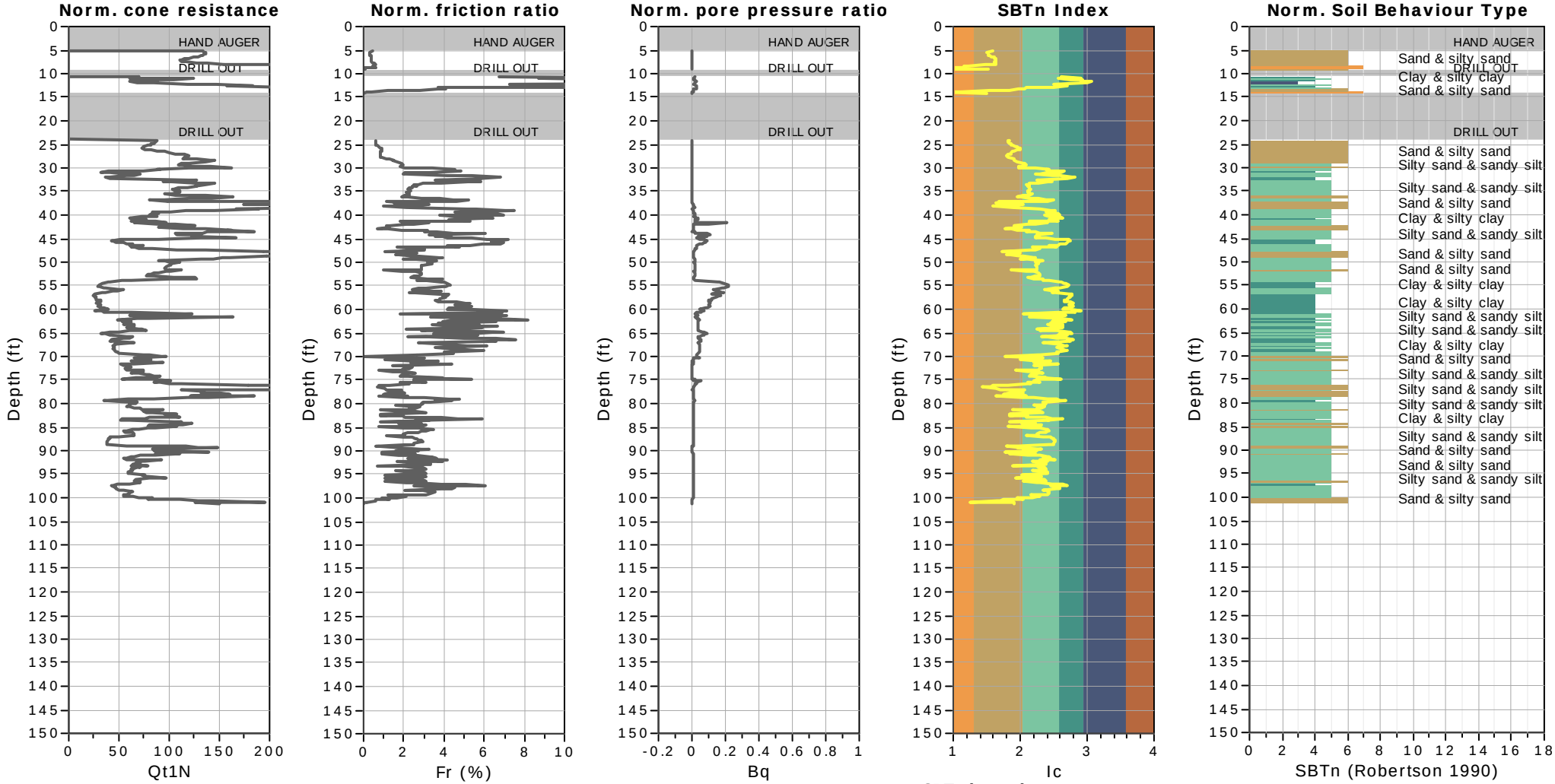
Coords: X:6325407.00, Y:2155267.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

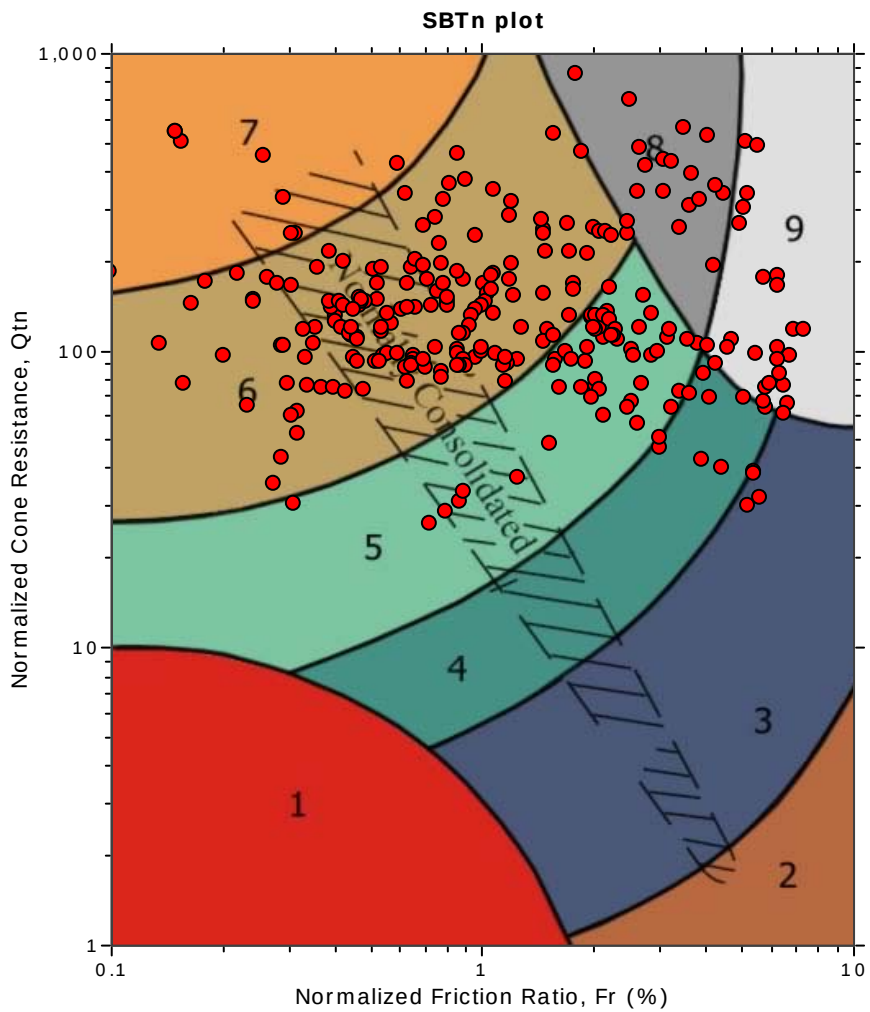


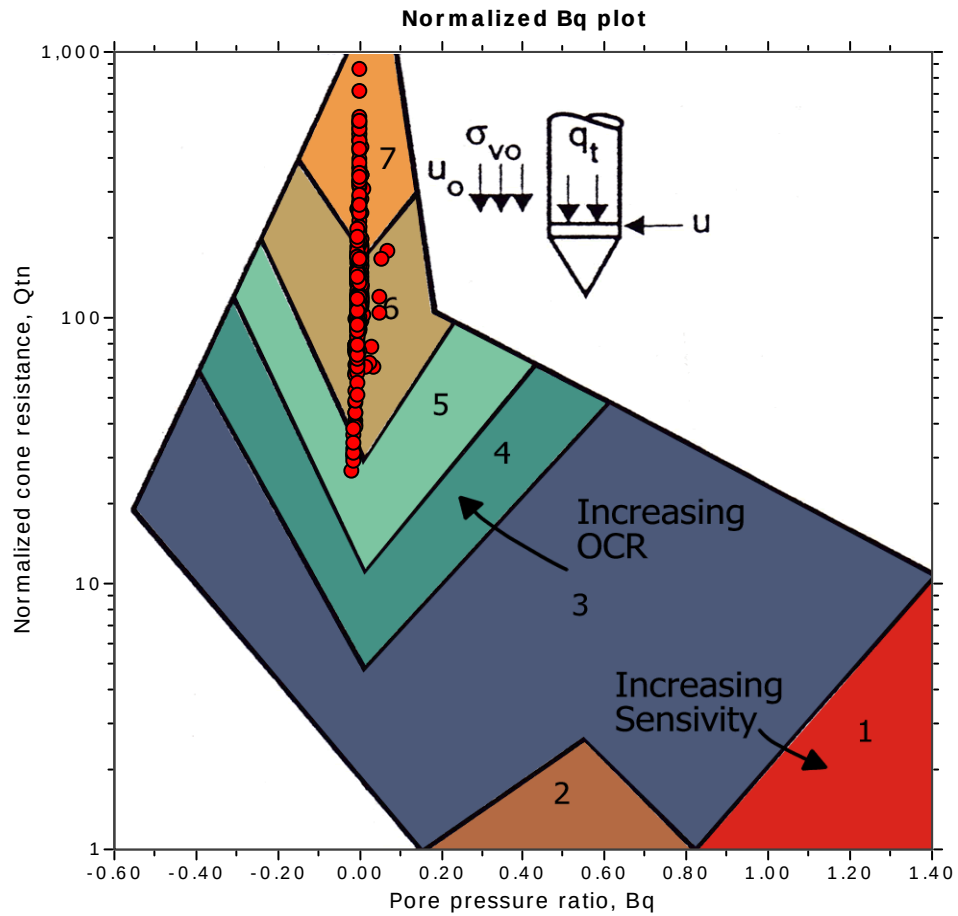
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0014CPT

Total depth: 52.17 ft

Surface Elevation: 287.64 ft

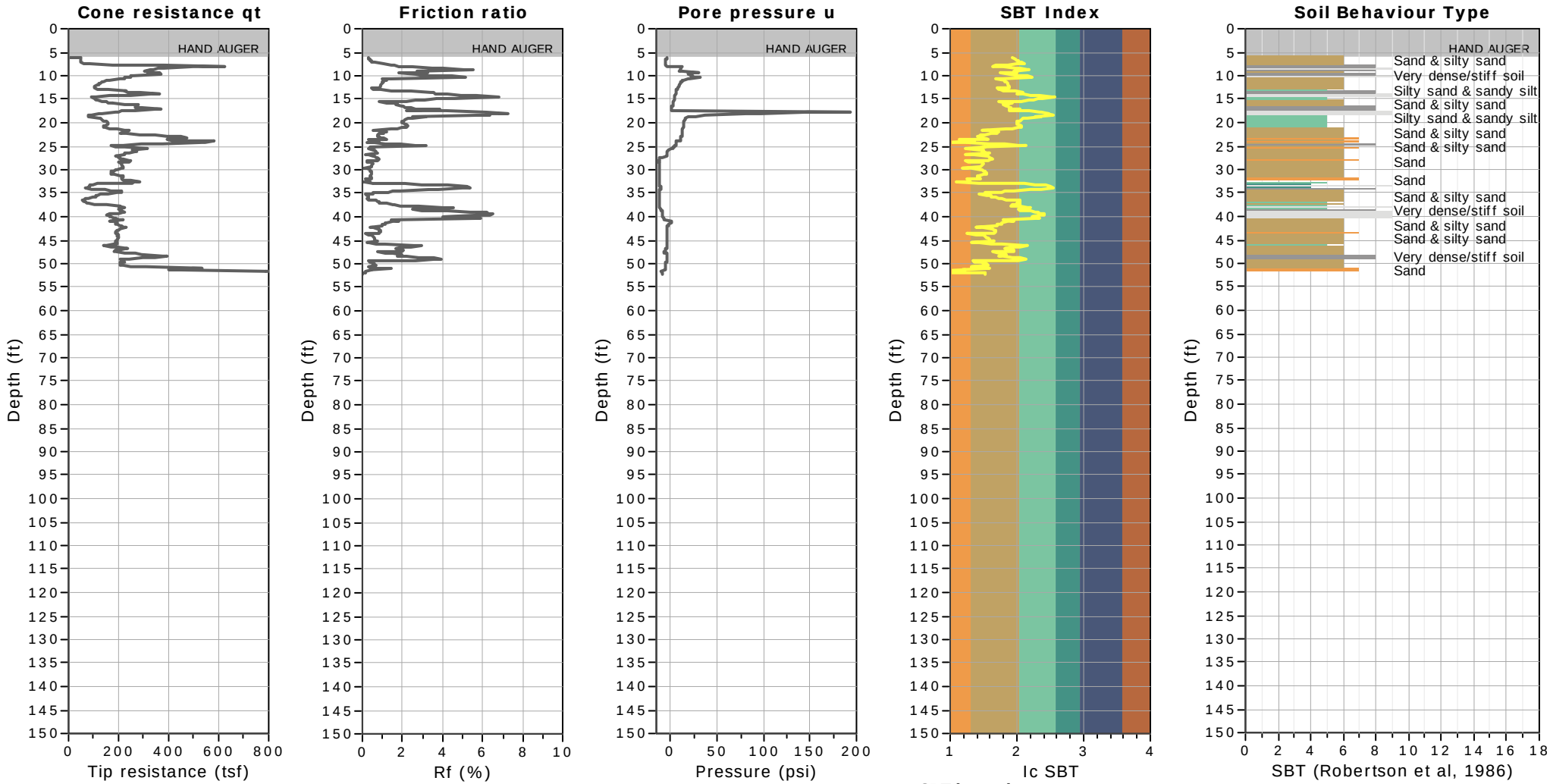
Coords: X:6325494.00, Y:2154687.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



CPT: S0014CPT

Total depth: 52.17 ft

Surface Elevation: 287.64 ft

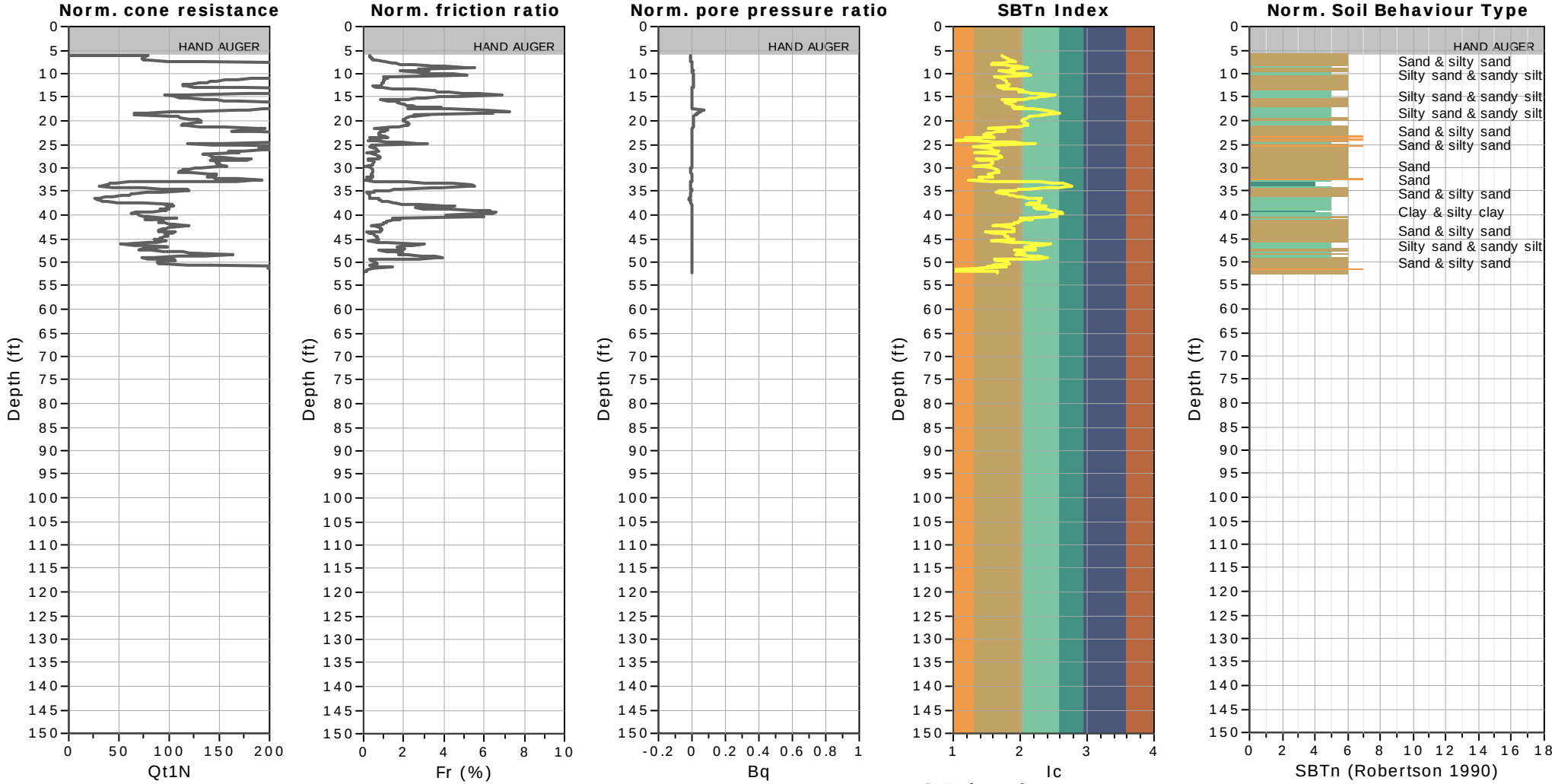
Coords: X:6325494.00, Y:2154687.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

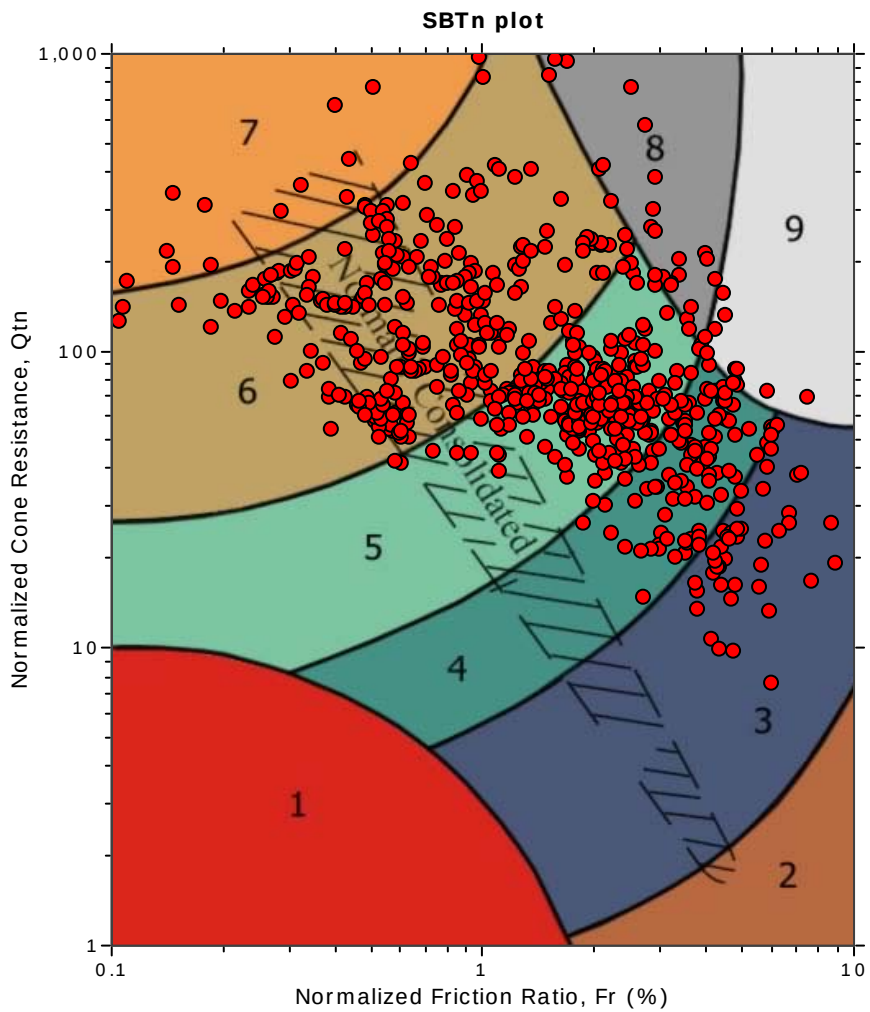


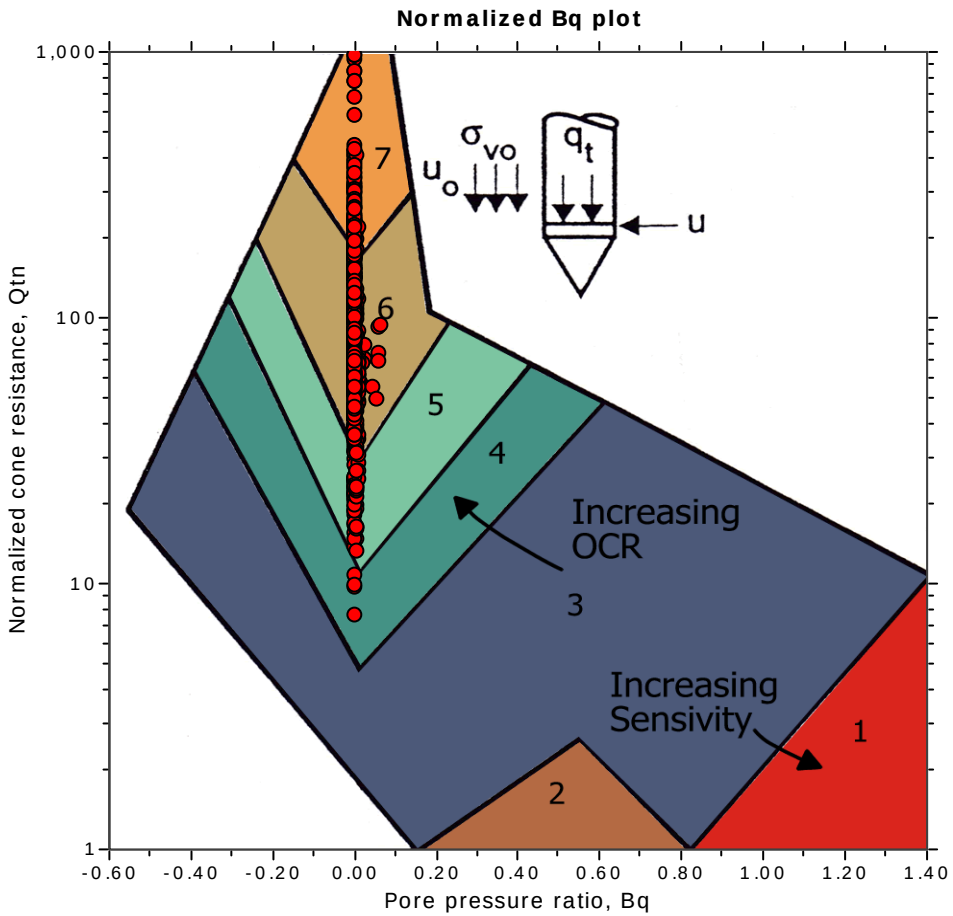
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0015CPT

Total depth: 114.67 ft

Surface Elevation: 286.11 ft

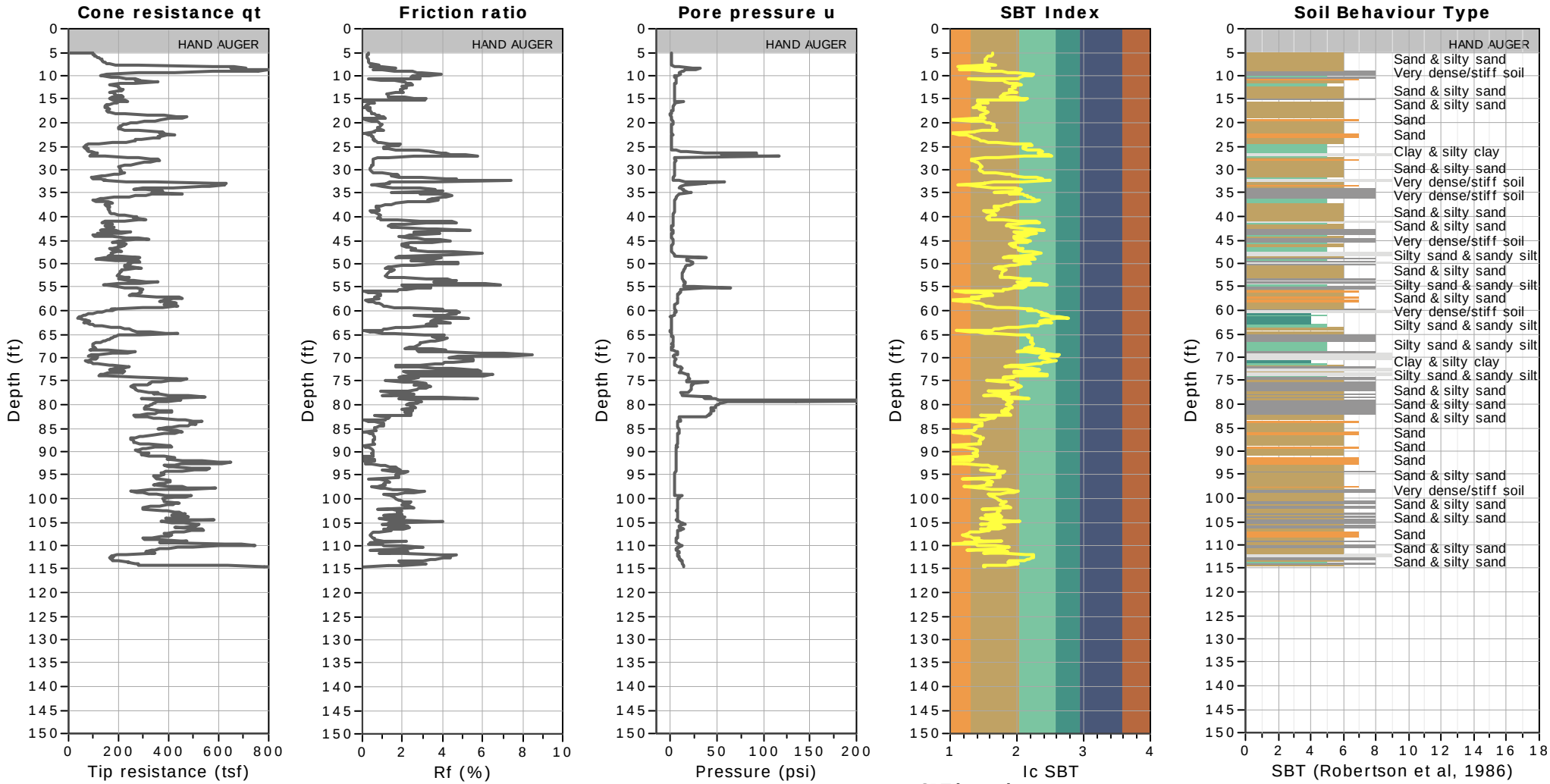
Coords: X:6326261.00, Y:2153498.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0015CPT

Total depth: 114.67 ft

Surface Elevation: 286.11 ft

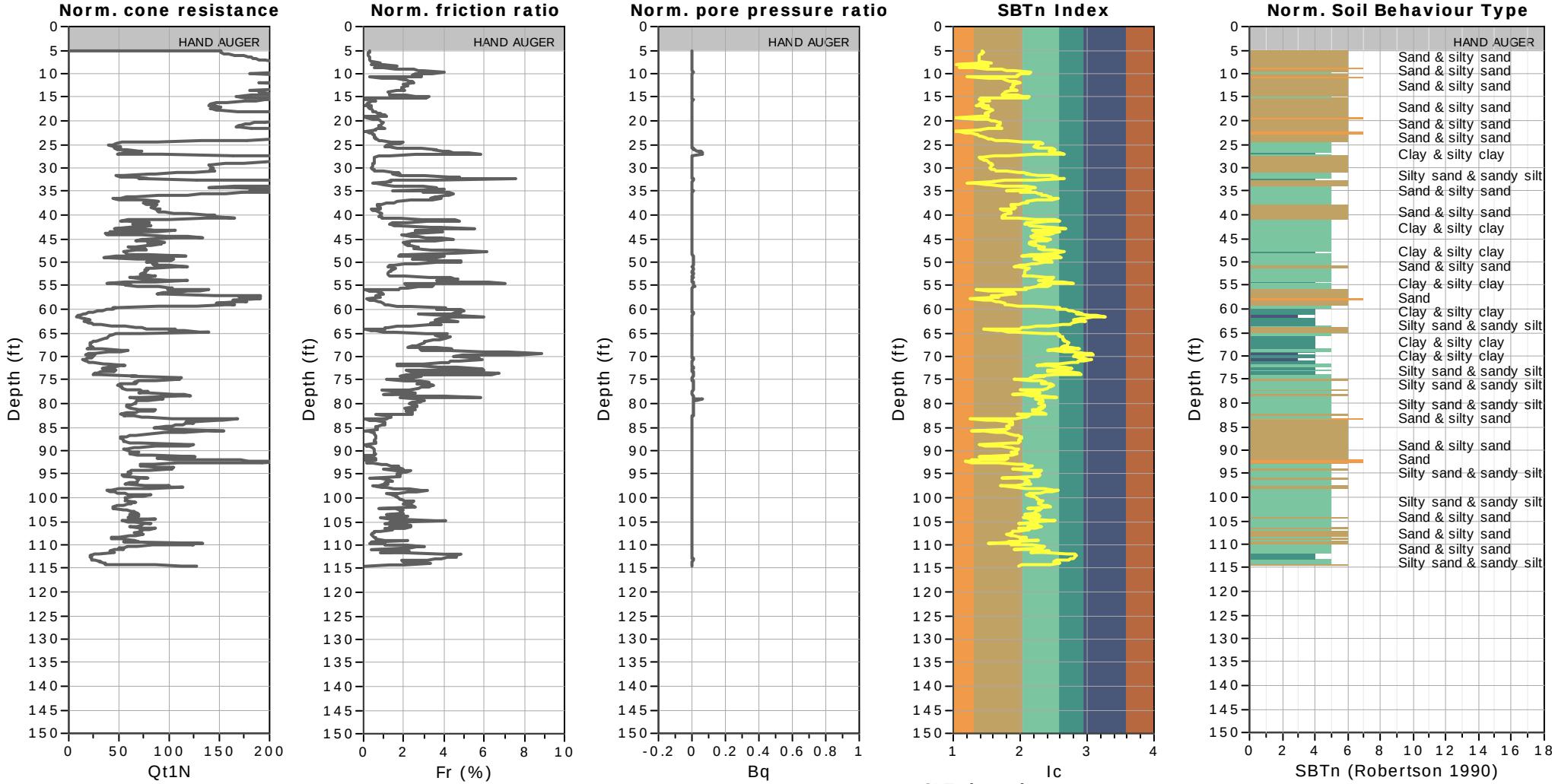
Coords: X:6326261.00, Y:2153498.50

Cone Type: GDC-27

Cone Operator: T.Patterson

Project: California High-Speed Train

Location: Fresno, CA

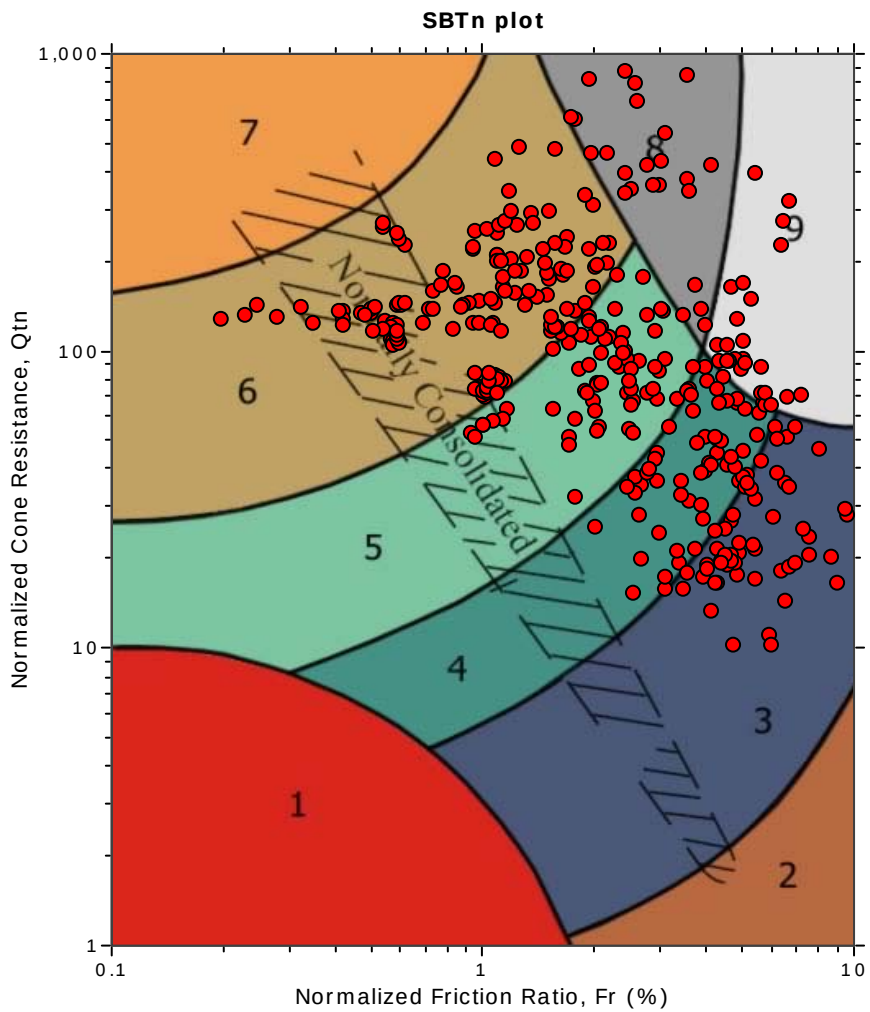


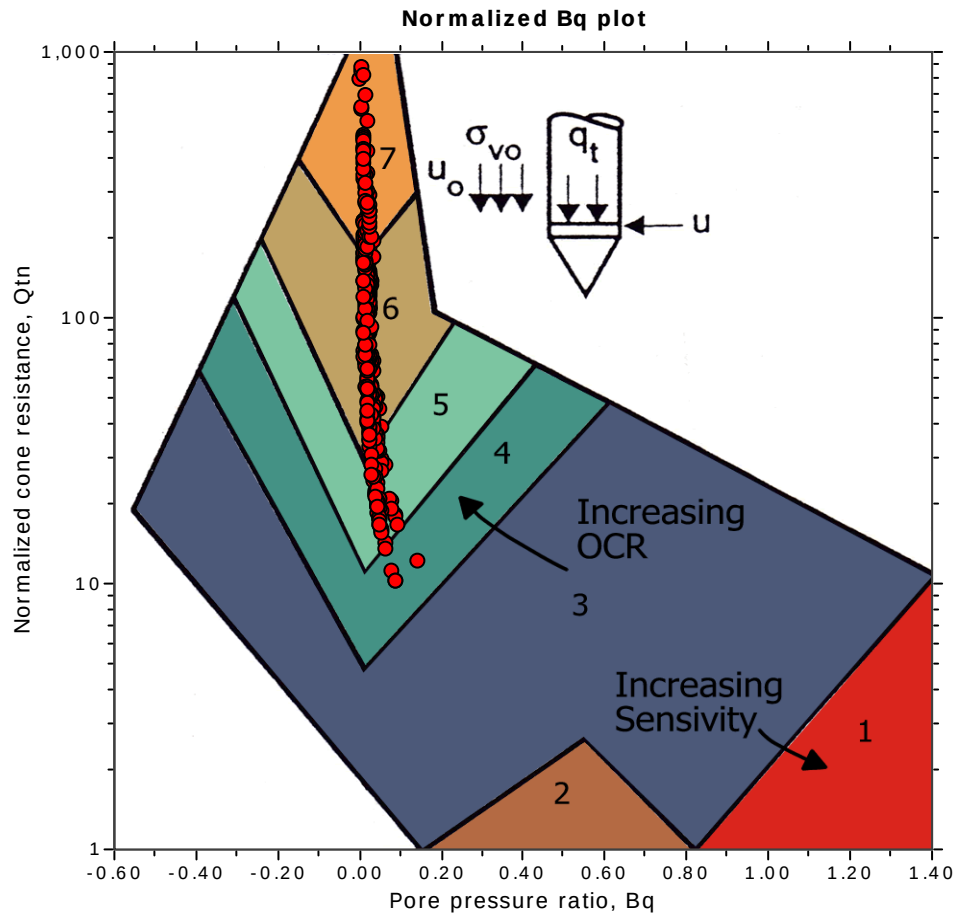
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0016CPT

Total depth: 67.26 ft

Surface Elevation: 285.37 ft

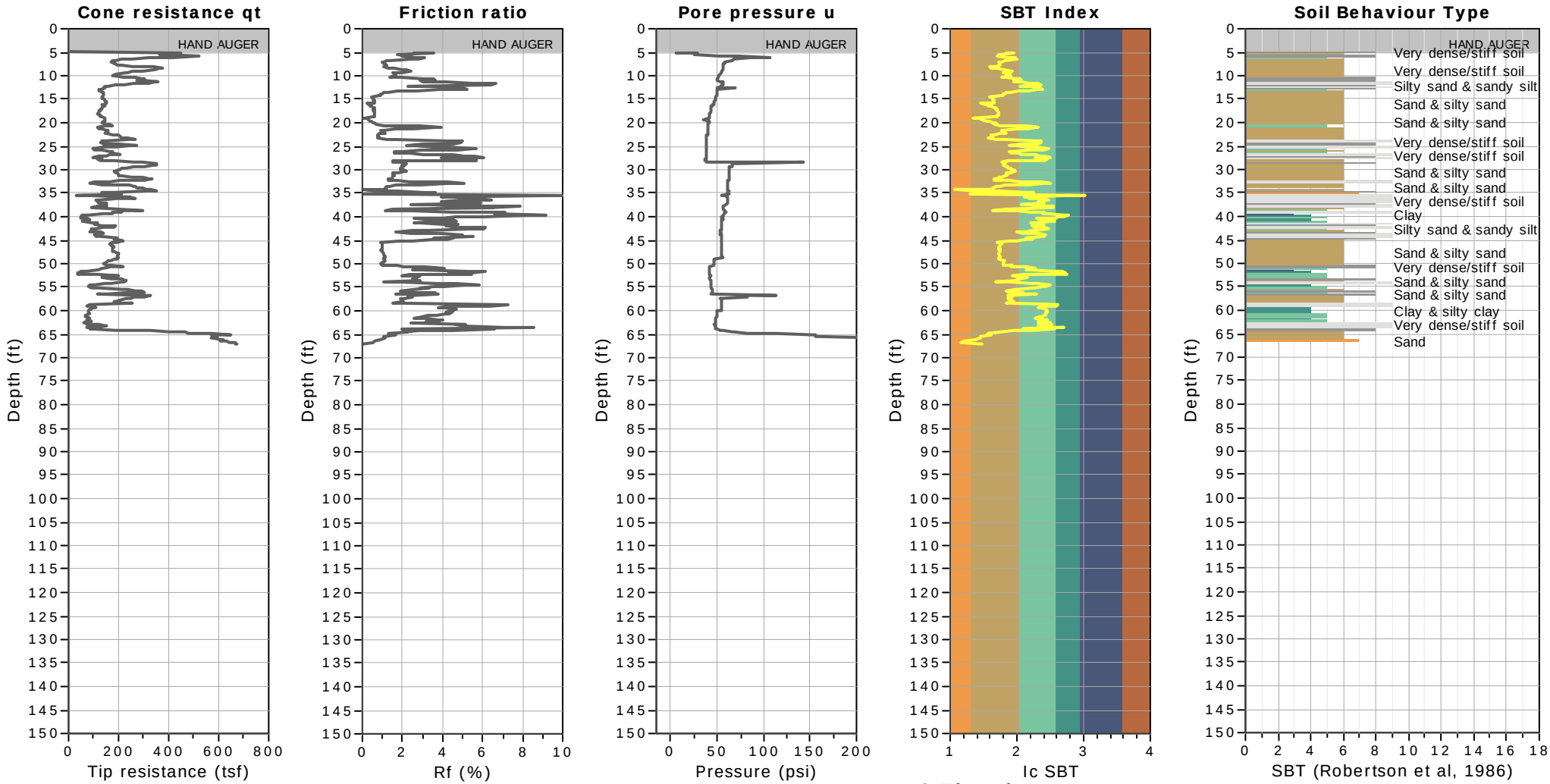
Coords: X:6327476.00, Y:2152082.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0016CPT

Total depth: 67.26 ft

Surface Elevation: 285.37 ft

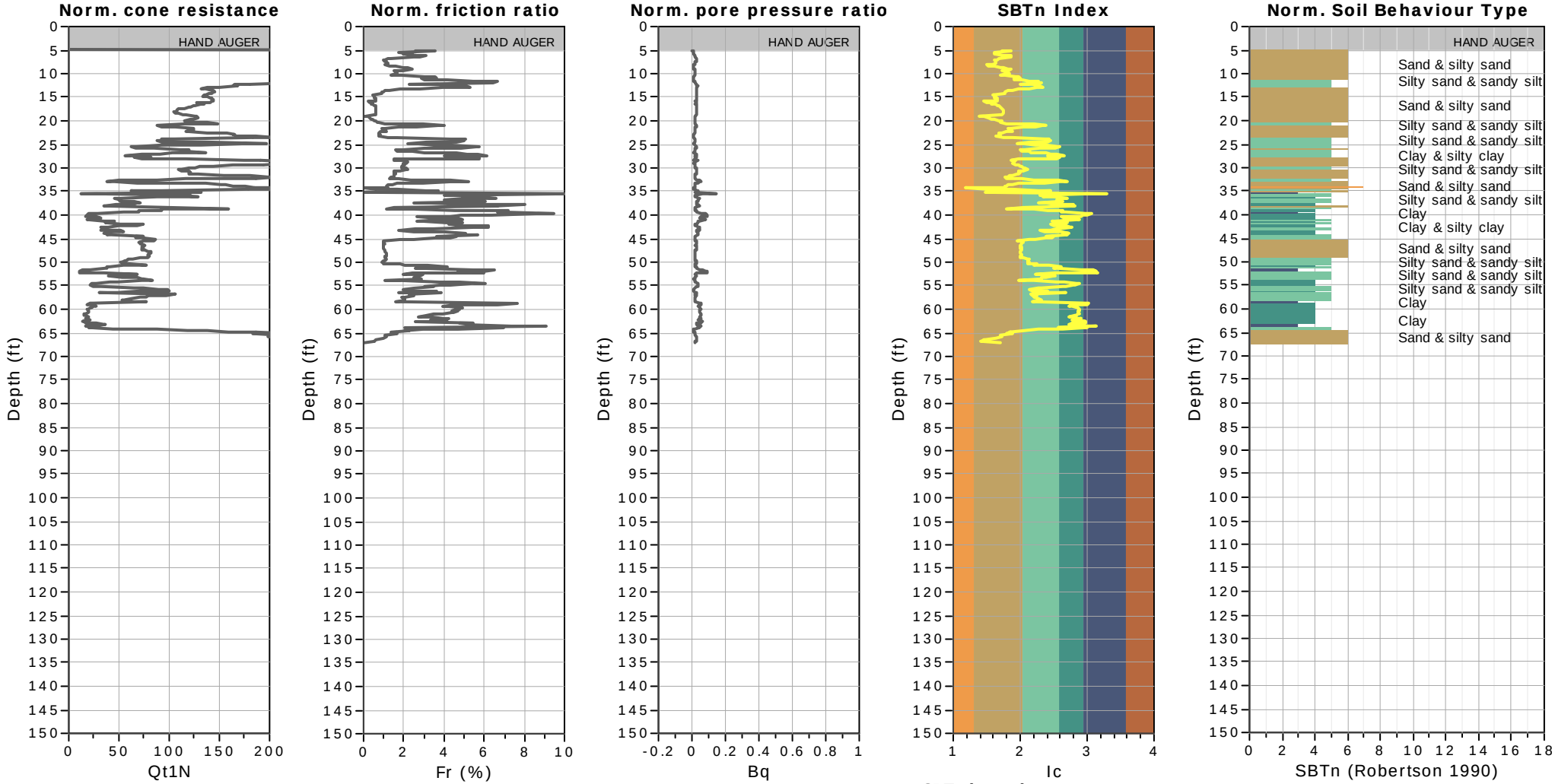
Coords: X:6327476.00, Y:2152082.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

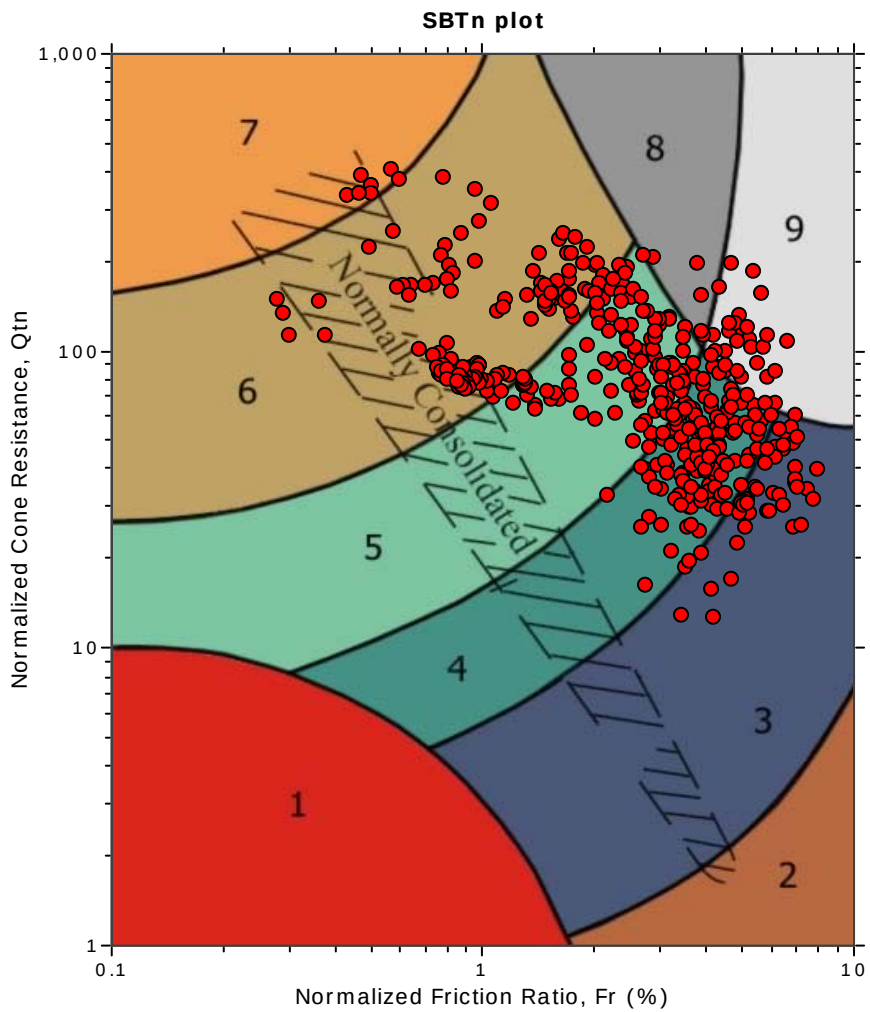


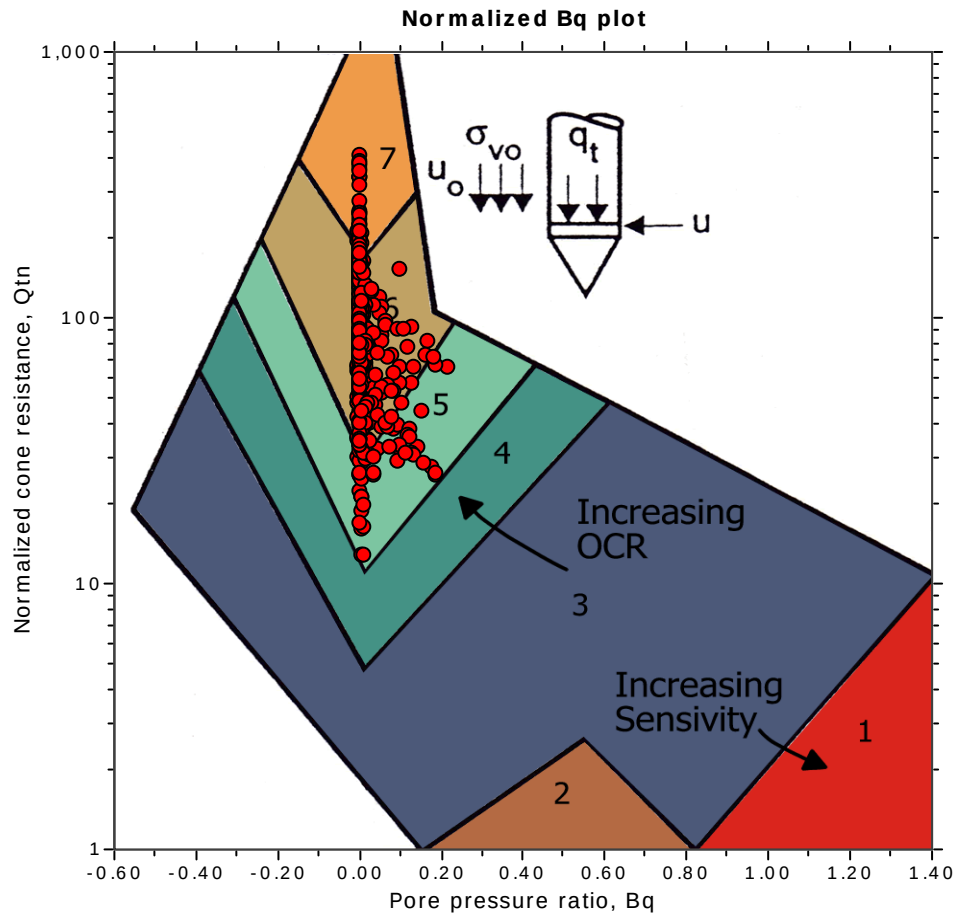
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0017CPT

Total depth: 80.38 ft

Surface Elevation: 286.31 ft

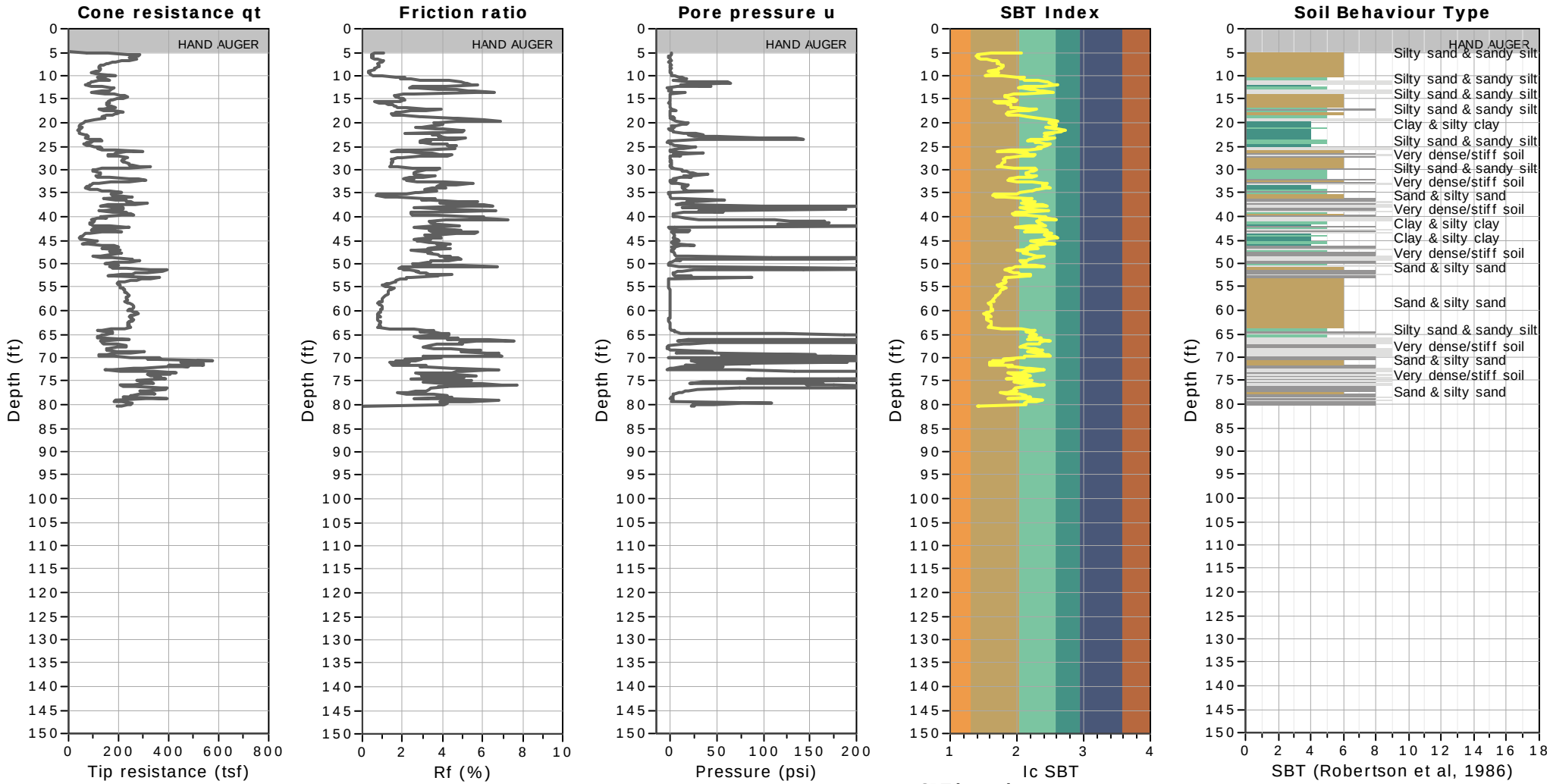
Coords: X:6327731.50, Y:2151787.00

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0017CPT

Total depth: 80.38 ft

Surface Elevation: 286.31 ft

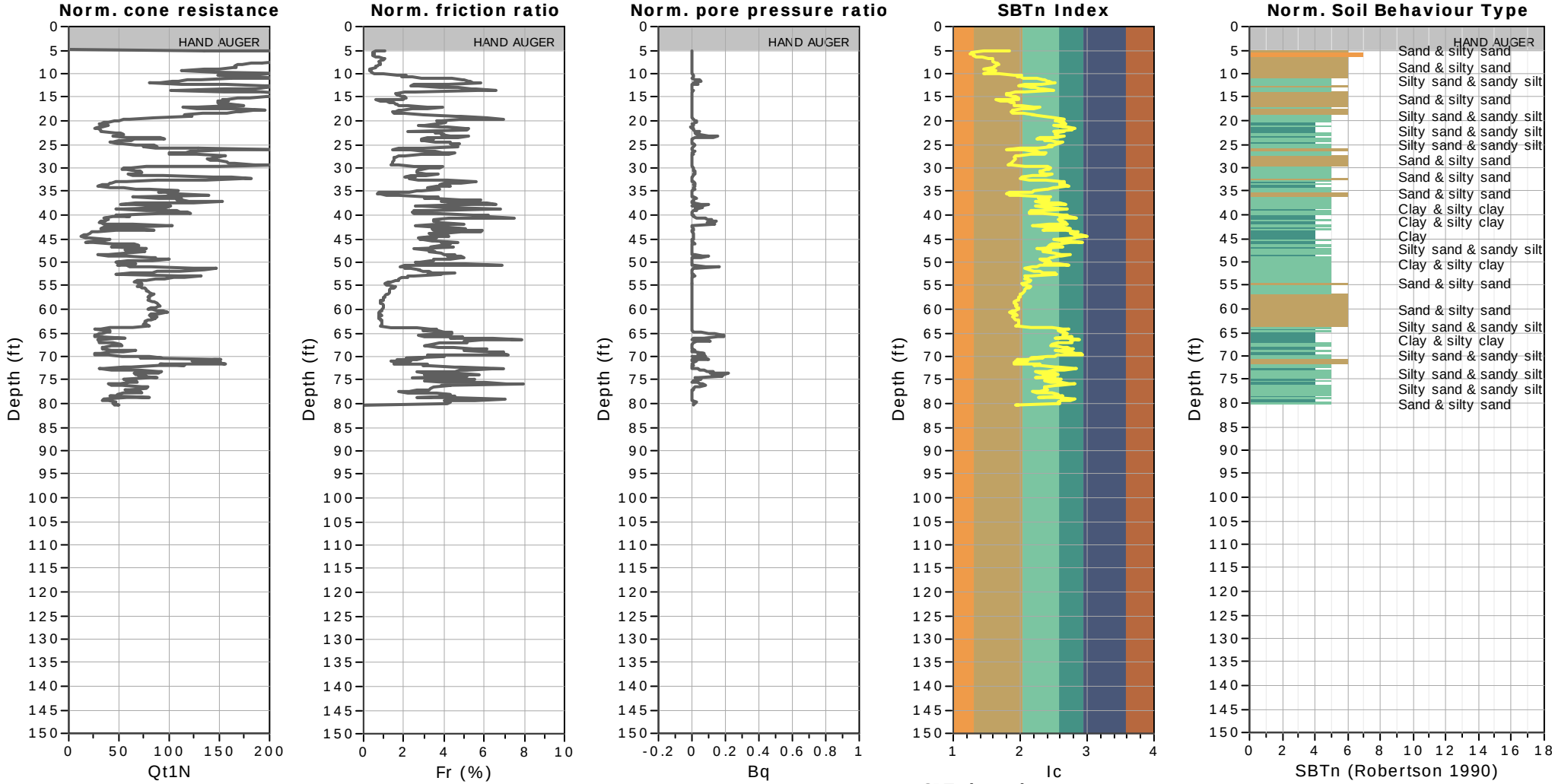
Coords: X:6327731.50, Y:2151787.00

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



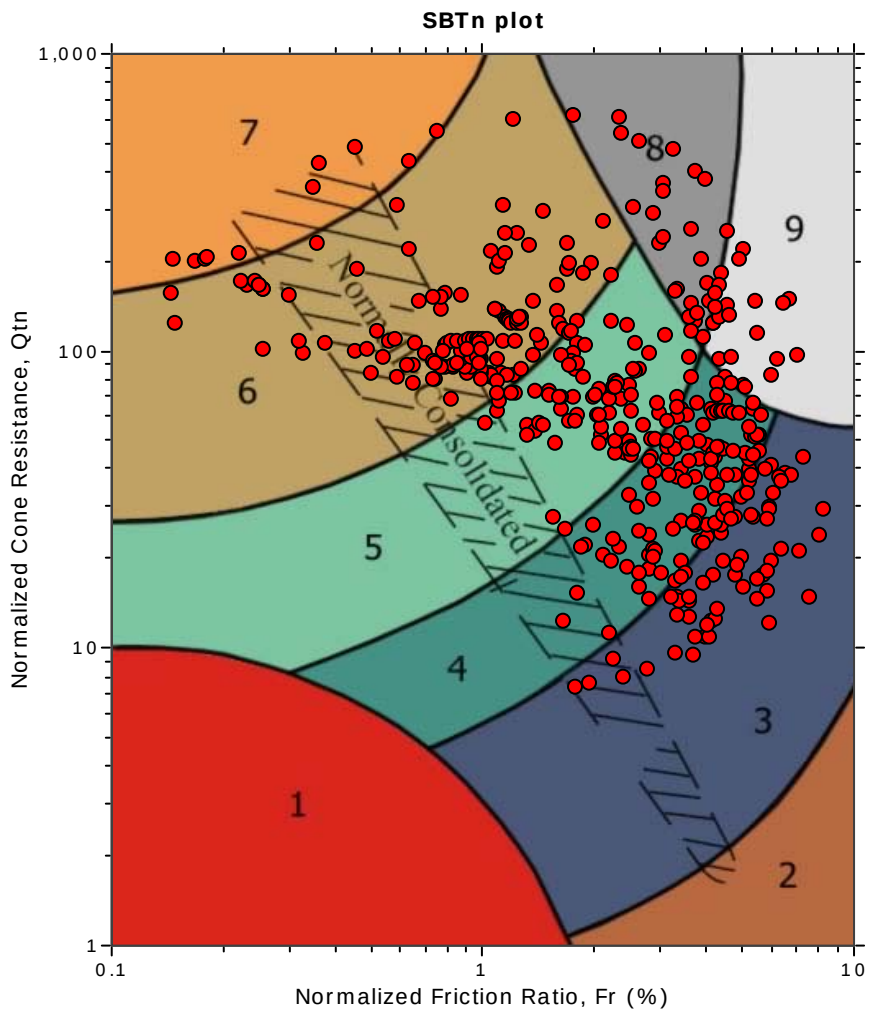
SBTn legend

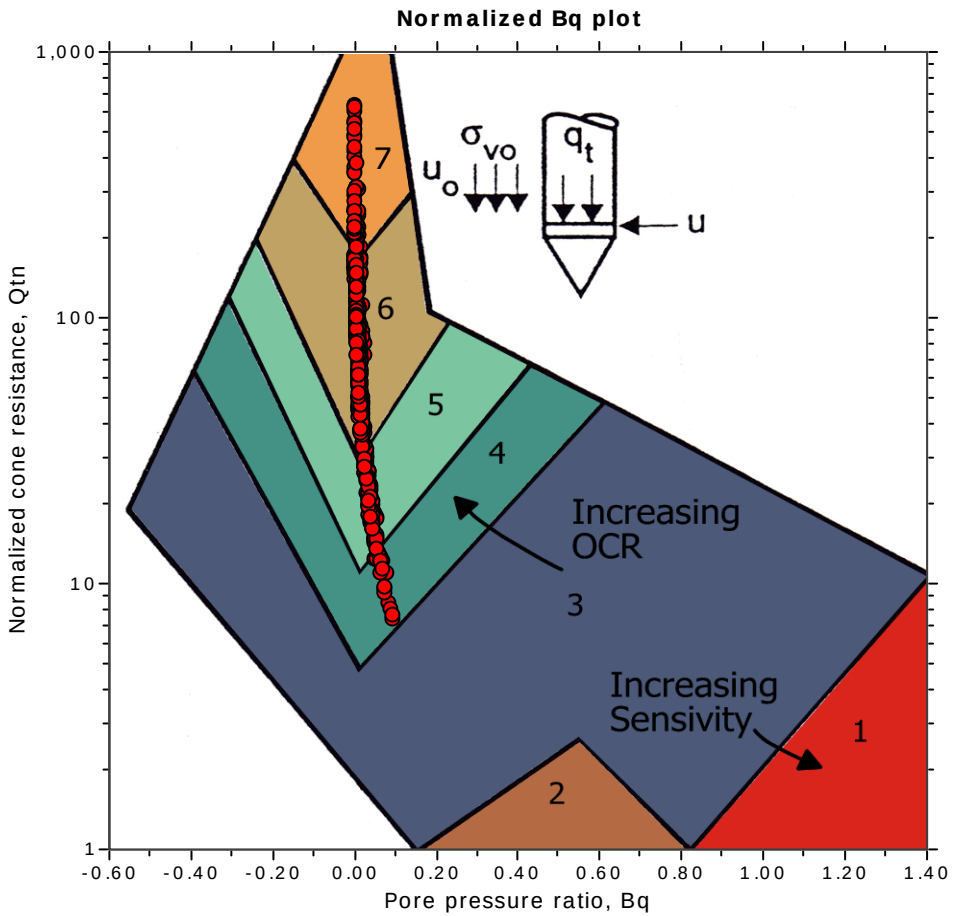
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0018CPT
Total depth: 80.38 ft
Surface Elevation: 285.99 ft
Coords: X:6328346.00, Y:2150921.75
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0018CPT

Total depth: 80.38 ft

Surface Elevation: 285.99 ft

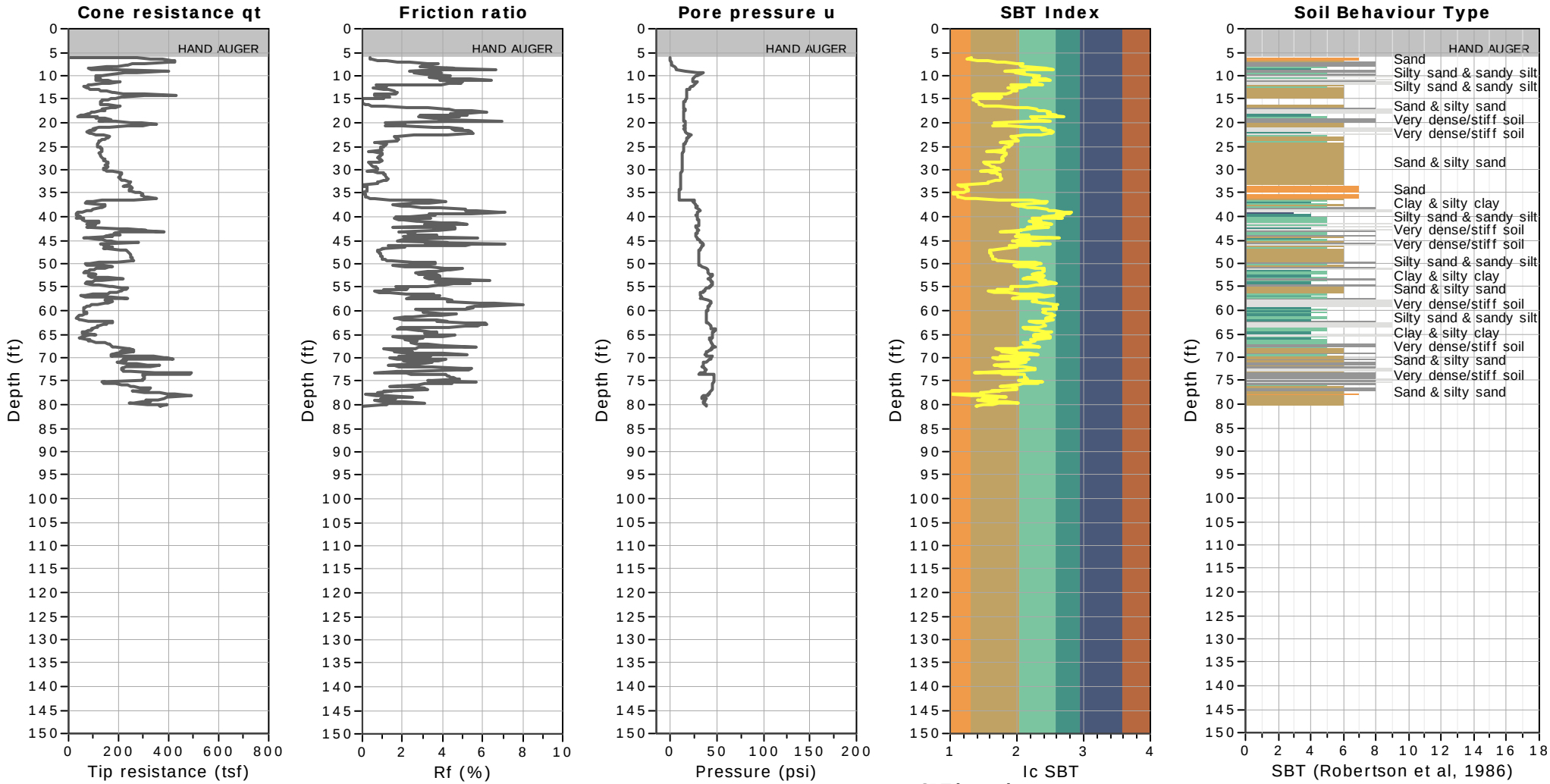
Coords: X:6328346.00, Y:2150921.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0018CPT

Total depth: 80.38 ft

Surface Elevation: 285.99 ft

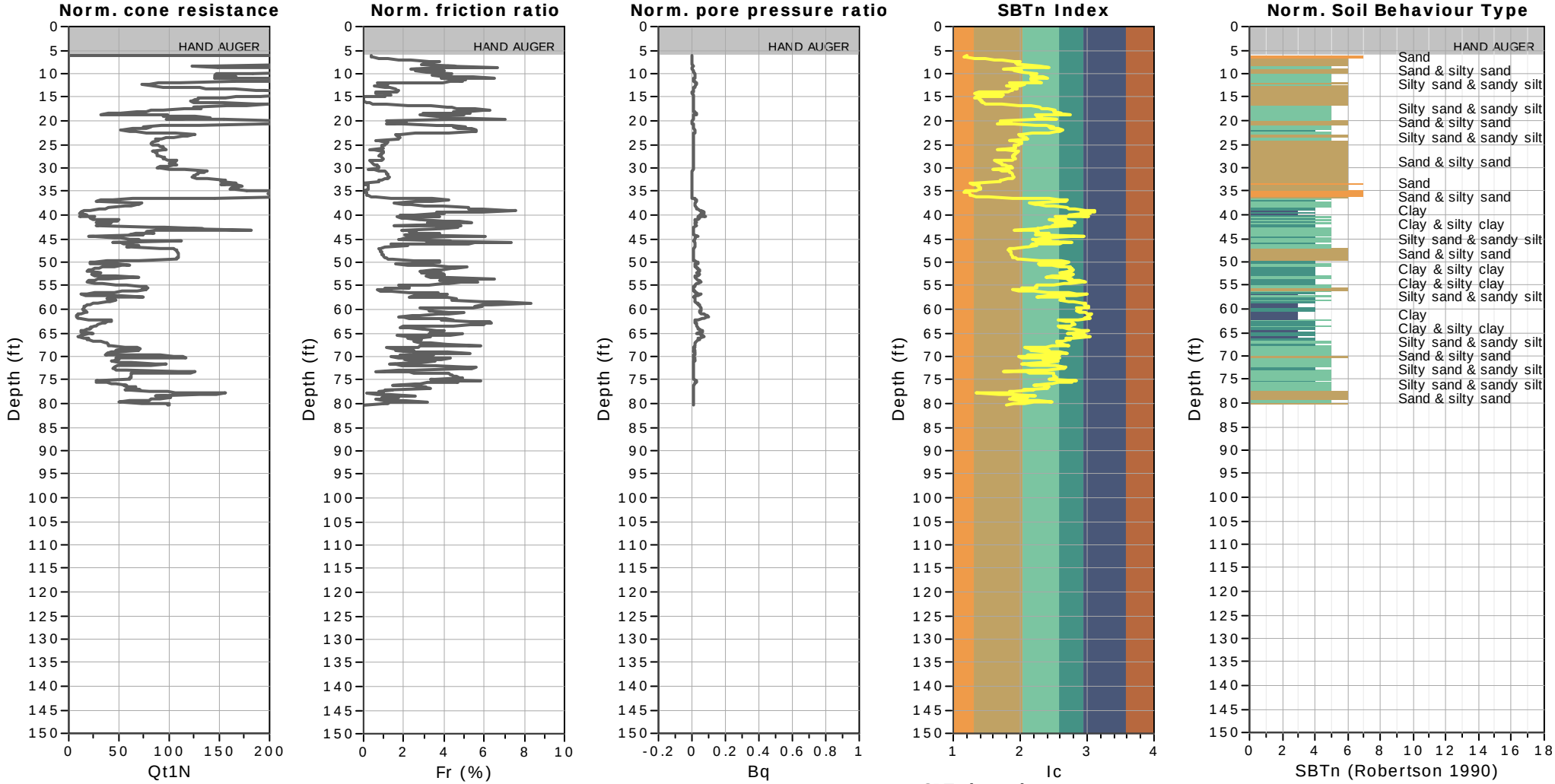
Coords: X:6328346.00, Y:2150921.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



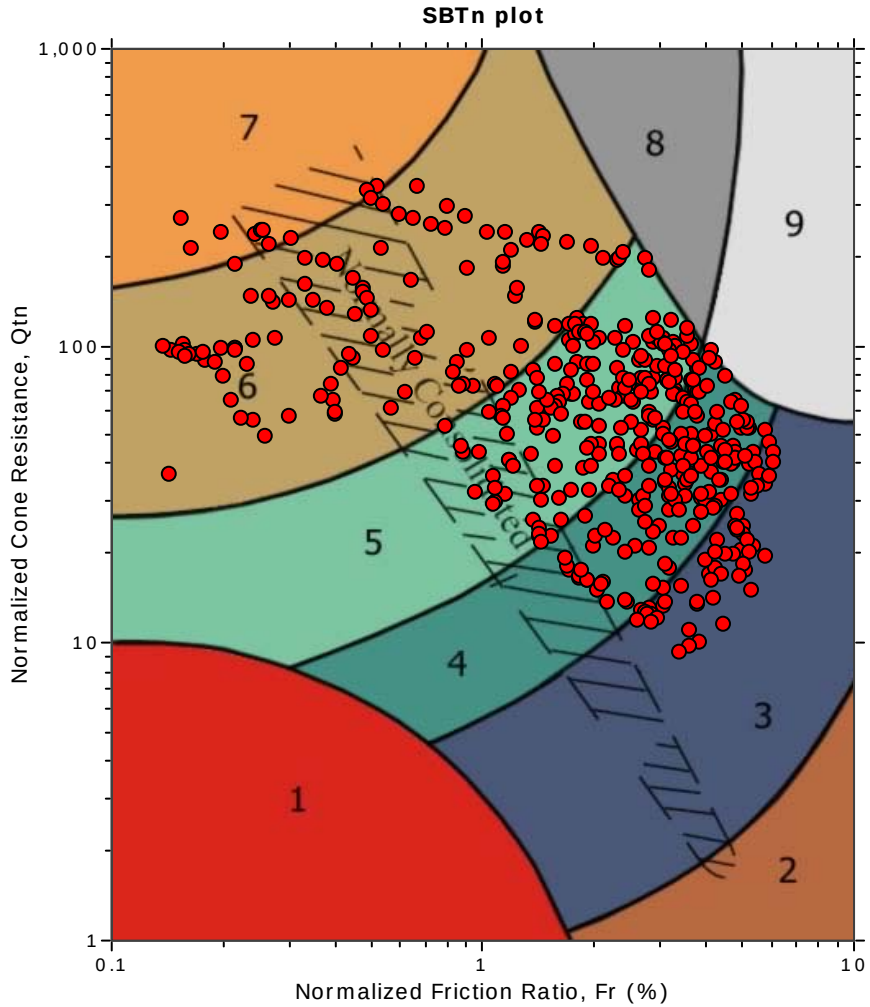
SBTn legend

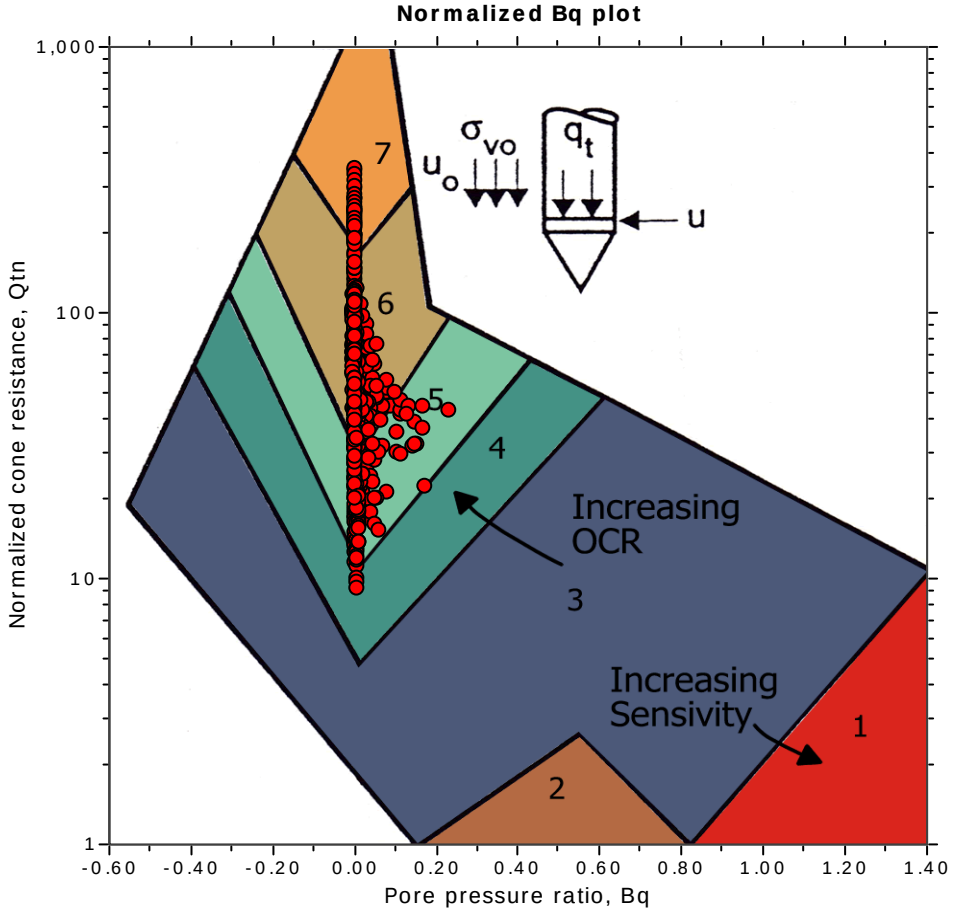
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0019CPT
Total depth: 81.53 ft
Surface Elevation: 289.11 ft
Coords: X:6329493.00, Y:2150638.25
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0019CPT

Total depth: 81.53 ft

Surface Elevation: 289.11 ft

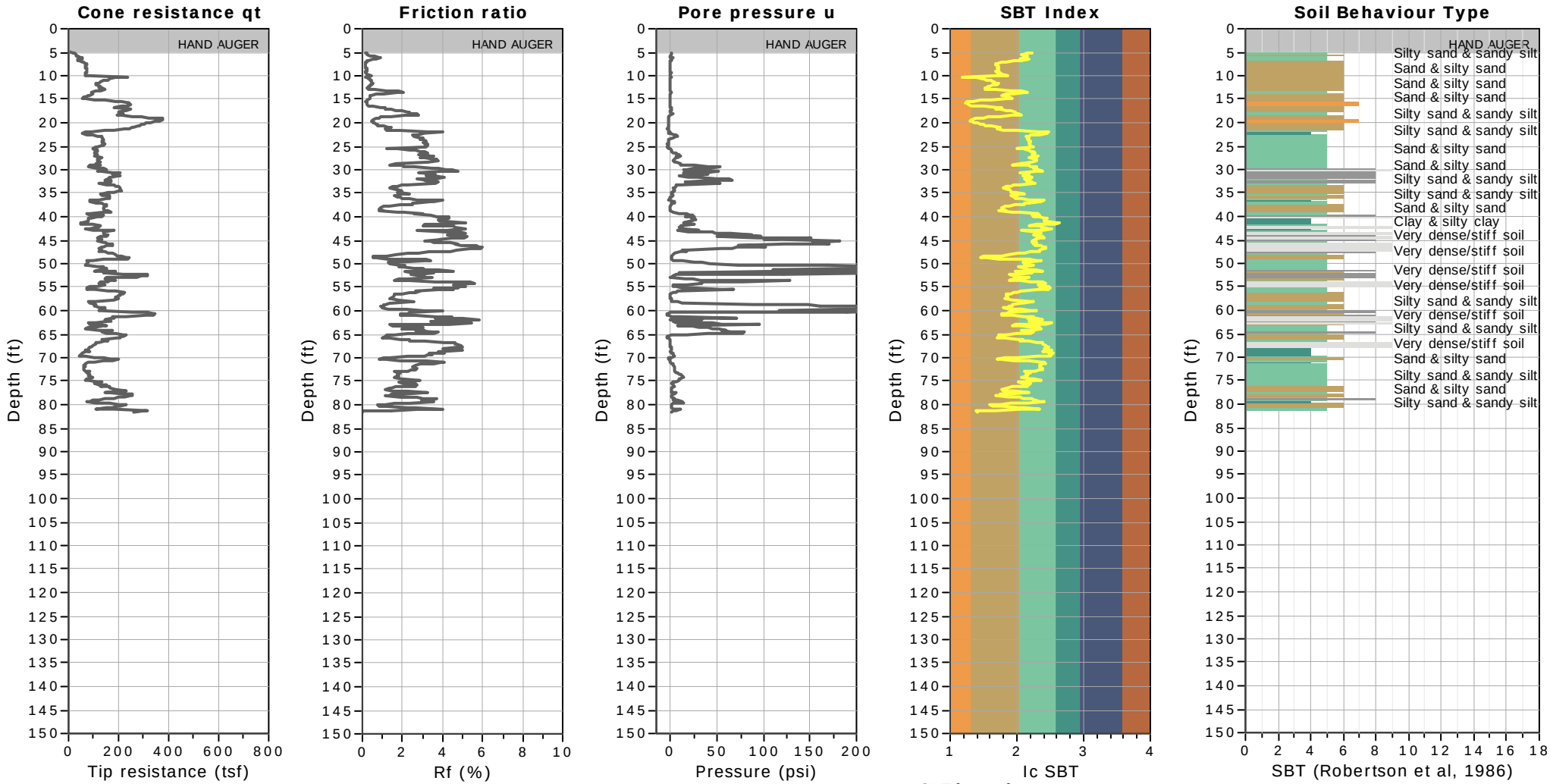
Coords: X:6329493.00, Y:2150638.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0019CPT

Total depth: 81.53 ft

Surface Elevation: 289.11 ft

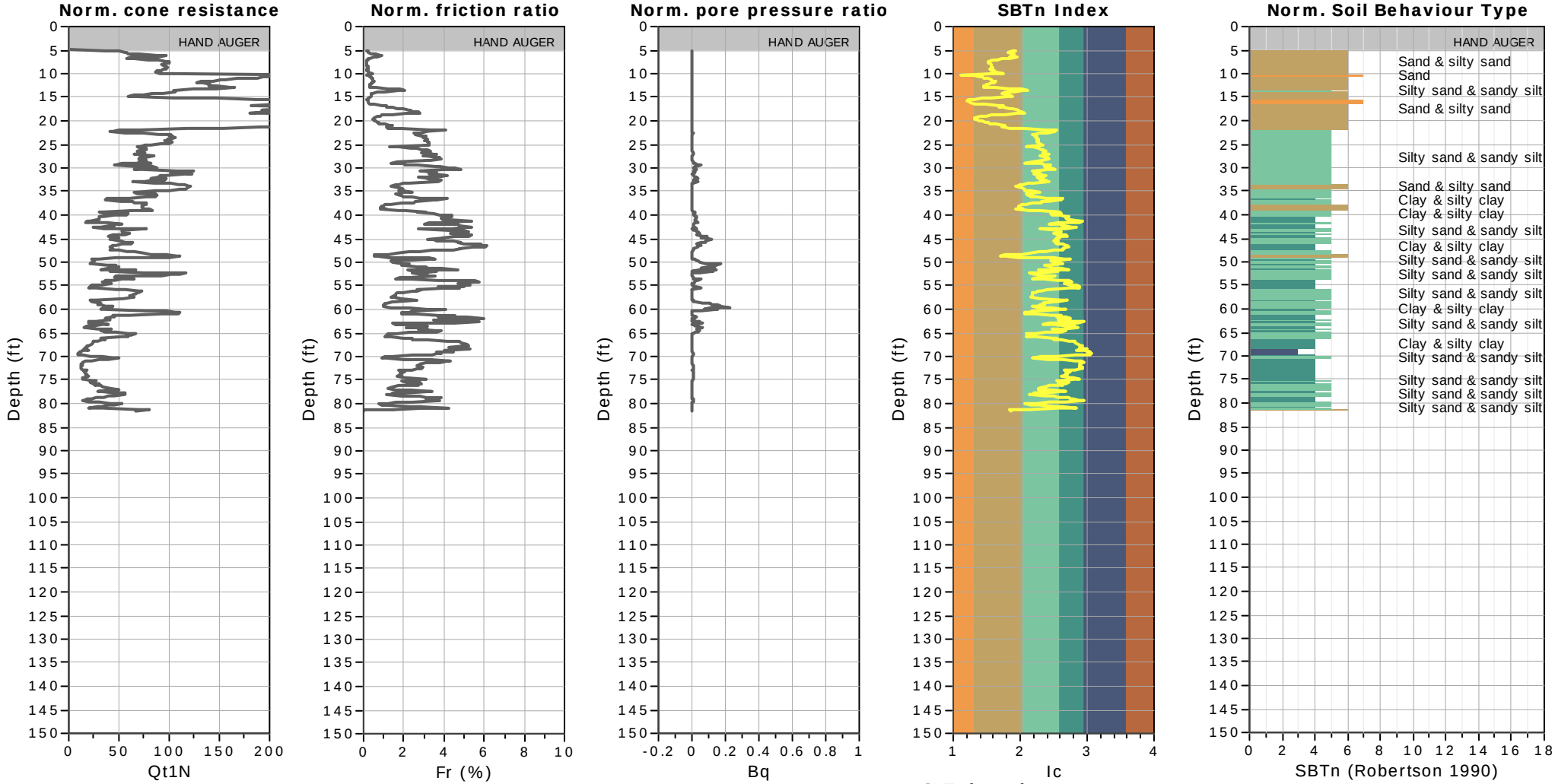
Coords: X:6329493.00, Y:2150638.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA

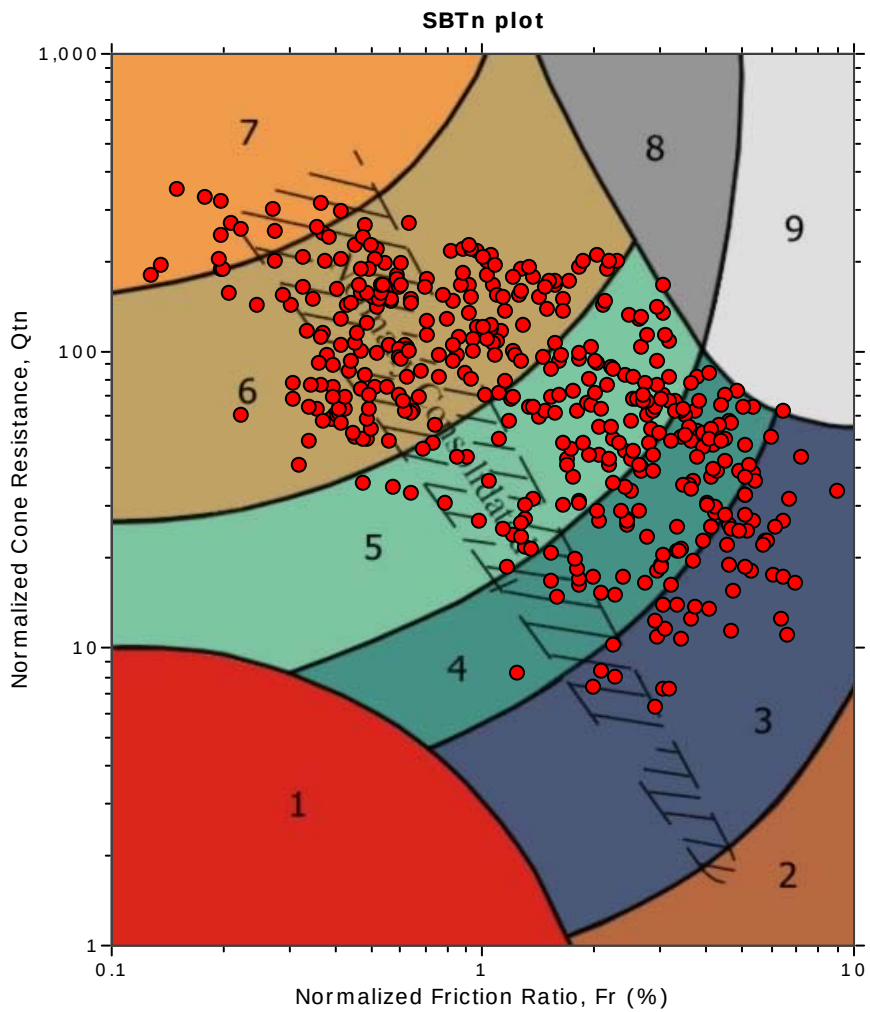


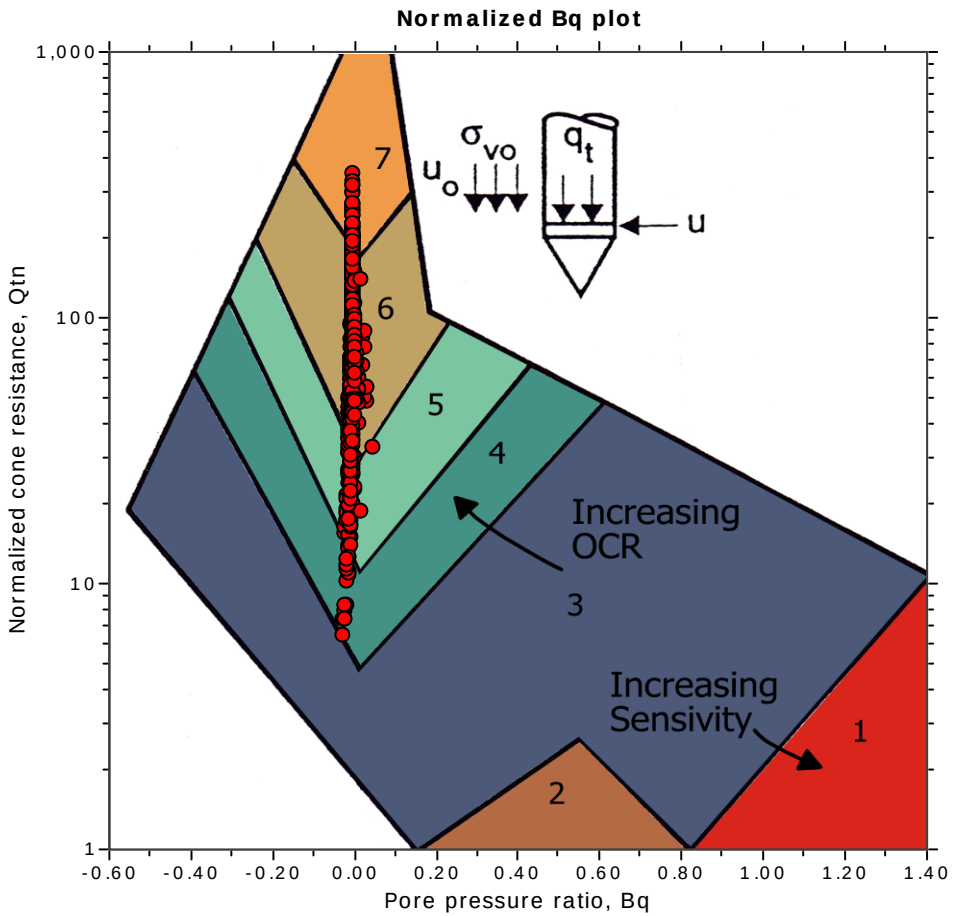
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0020CPT

Total depth: 80.05 ft

Surface Elevation: 288.96 ft

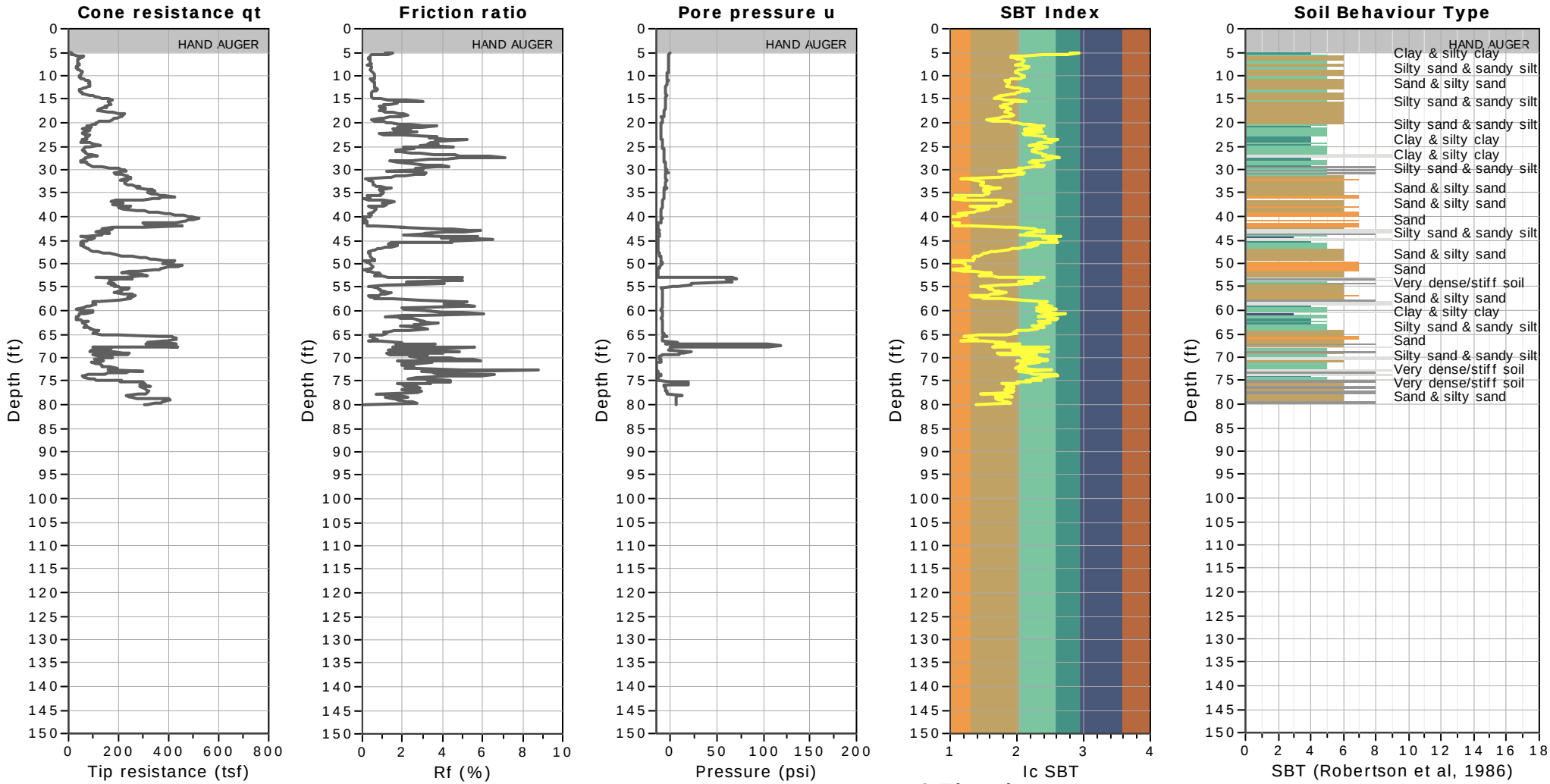
Coords: X:6329144.00, Y:2150348.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0020CPT

Total depth: 80.05 ft

Surface Elevation: 288.96 ft

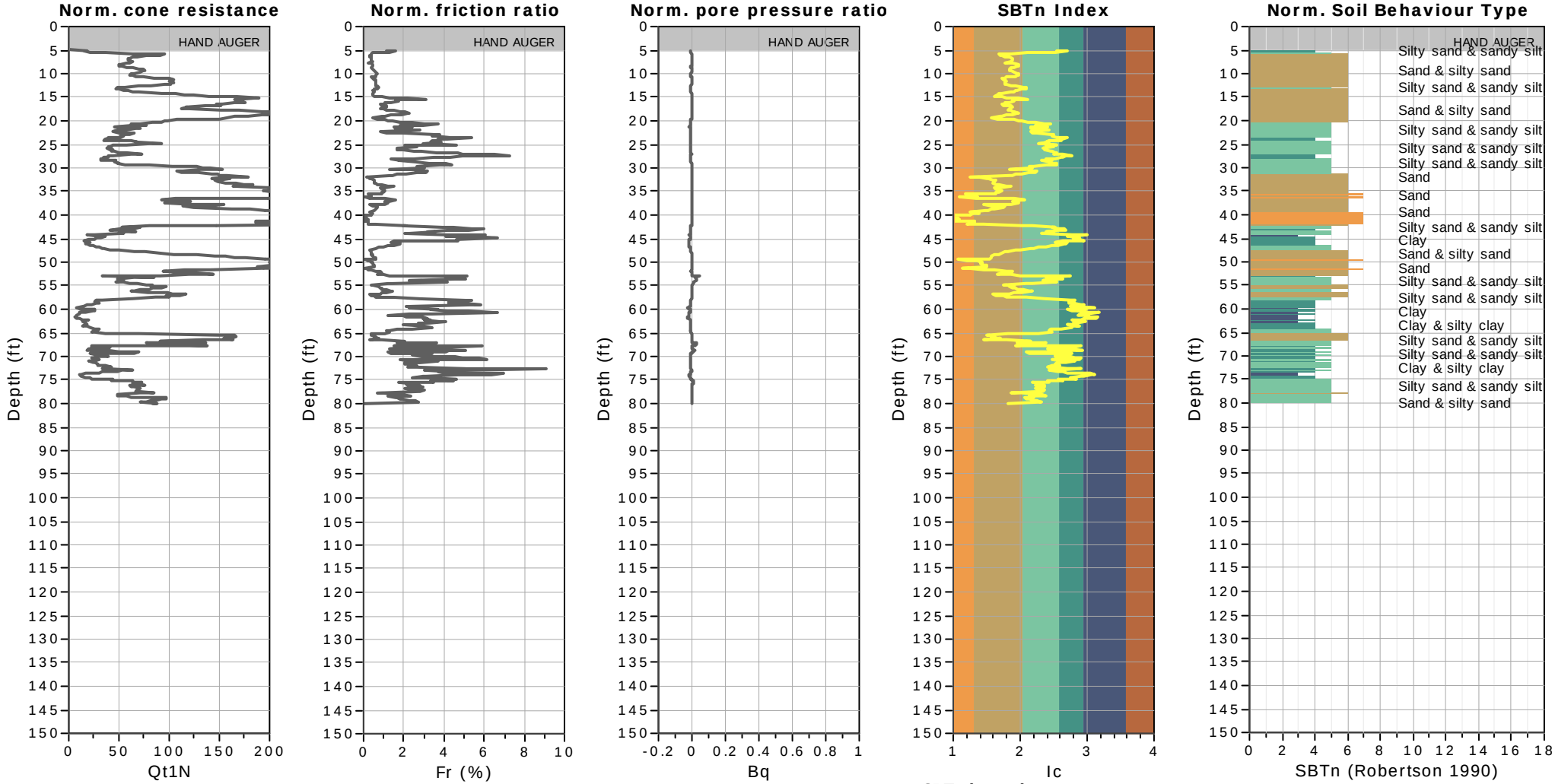
Coords: X:6329144.00, Y:2150348.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



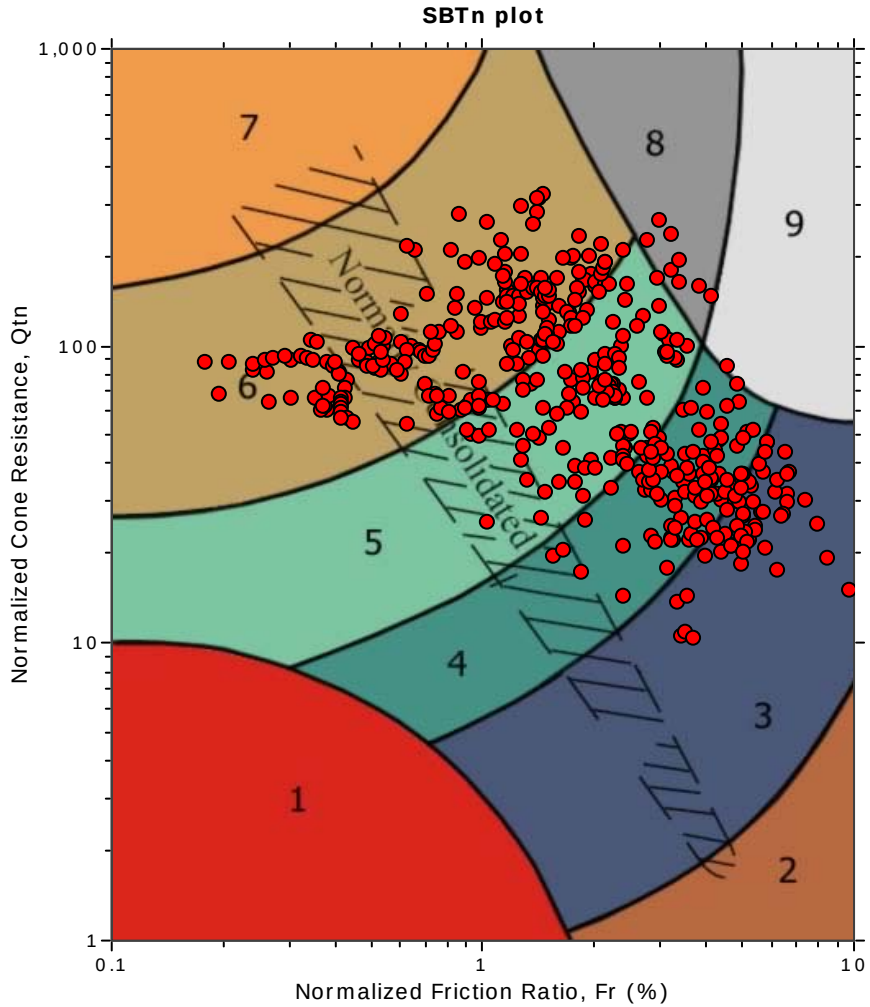
SBTn legend

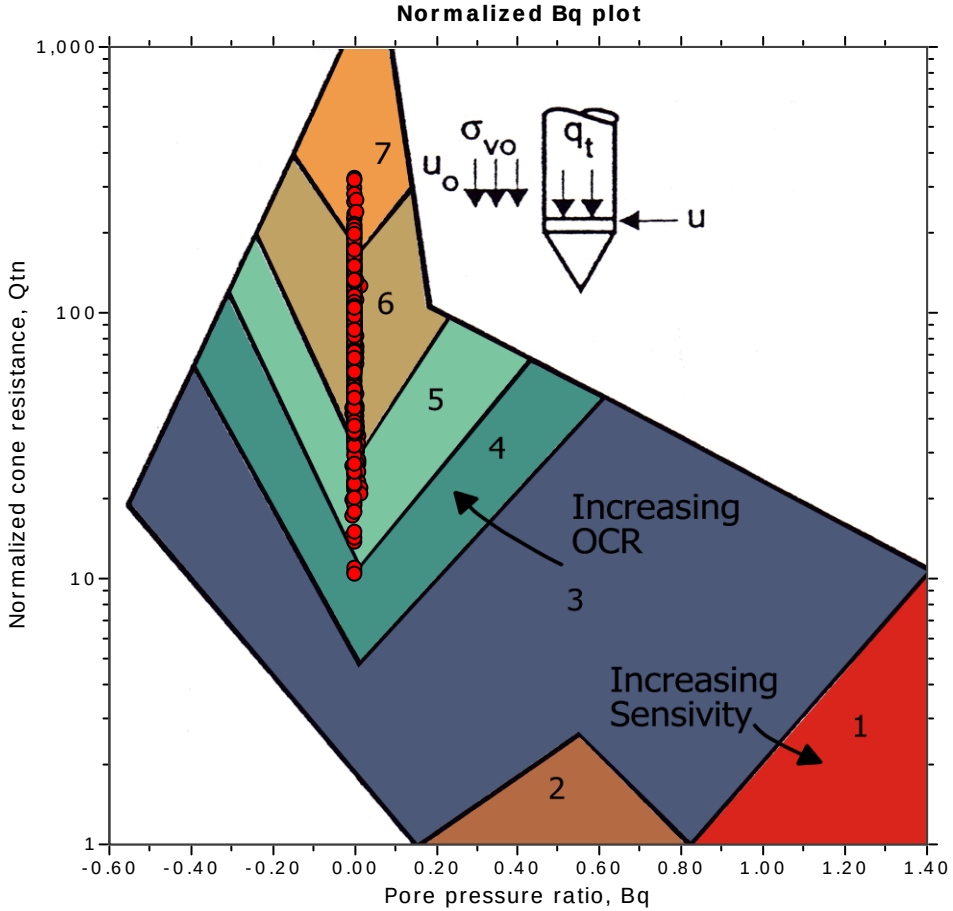
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0021CPT
Total depth: 80.38 ft
Surface Elevation: 292.55 ft
Coords: X:6330415.00, Y:2148901.75
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0021CPT

Total depth: 80.38 ft

Surface Elevation: 292.55 ft

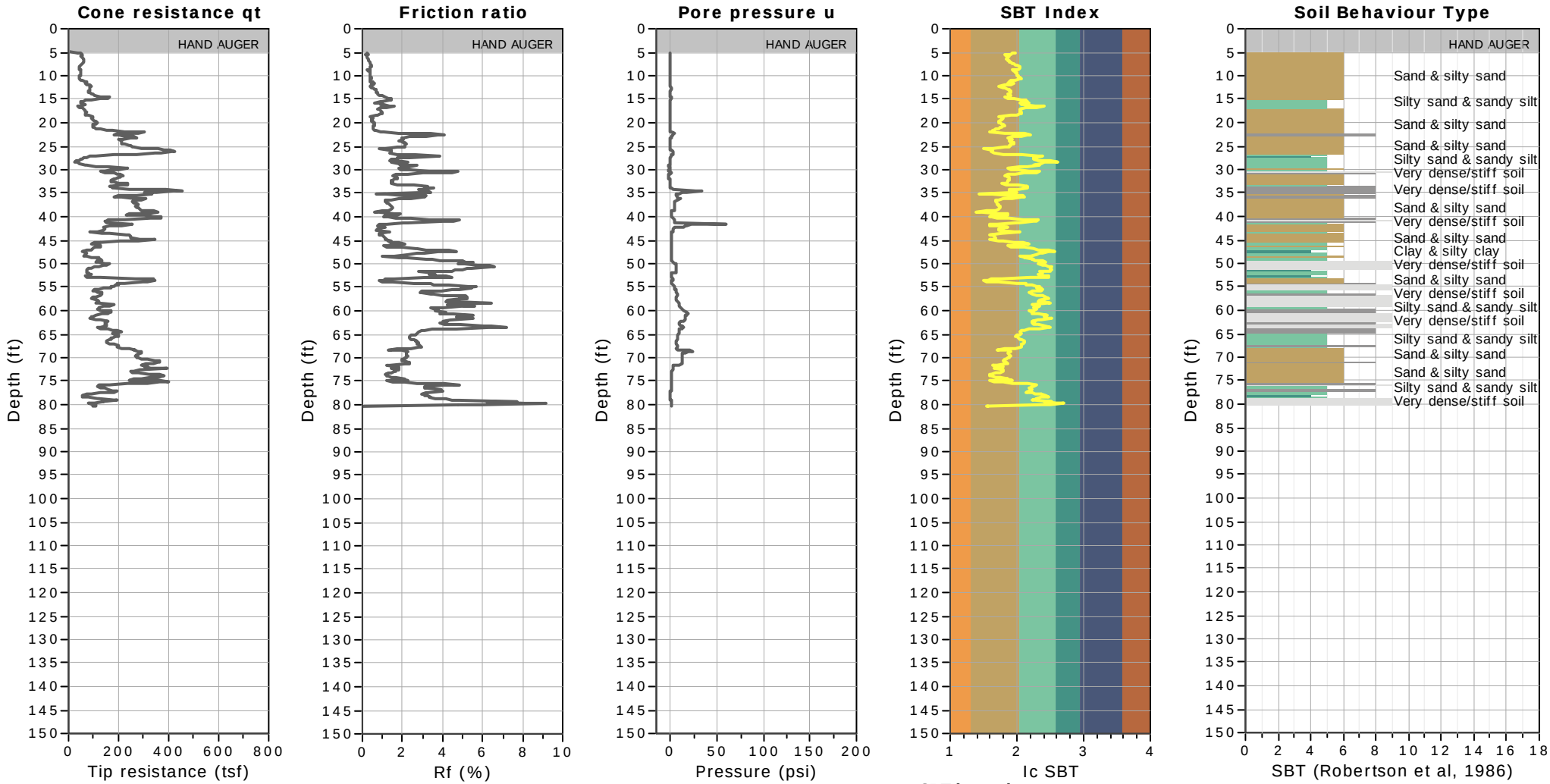
Coords: X:6330415.00, Y:2148901.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0021CPT

Total depth: 80.38 ft

Surface Elevation: 292.55 ft

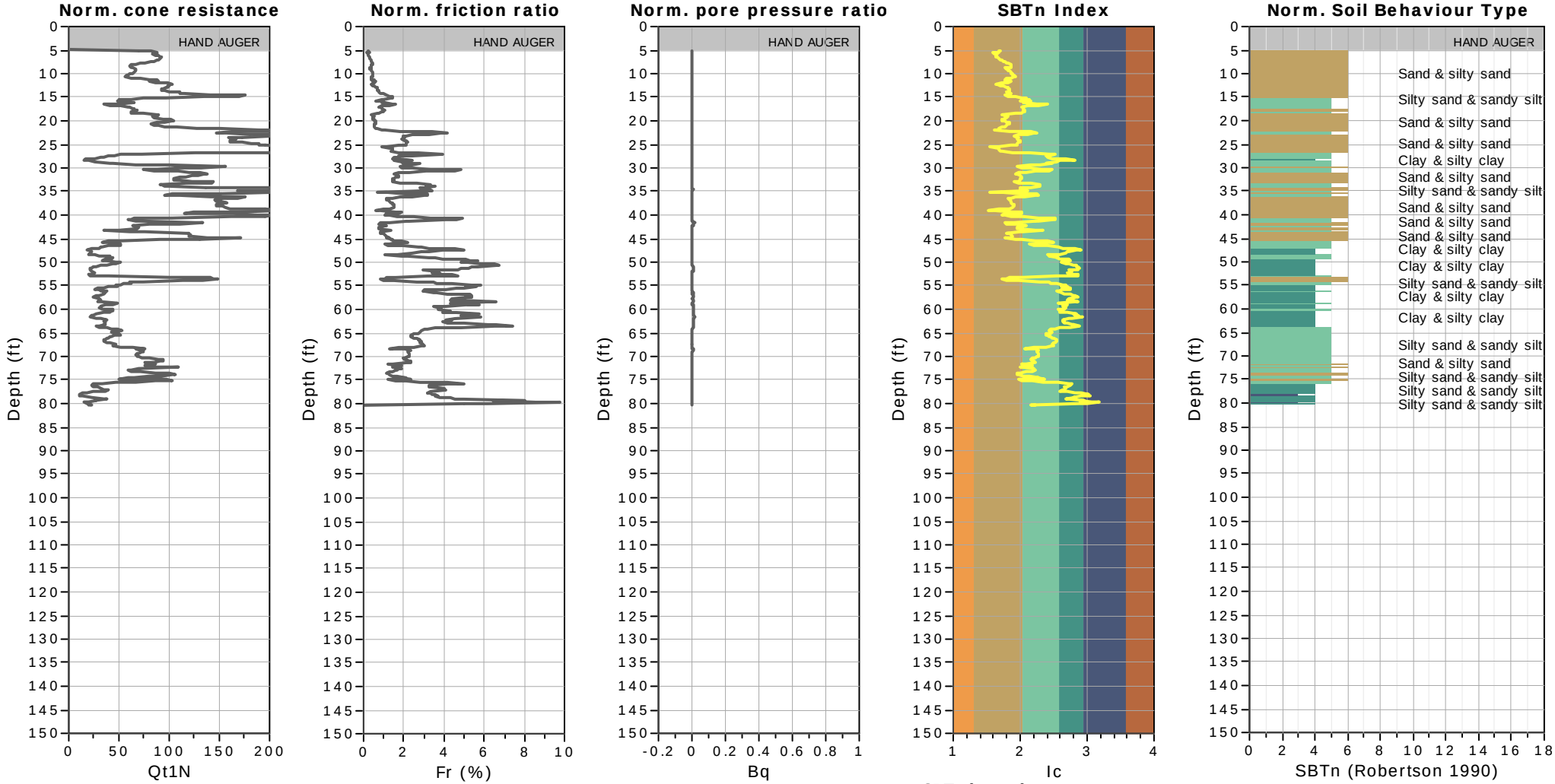
Coords: X:6330415.00, Y:2148901.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA

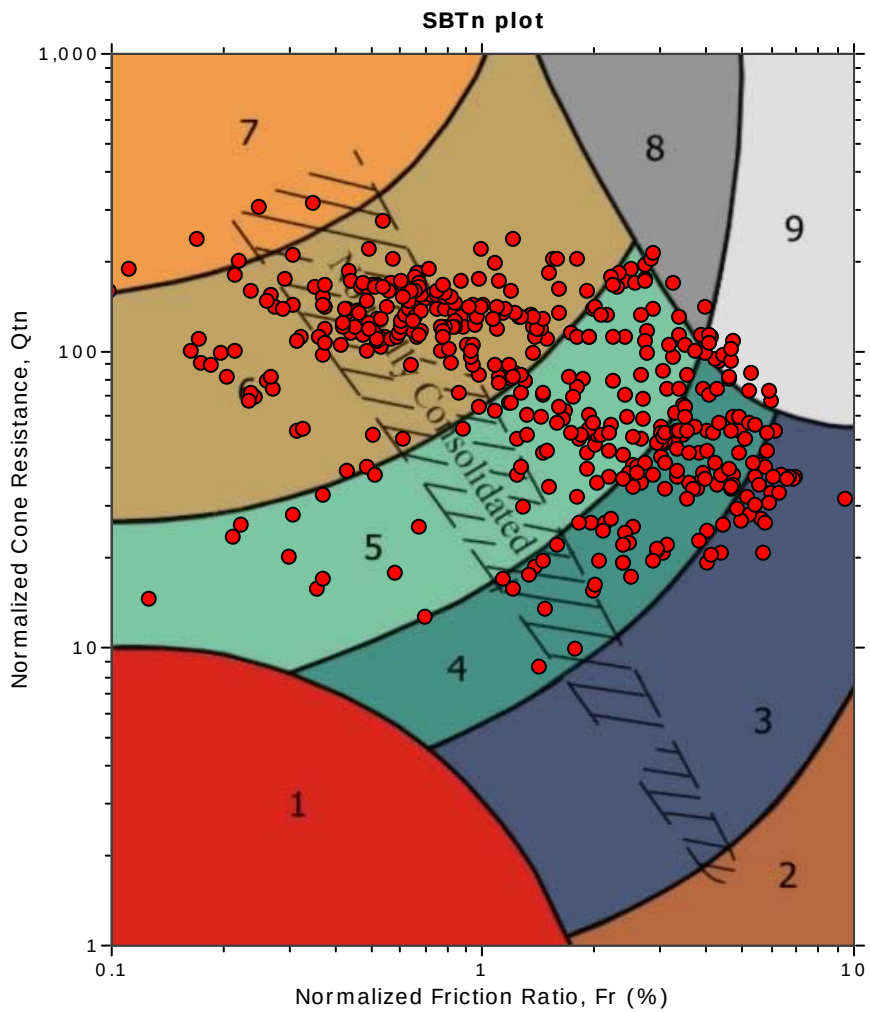


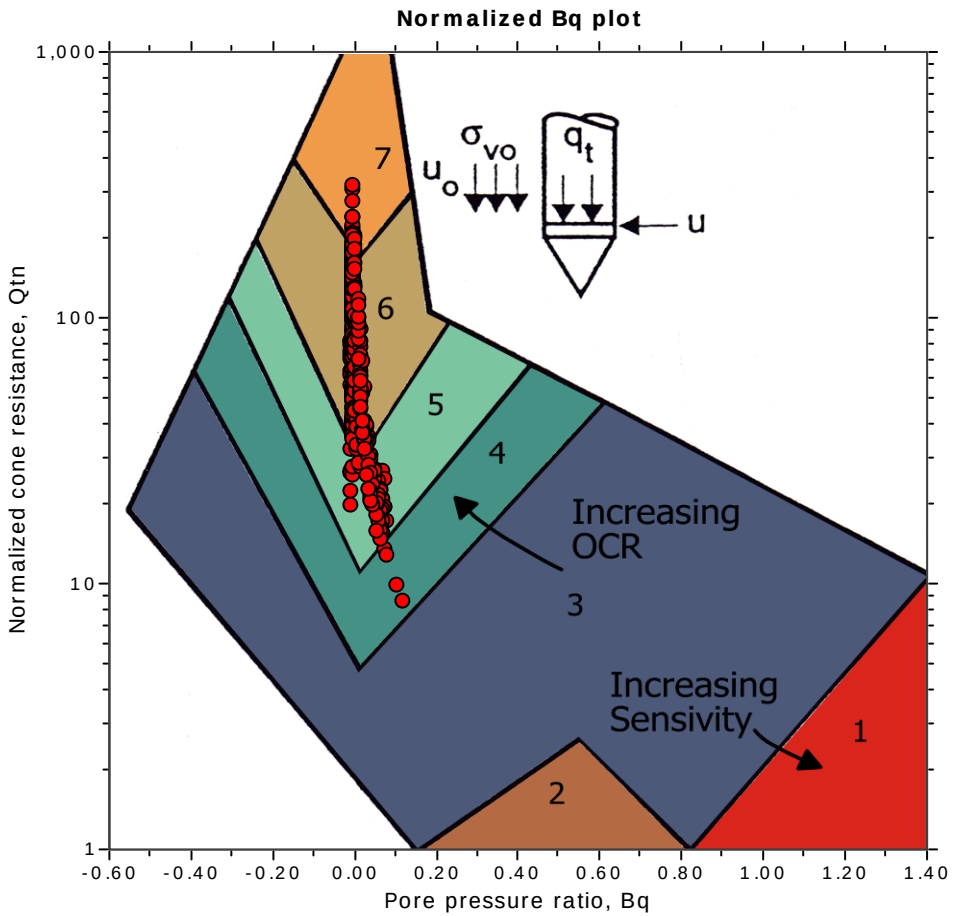
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0022CPT

Total depth: 80.05 ft

Surface Elevation: 293.04 ft

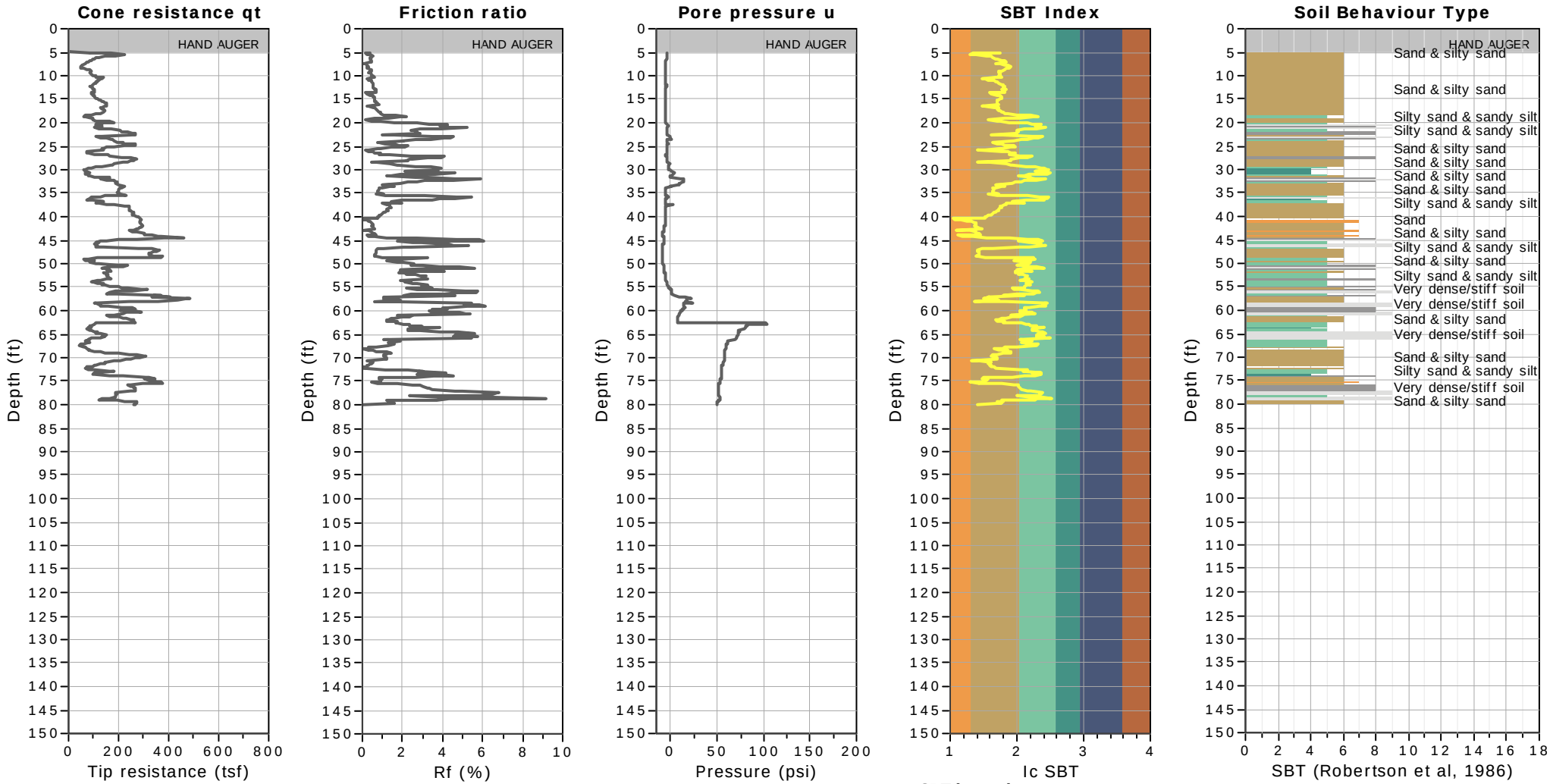
Coords: X:6330712.00, Y:2149159.25

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0022CPT

Total depth: 80.05 ft

Surface Elevation: 293.04 ft

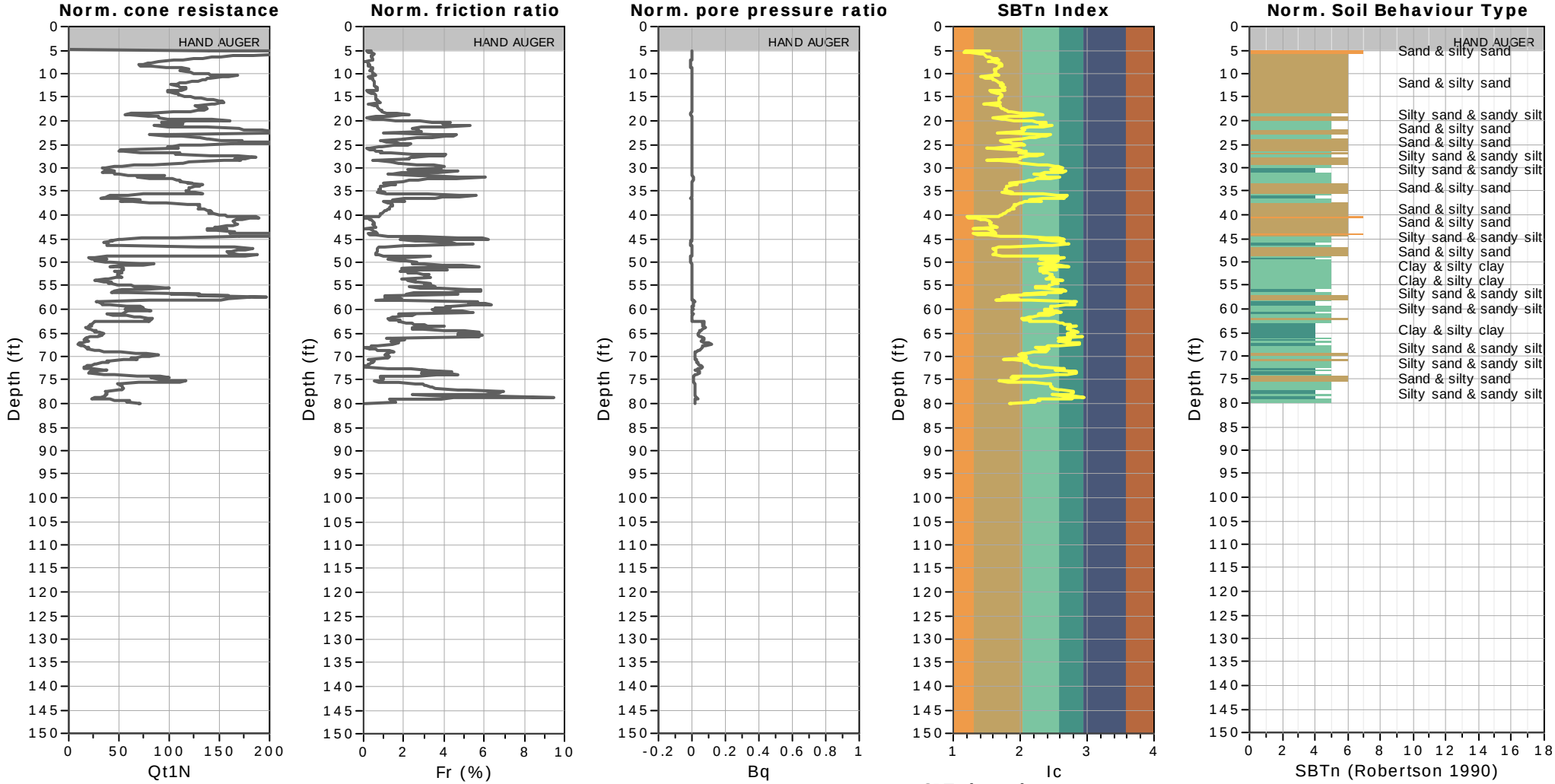
Coords: X:6330712.00, Y:2149159.25

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBTn legend

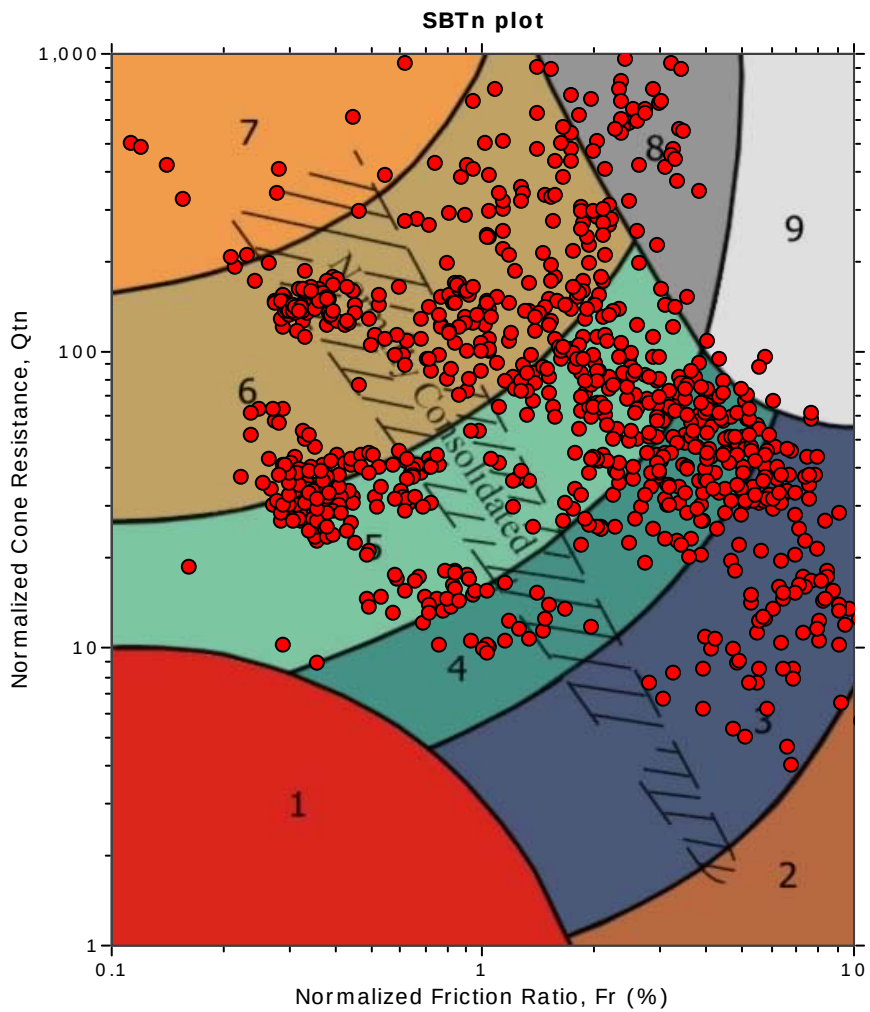
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

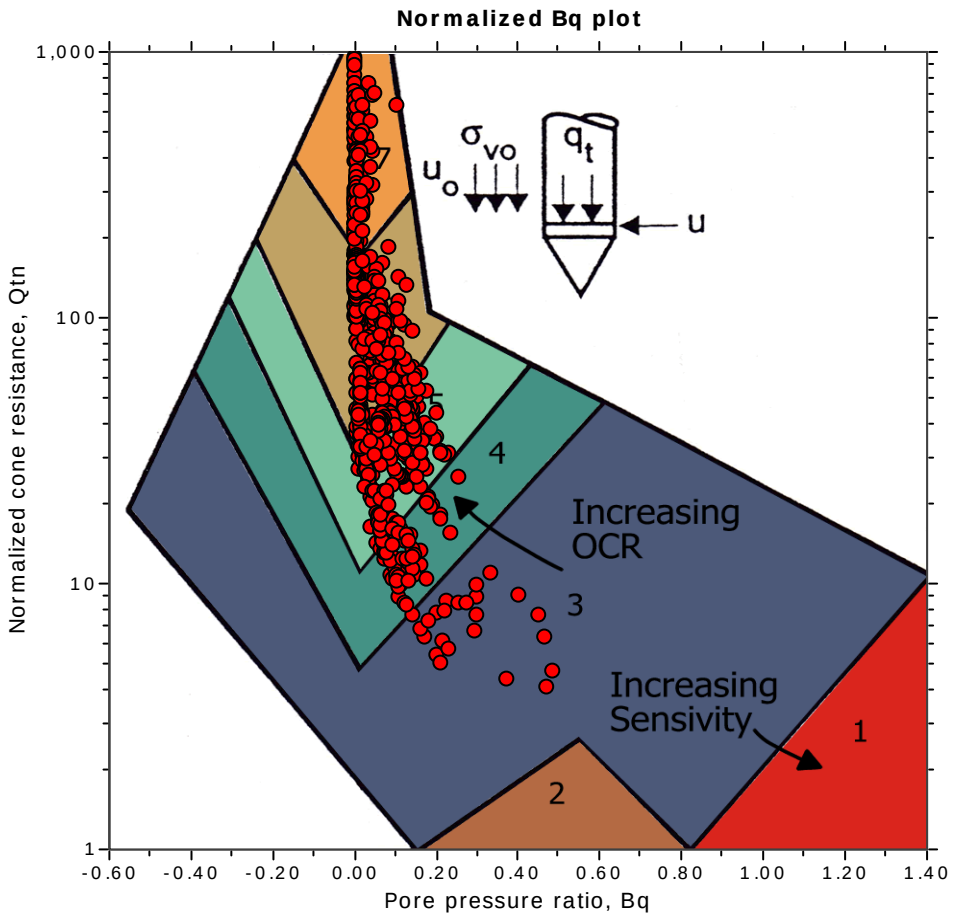
CPT: S0023CPT

Total depth: 150.59 ft
Surface Elevation: 284.97 ft
Coords: X:6331231.00, Y:2147685.75
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0023CPT

Total depth: 150.59 ft

Surface Elevation: 284.97 ft

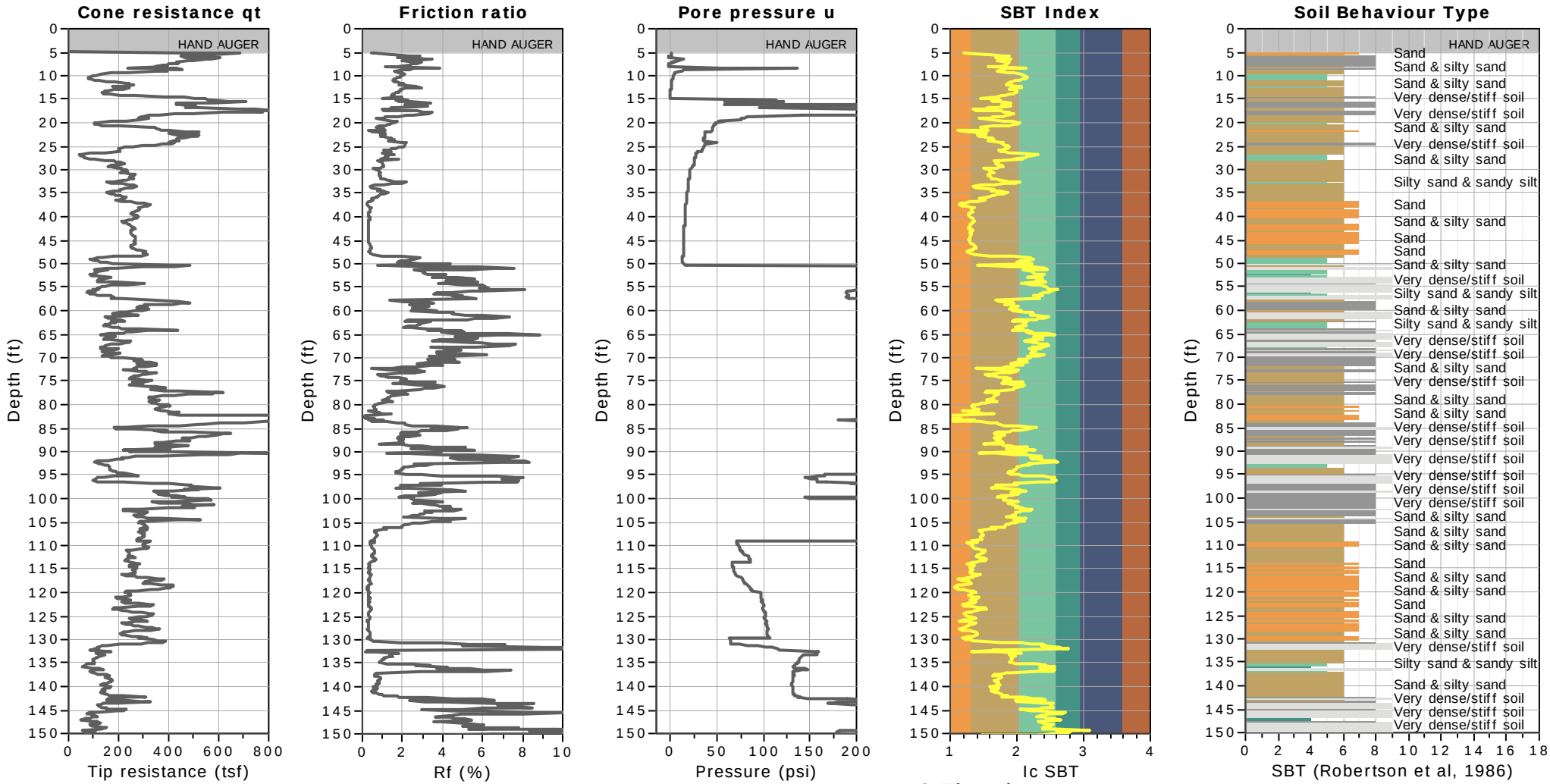
Coords: X:6331231.00, Y:2147685.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0023CPT

Total depth: 150.59 ft

Surface Elevation: 284.97 ft

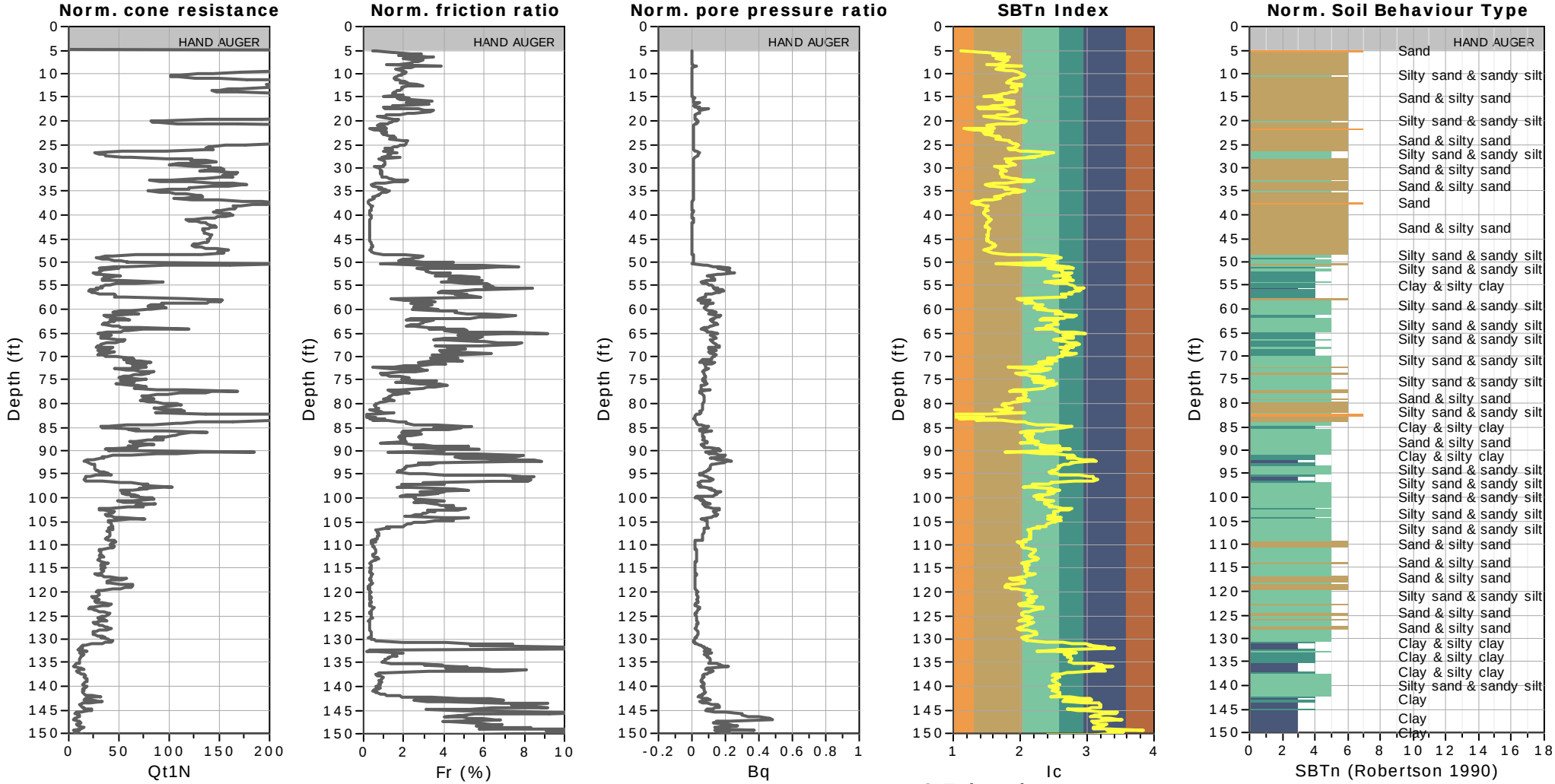
Coords: X:6331231.00, Y:2147685.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBTn legend

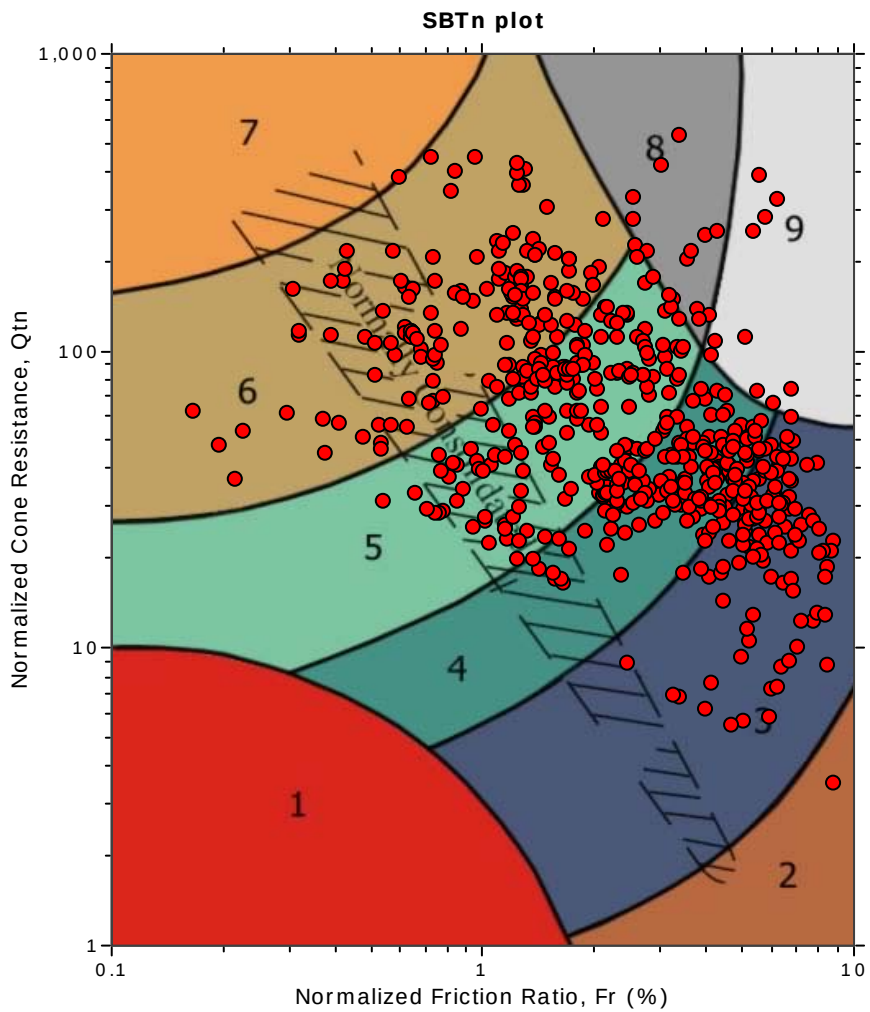
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

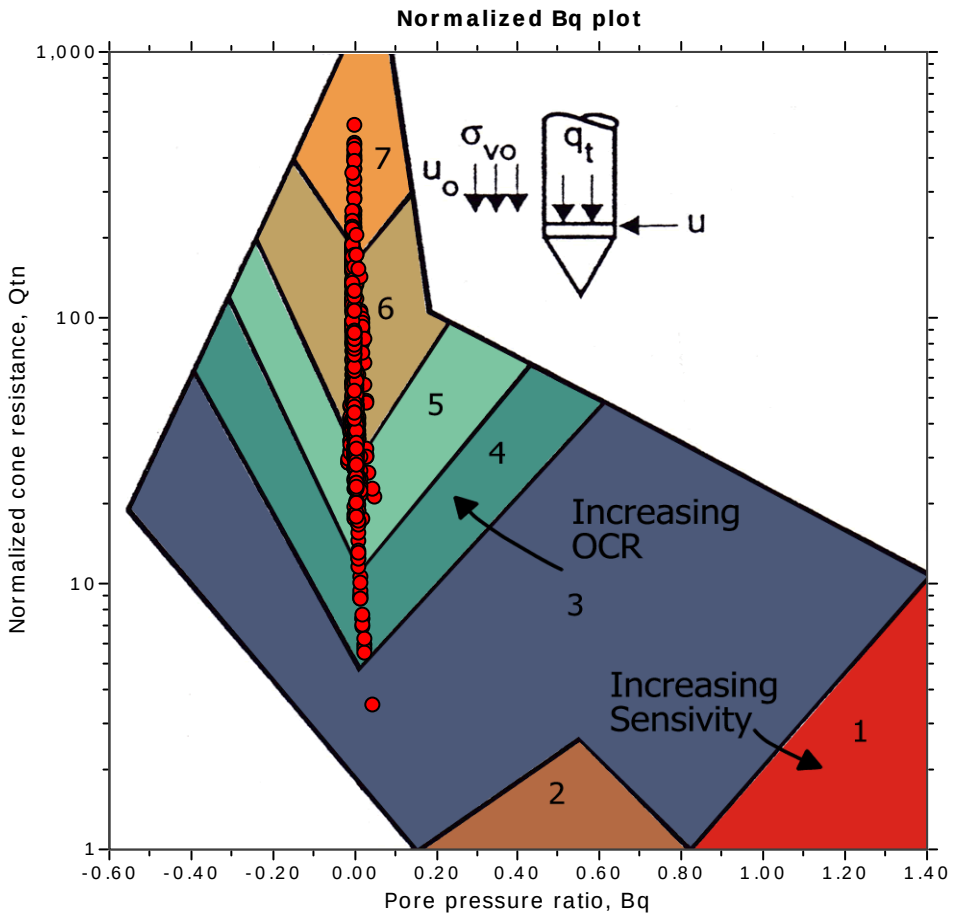
CPT: S0024CPT

Total depth: 103.84 ft
Surface Elevation: 285.13 ft
Coords: X:6331888.50, Y:2146941.75
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0024CPT

Total depth: 103.84 ft

Surface Elevation: 285.13 ft

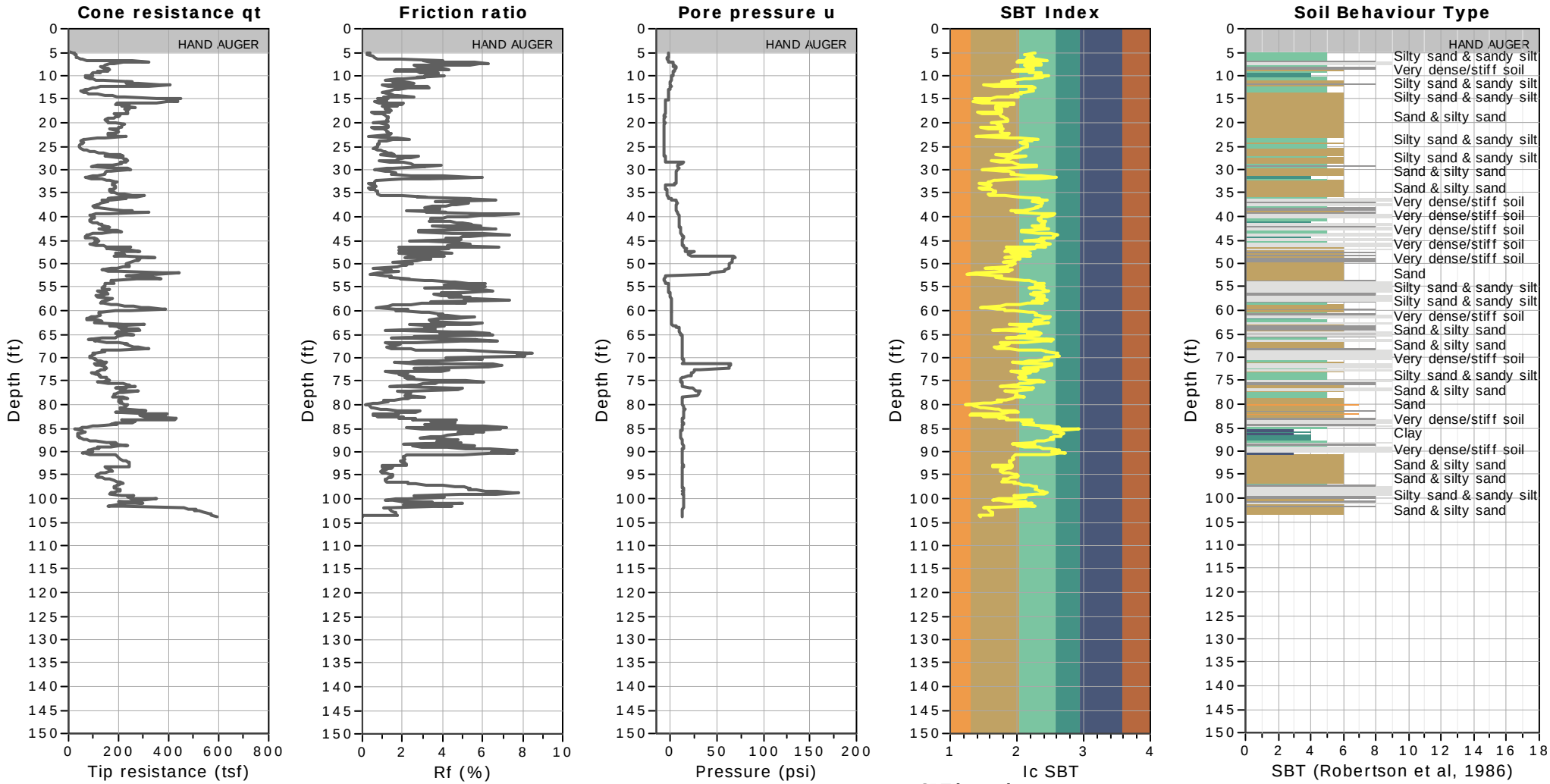
Coords: X:6331888.50, Y:2146941.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0024CPT

Total depth: 103.84 ft

Surface Elevation: 285.13 ft

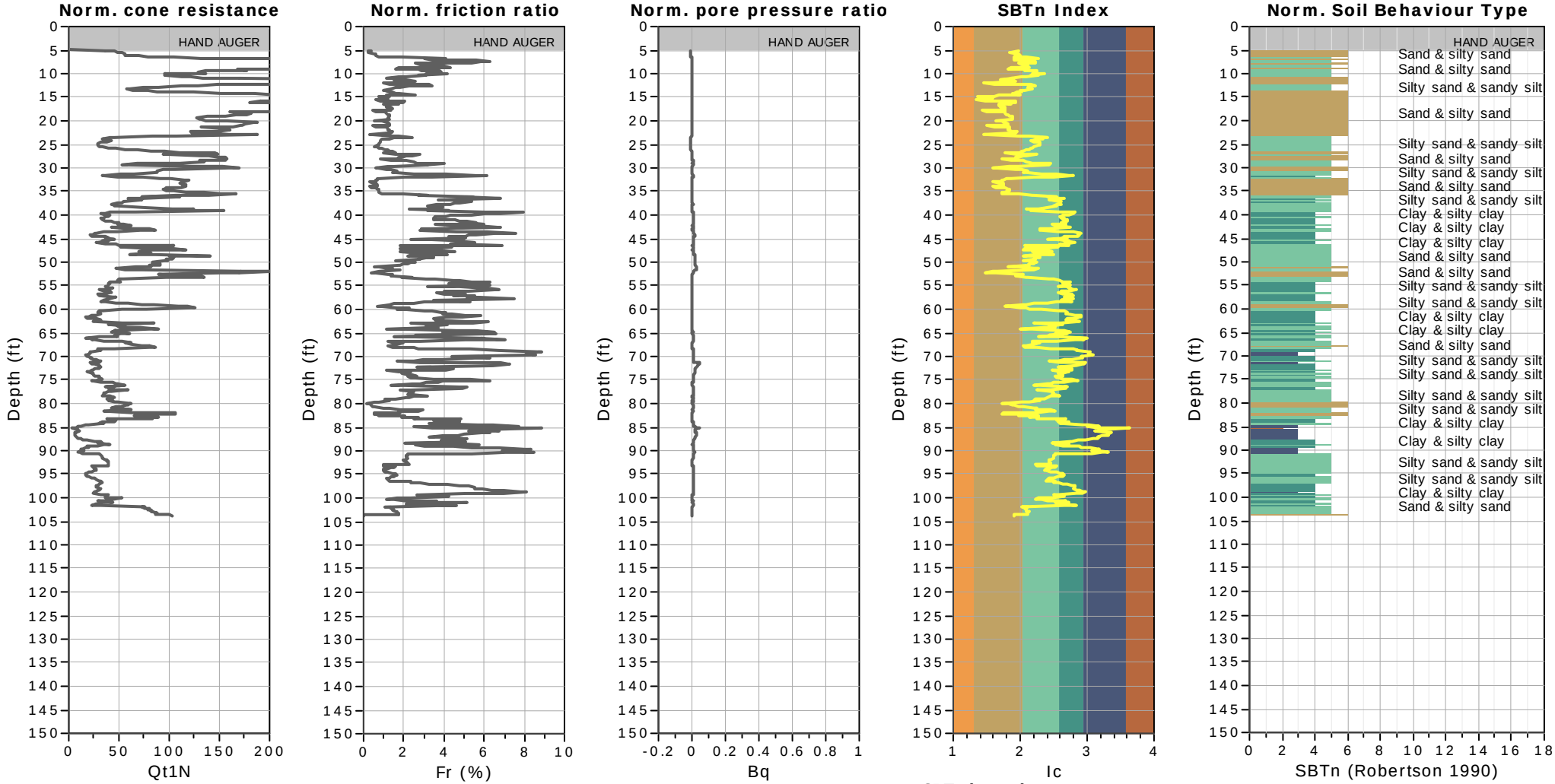
Coords: X:6331888.50, Y:2146941.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



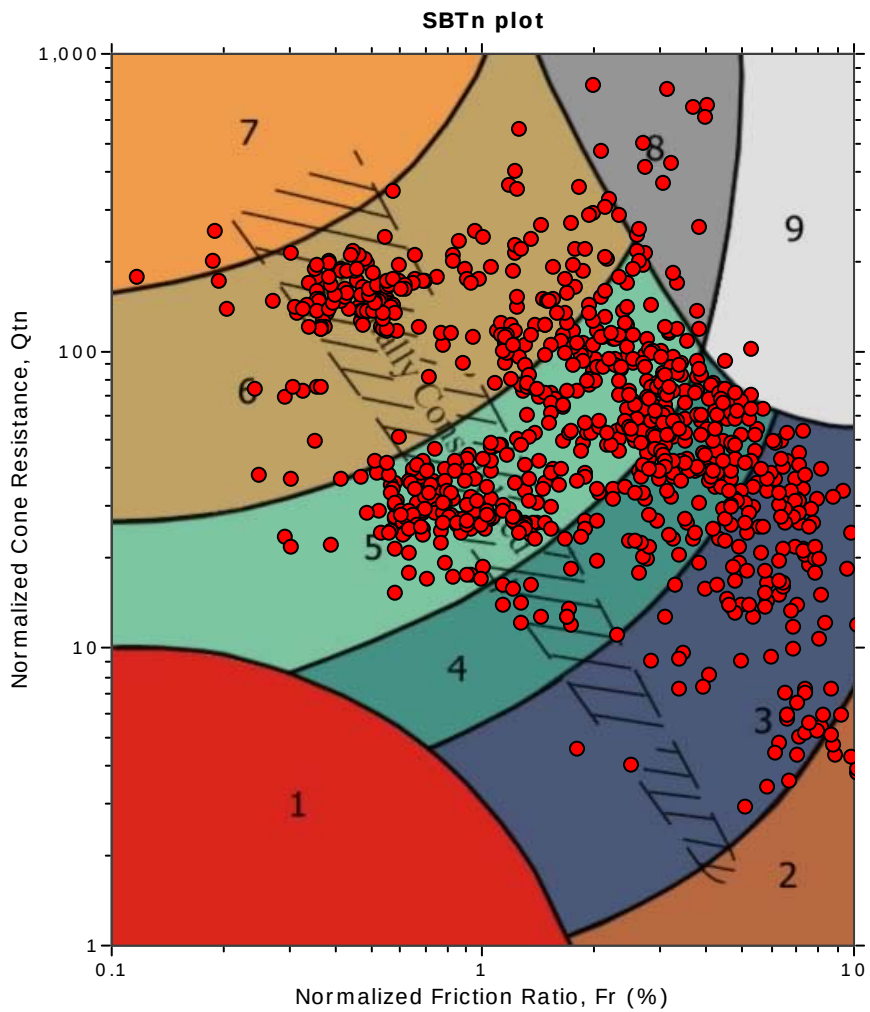
SBTn legend

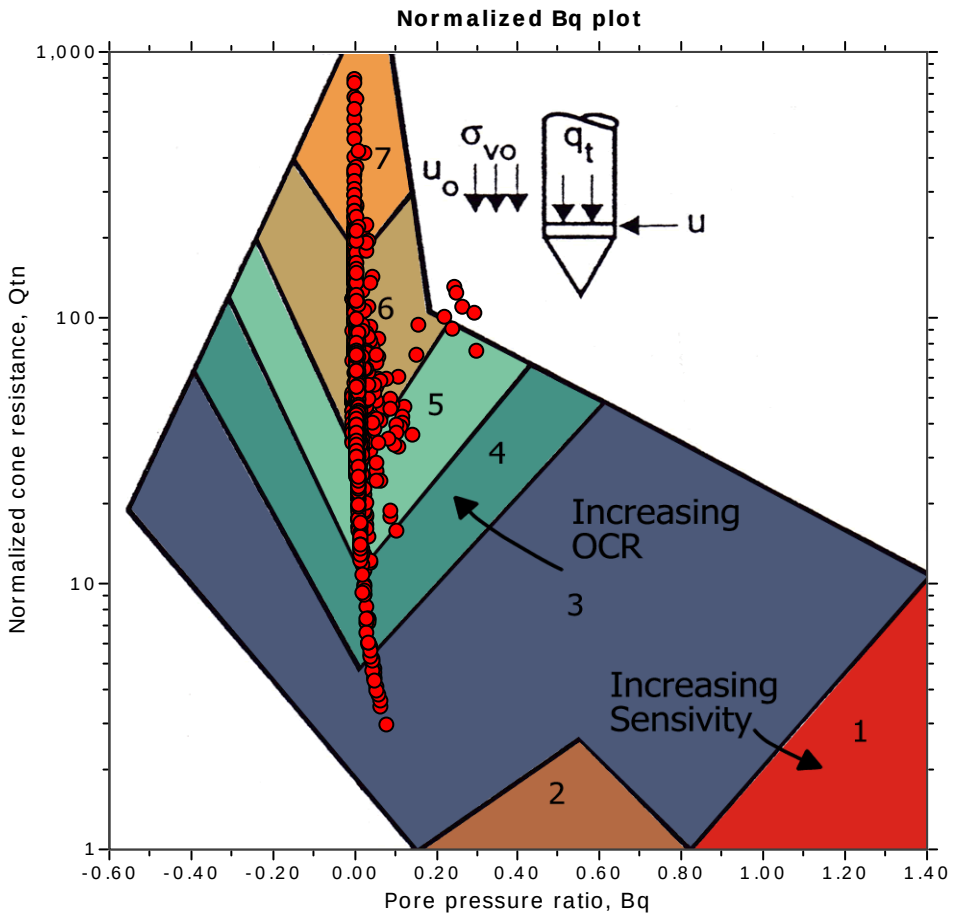
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0025CPT
Total depth: 150.59 ft
Surface Elevation: 284.71 ft
Coords: X:6331320.00, Y:2147581.50
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0025CPT

Total depth: 150.59 ft

Surface Elevation: 284.71 ft

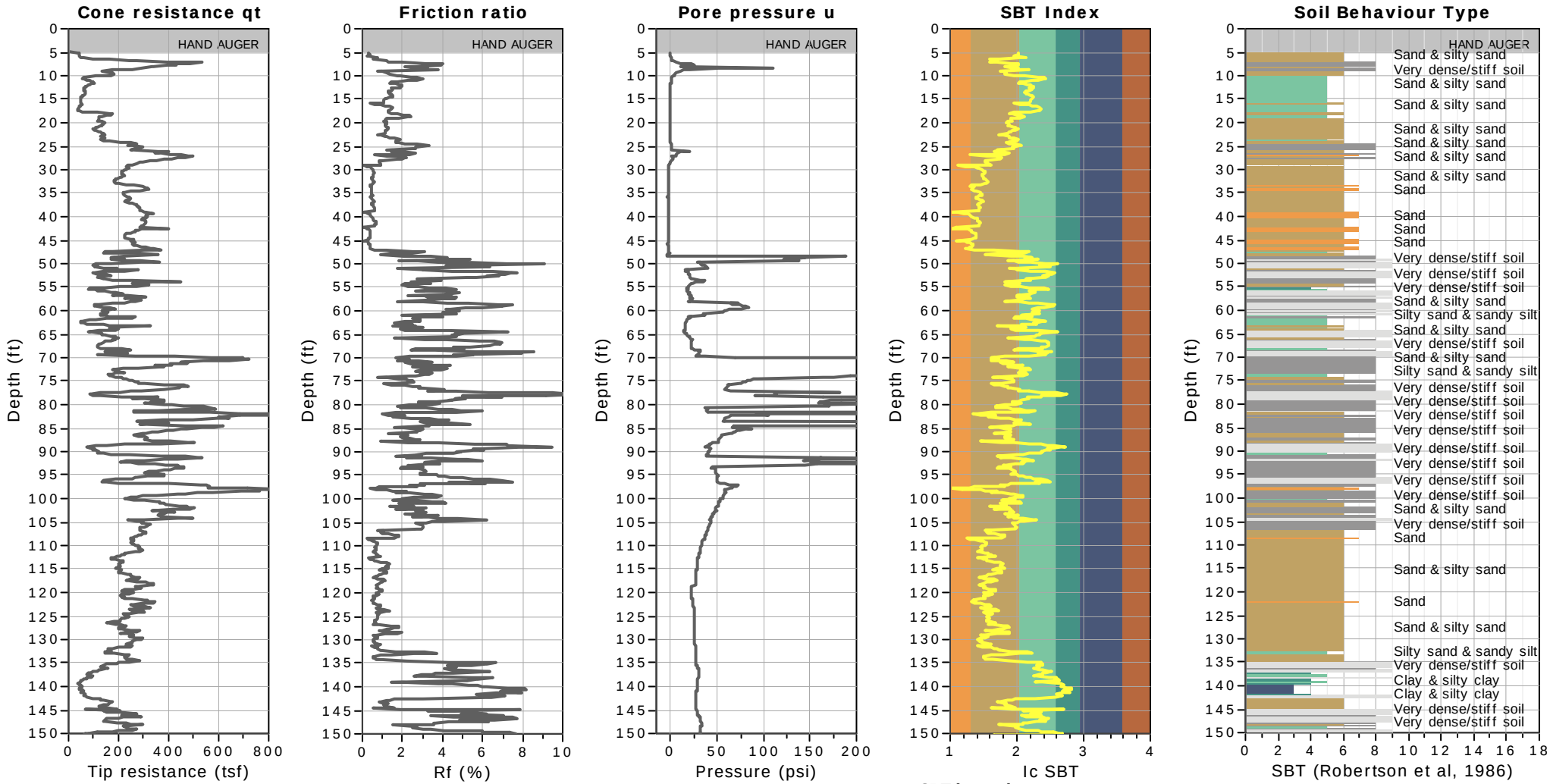
Coords: X:6331320.00, Y:2147581.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: **California High-Speed Train**

Location: **Fresno, CA**



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0025CPT

Total depth: 150.59 ft

Surface Elevation: 284.71 ft

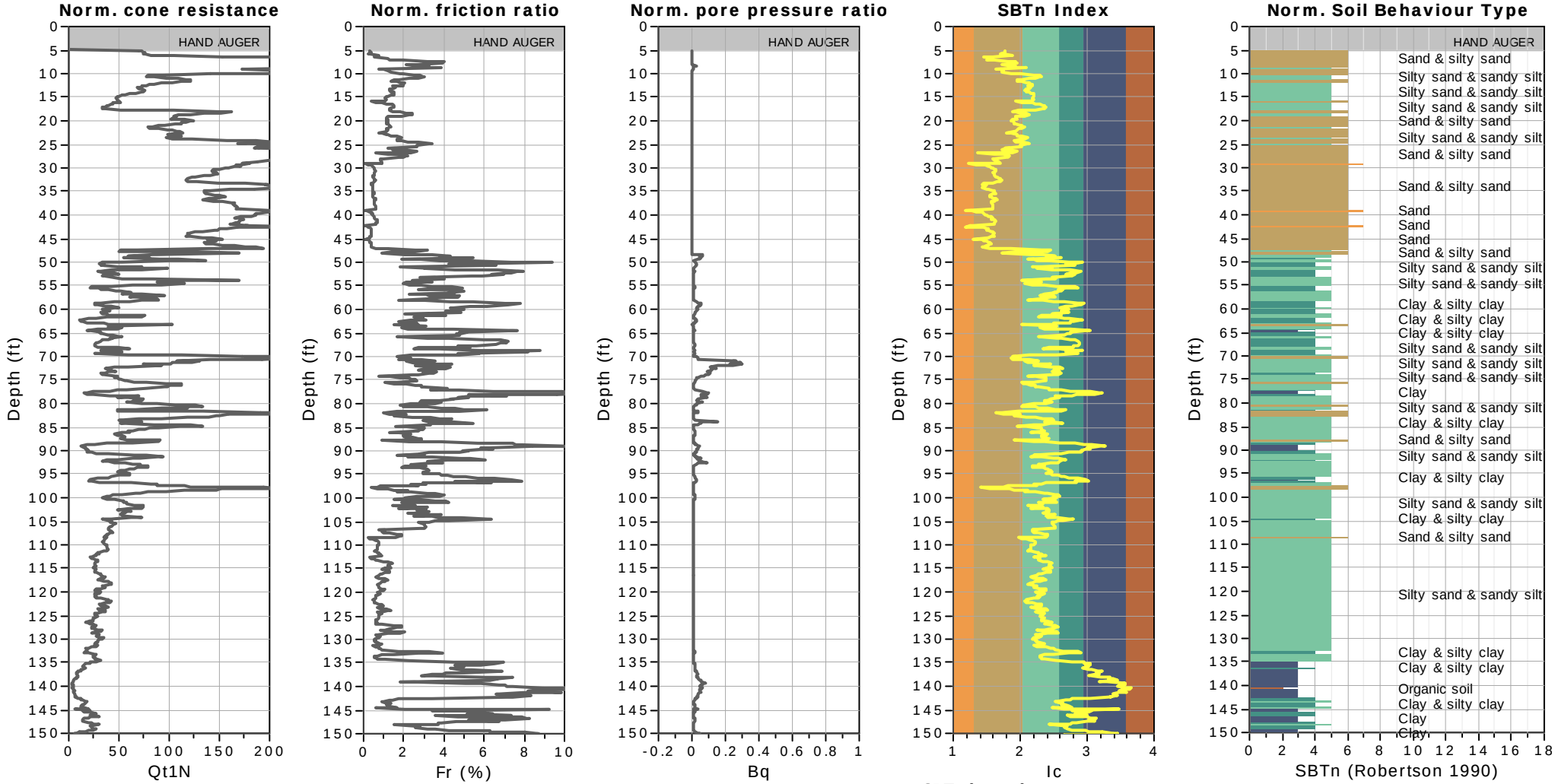
Coords: X:6331320.00, Y:2147581.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

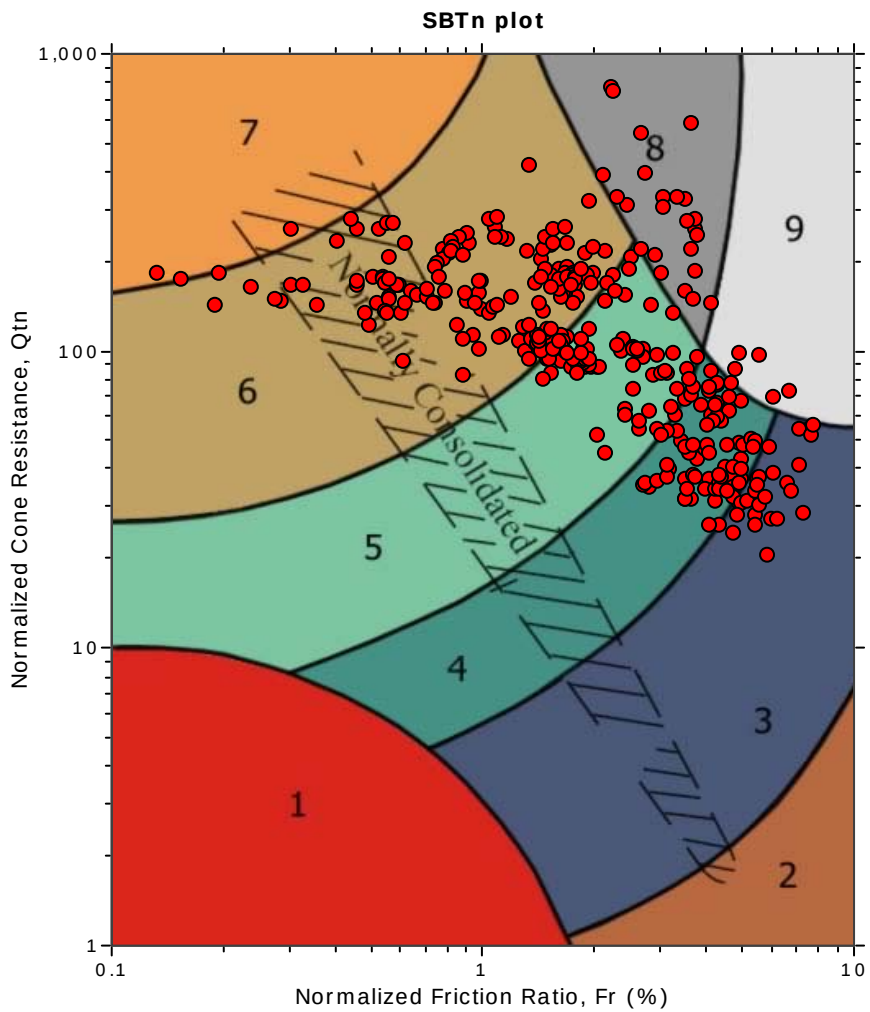
Location: Fresno, CA

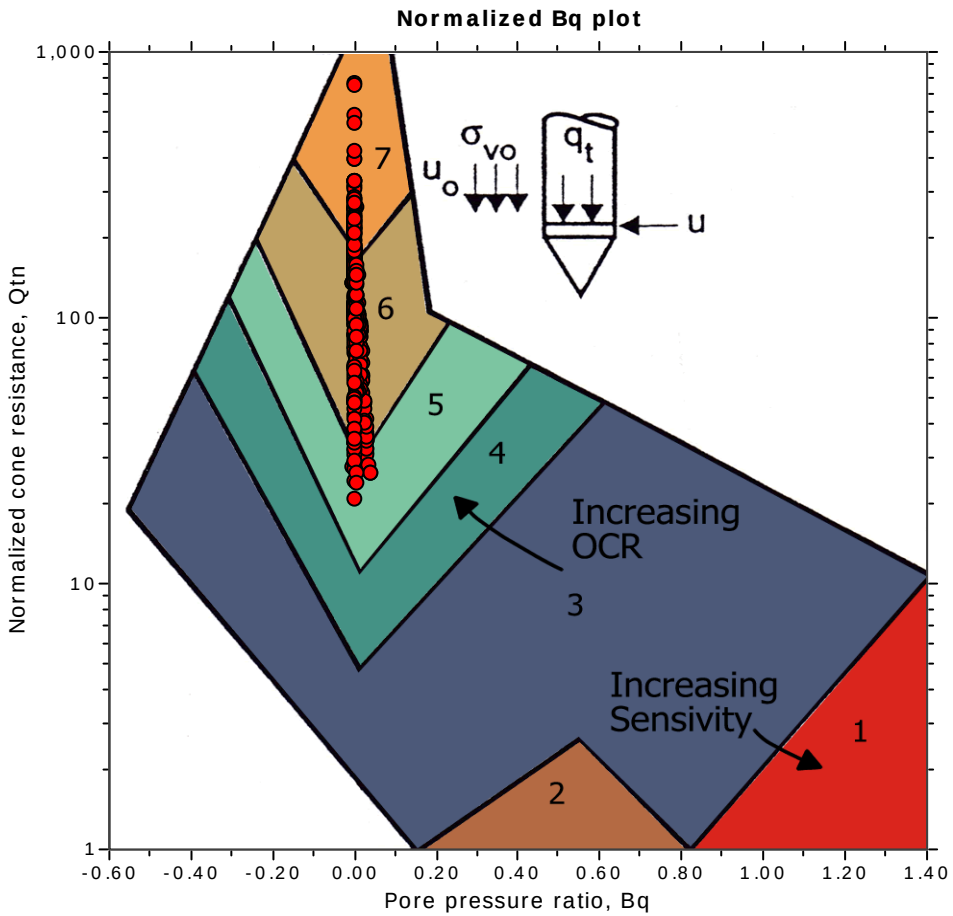


CPT: S0026CPT
Total depth: 63.98 ft
Surface Elevation: 283.79 ft
Coords: X:6333046.50, Y:2145957.75
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0026CPT

Total depth: 63.98 ft

Surface Elevation: 283.79 ft

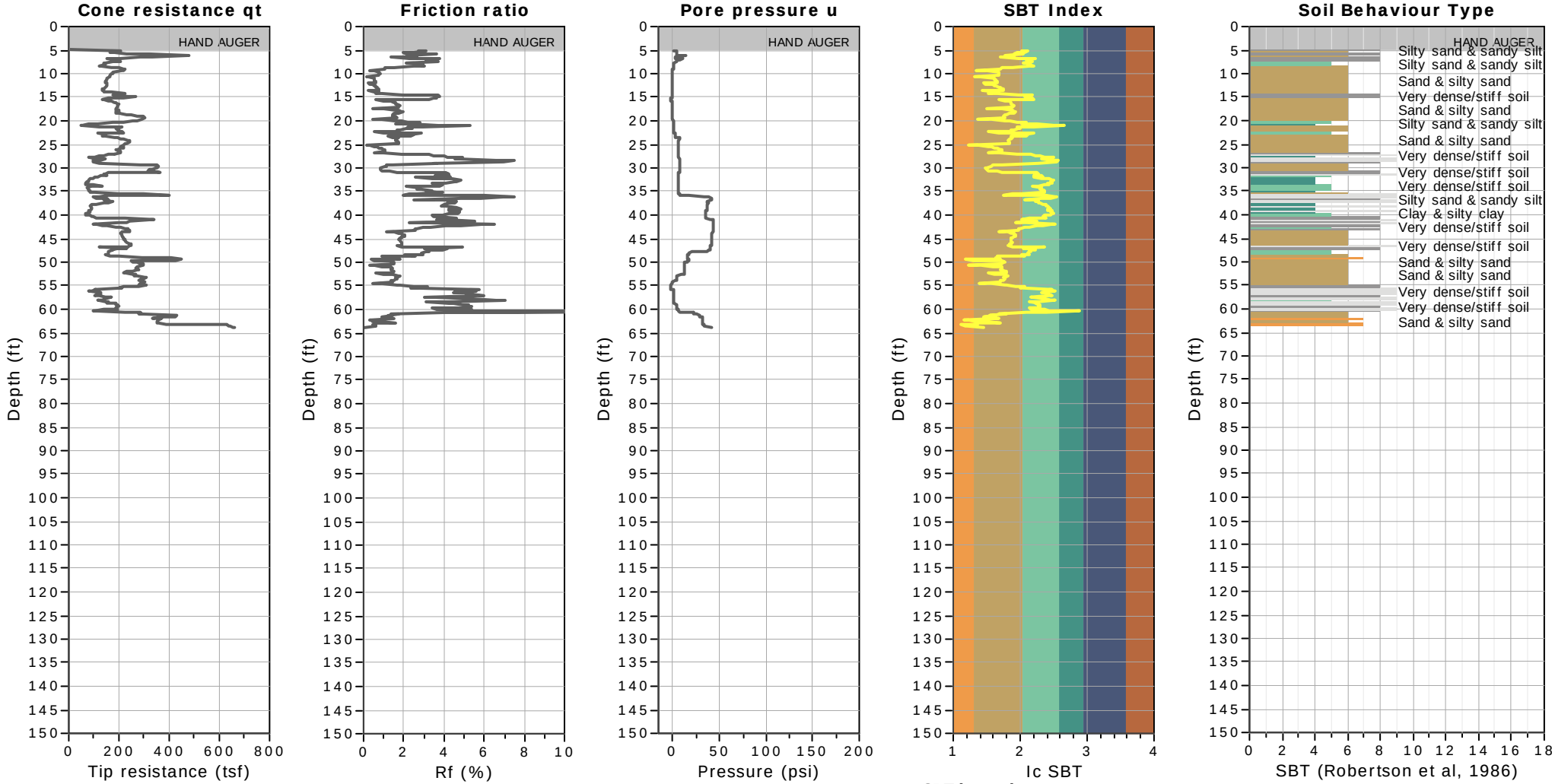
Coords: X:6333046.50, Y:2145957.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0026CPT

Total depth: 63.98 ft

Surface Elevation: 283.79 ft

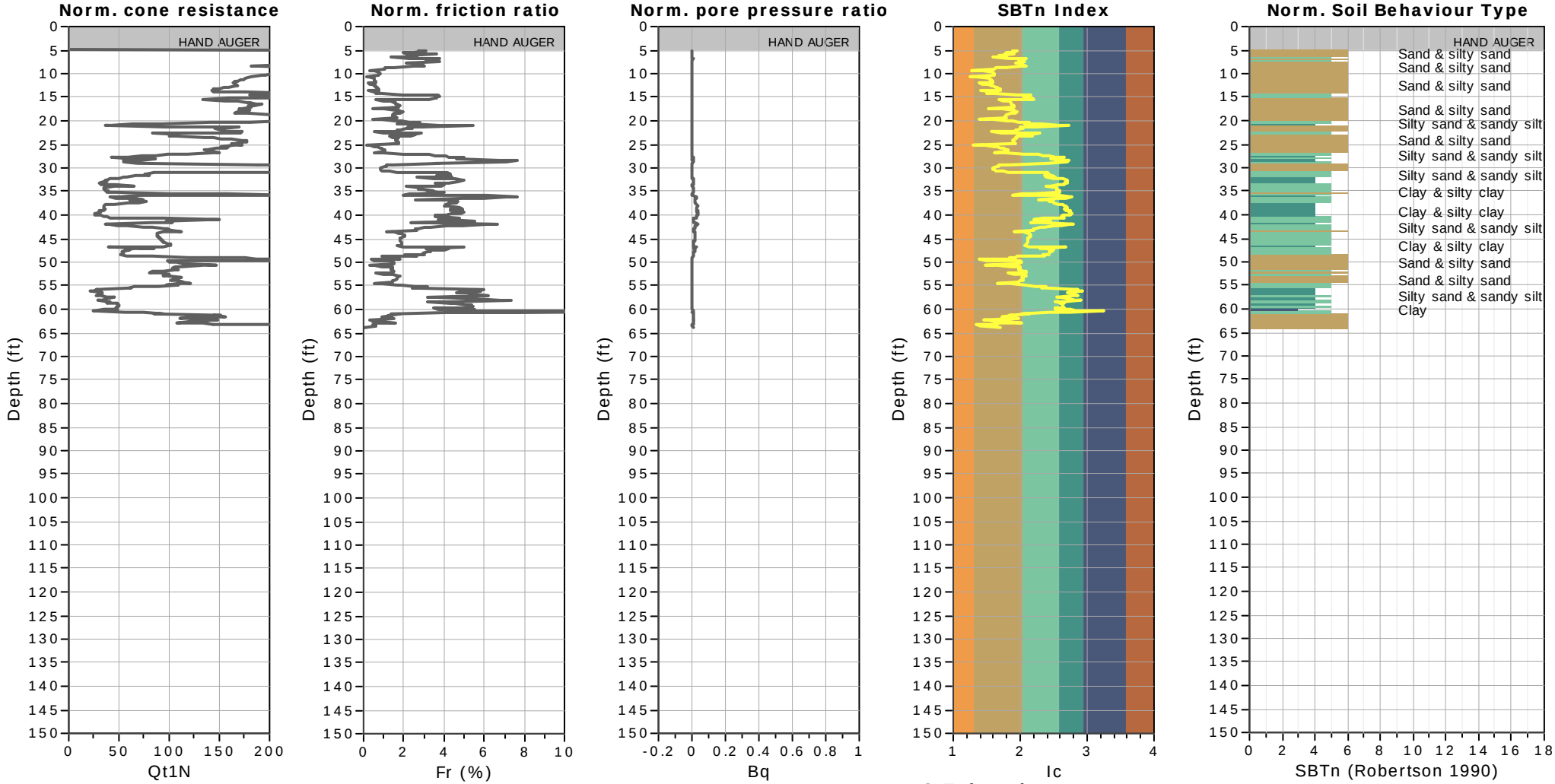
Coords: X:6333046.50, Y:2145957.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



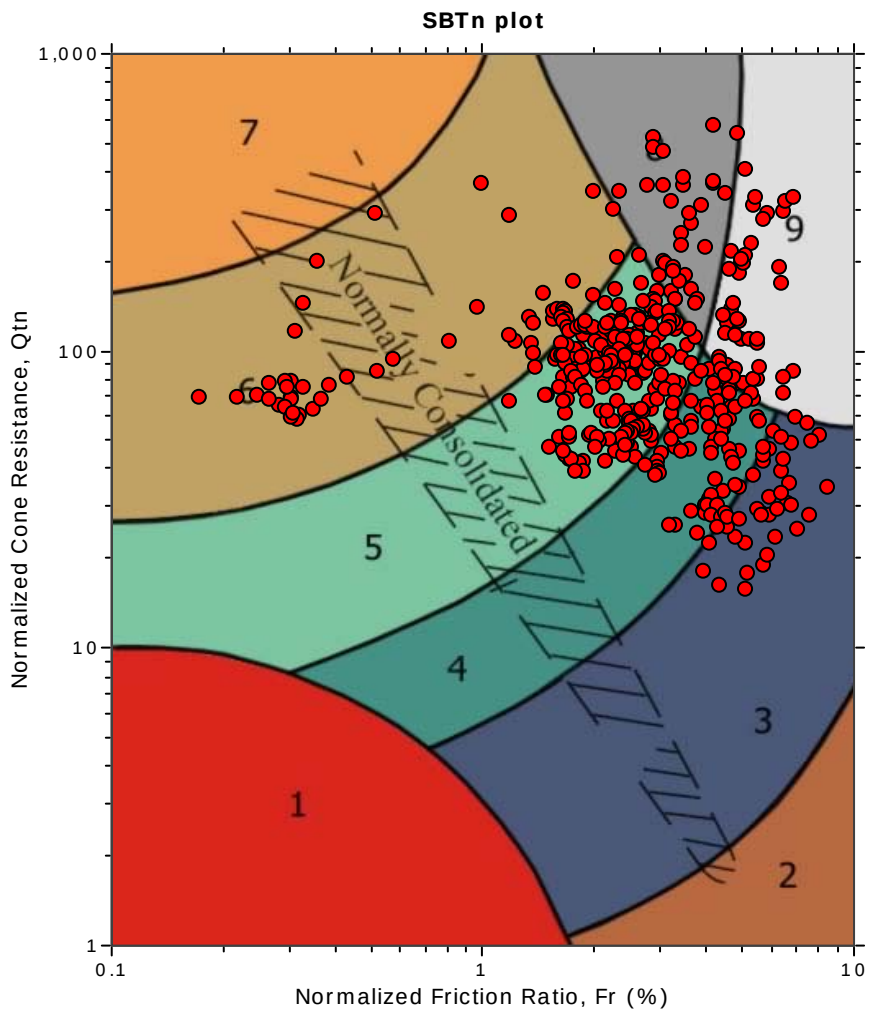
SBTn legend

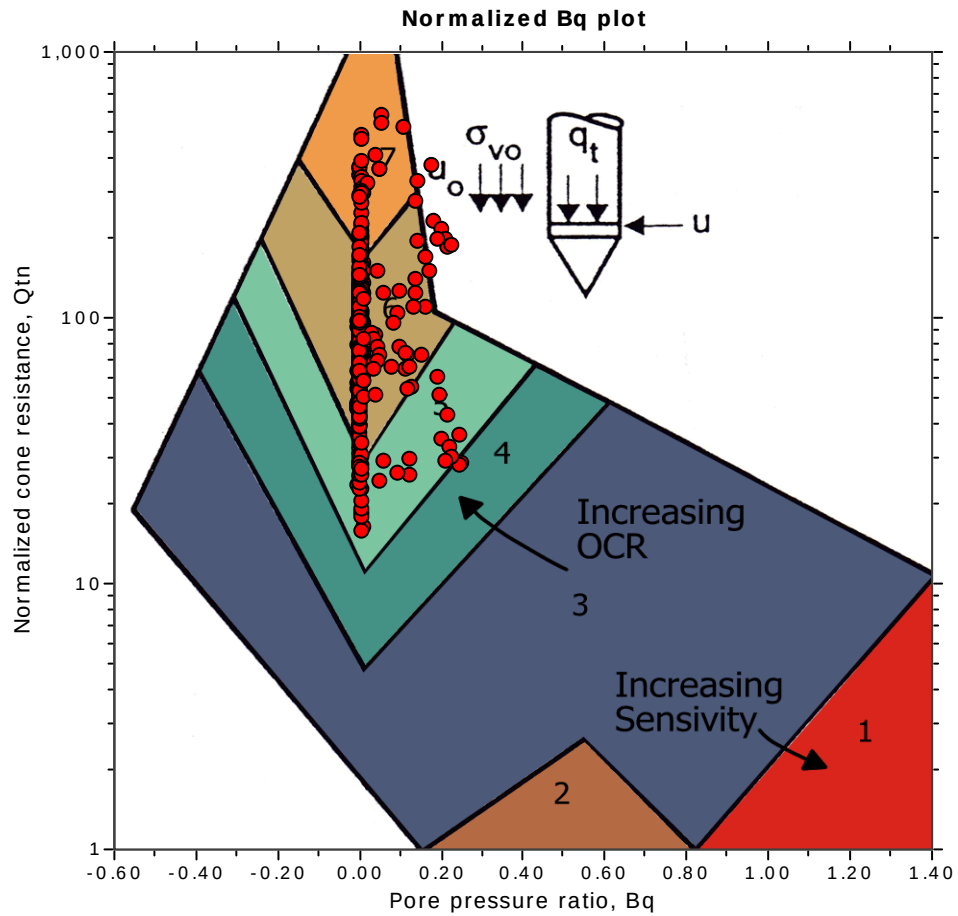
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0027CPT
Total depth: 80.38 ft
Surface Elevation: 286.63 ft
Coords: X:6335169.00, Y:2144137.50
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0027CPT

Total depth: 80.38 ft

Surface Elevation: 286.63 ft

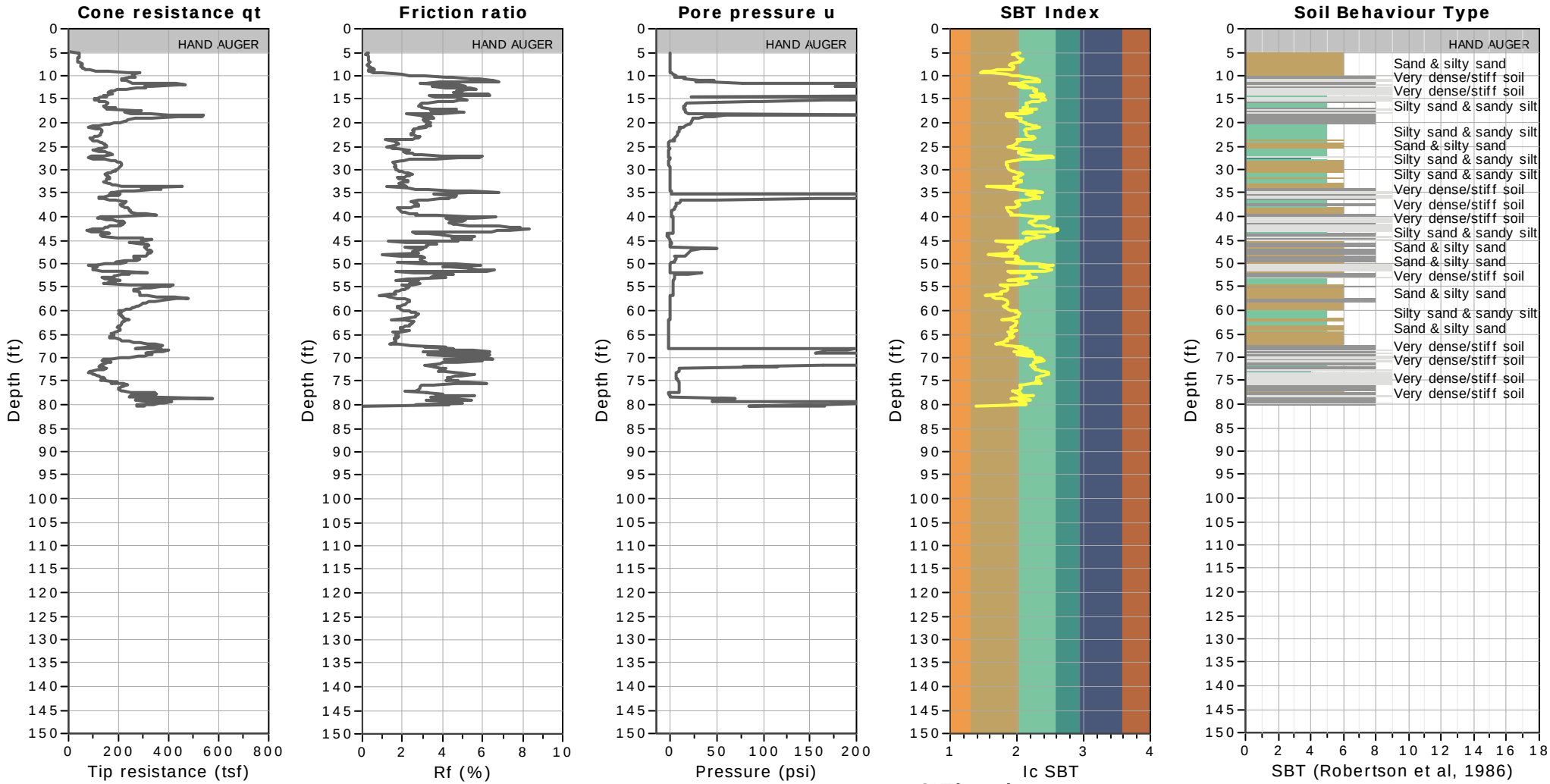
Coords: X:6335169.00, Y:2144137.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0027CPT

Total depth: 80.38 ft

Surface Elevation: 286.63 ft

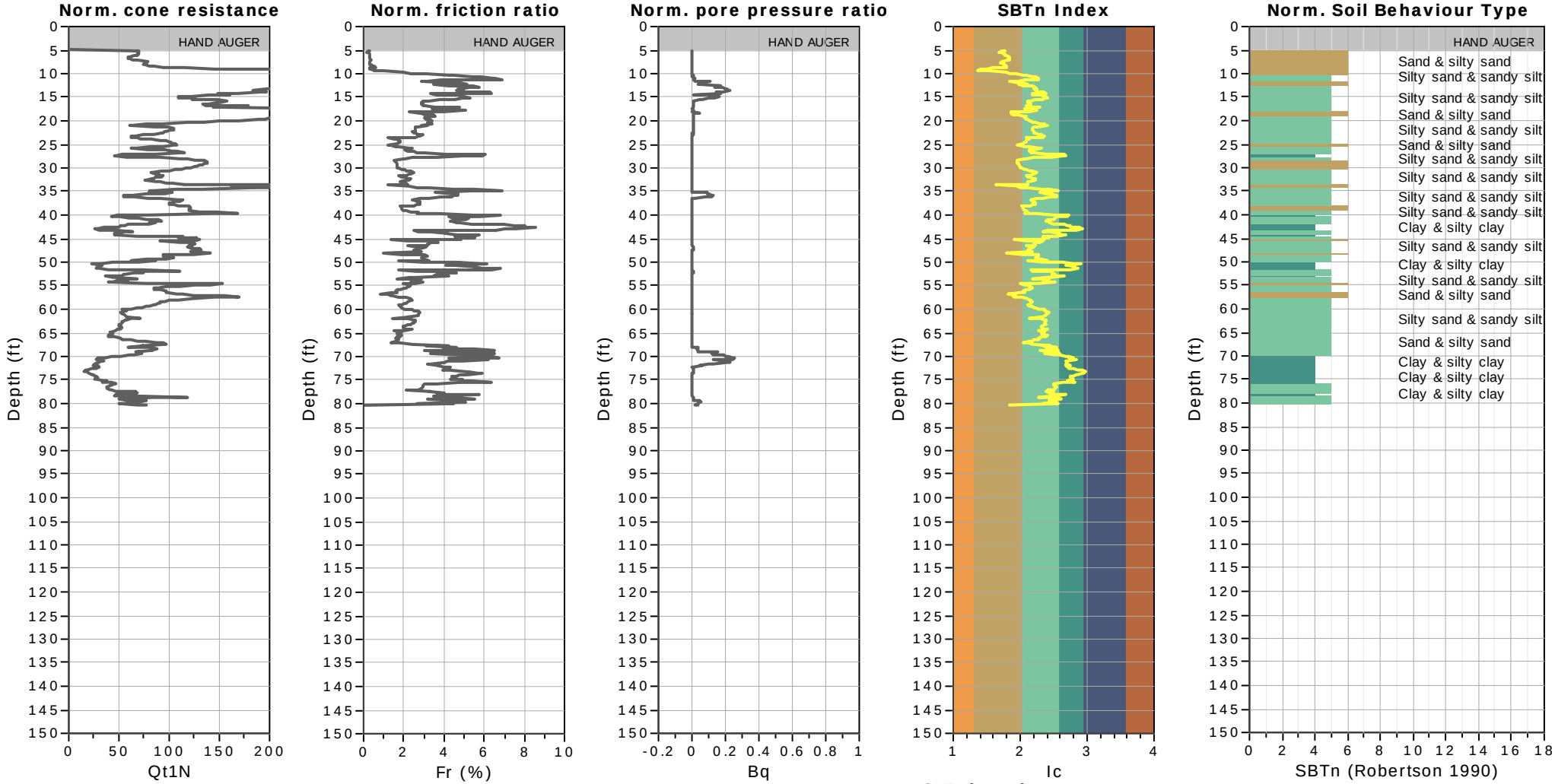
Coords: X:6335169.00, Y:2144137.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



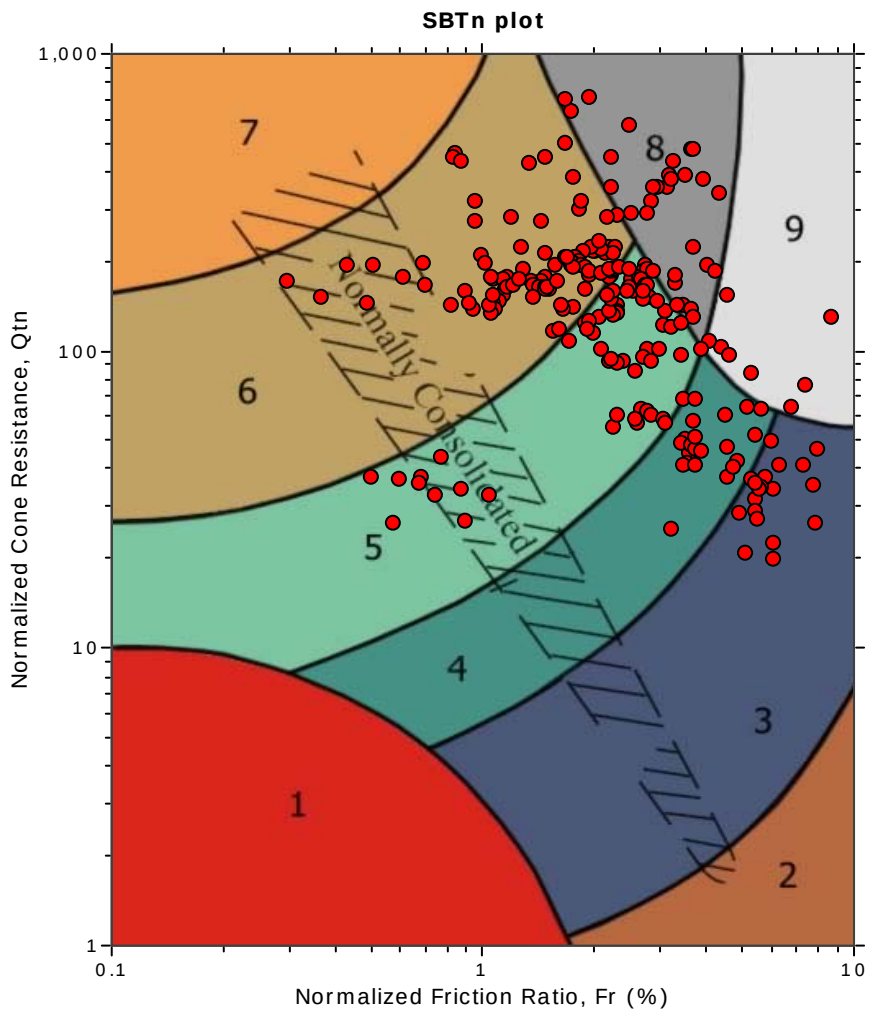
SBTn legend

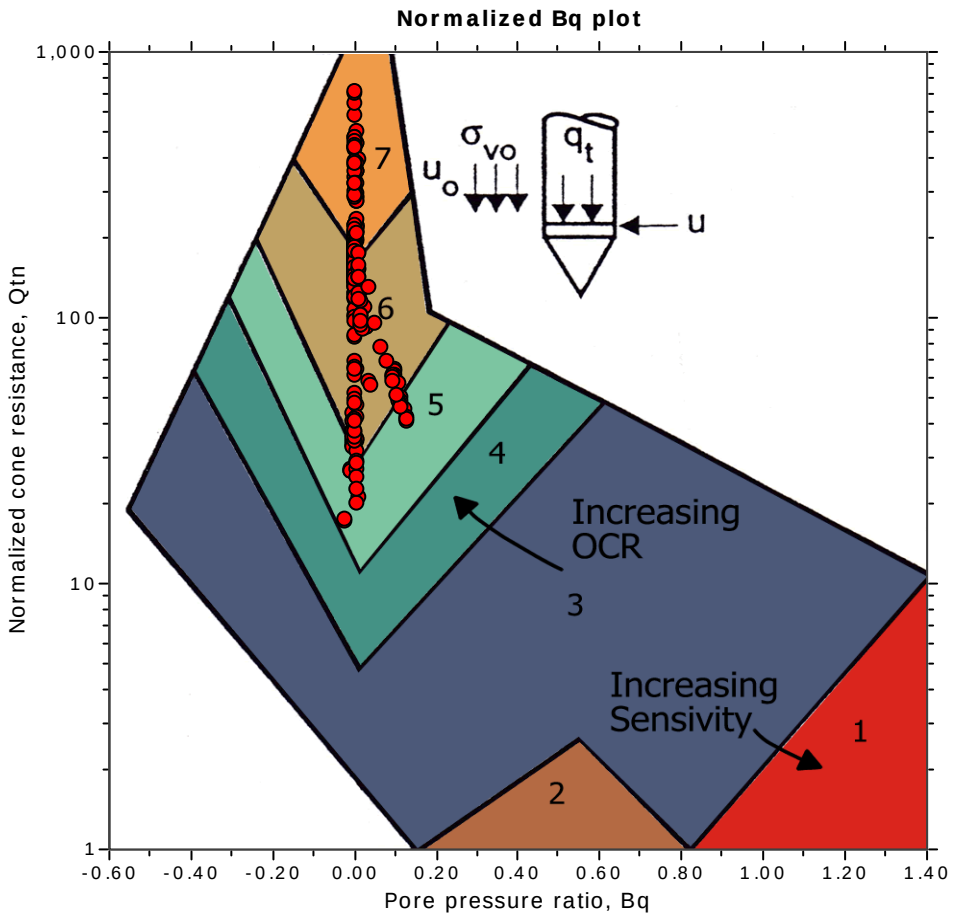
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0028CPT
Total depth: 45.11 ft
Surface Elevation: 286.81 ft
Coords: X:6336999.50, Y:2141437.00
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0028CPT

Total depth: 45.11 ft

Surface Elevation: 286.81 ft

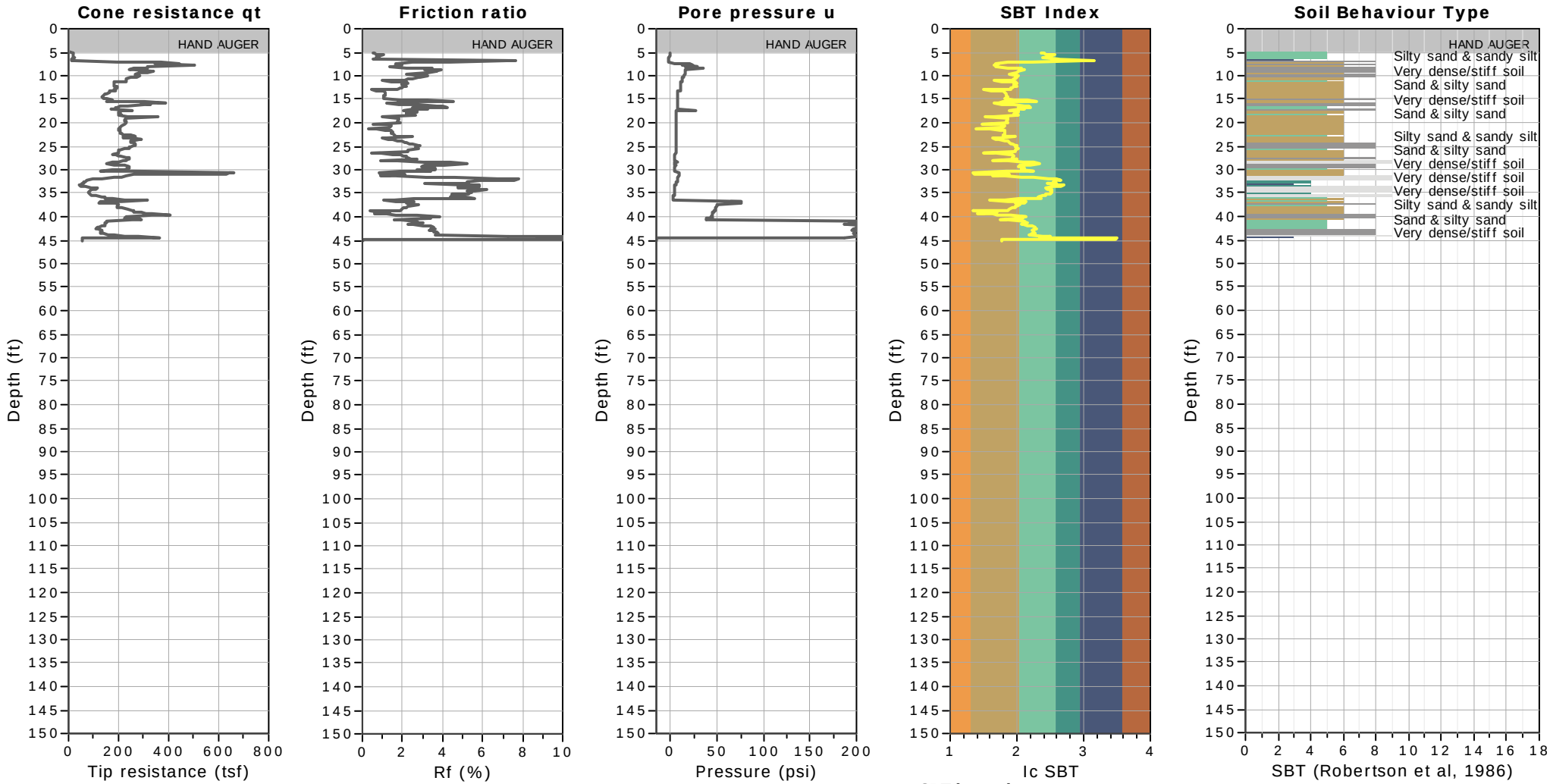
Coords: X:6336999.50, Y:2141437.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: **California High-Speed Train**

Location: **Fresno, CA**



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0028CPT

Total depth: 45.11 ft

Surface Elevation: 286.81 ft

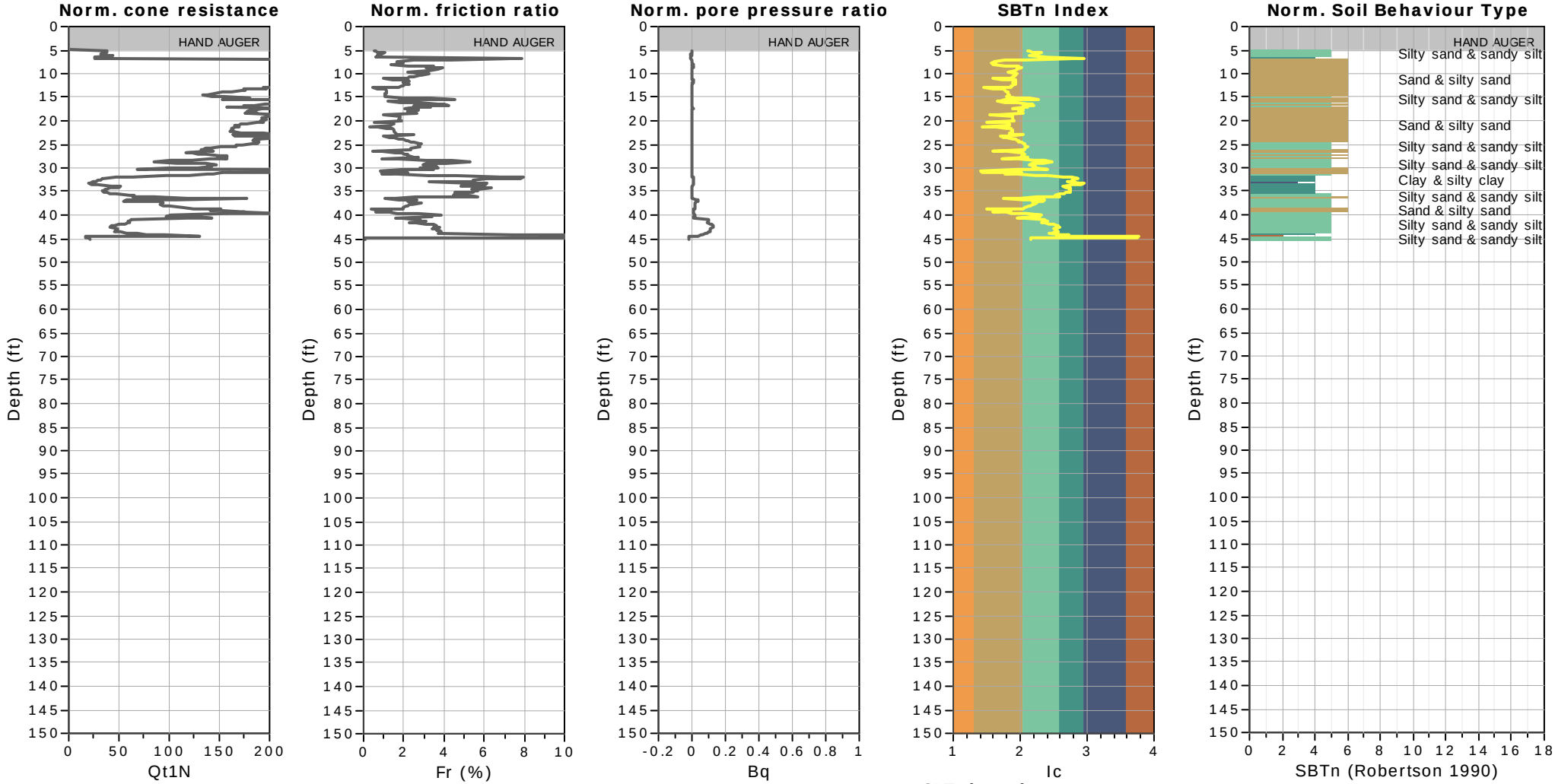
Coords: X:6336999.50, Y:2141437.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

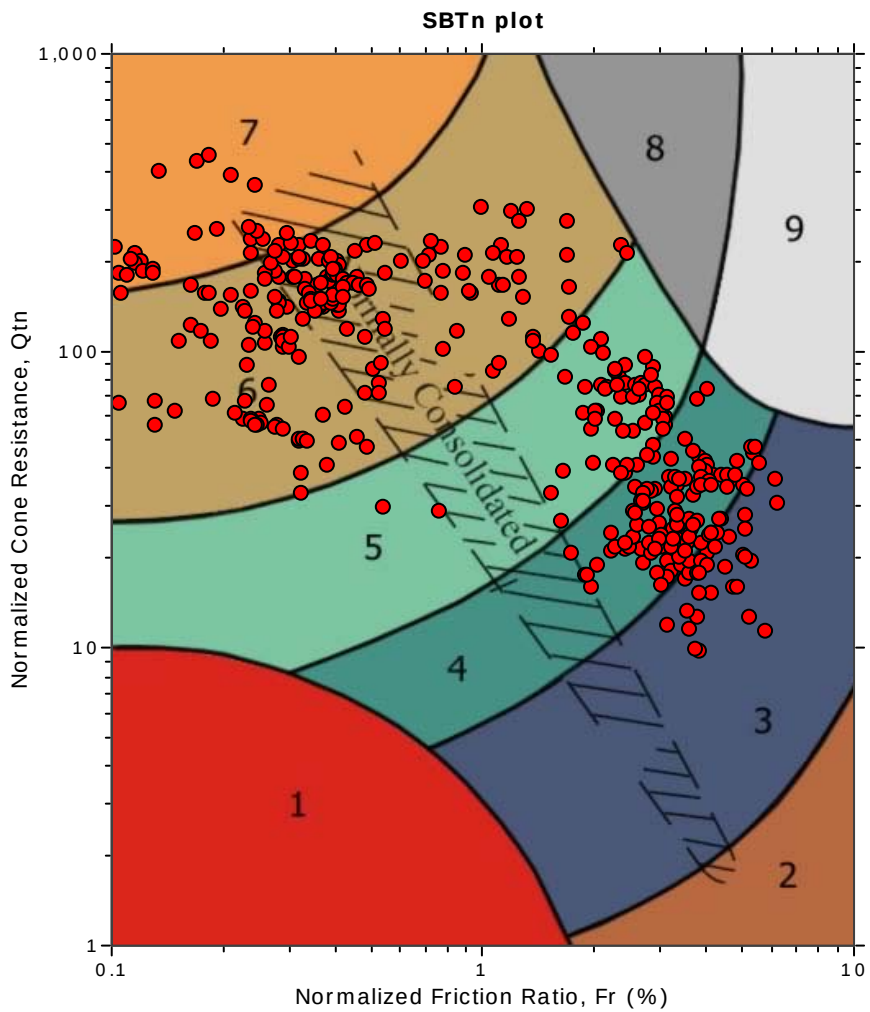


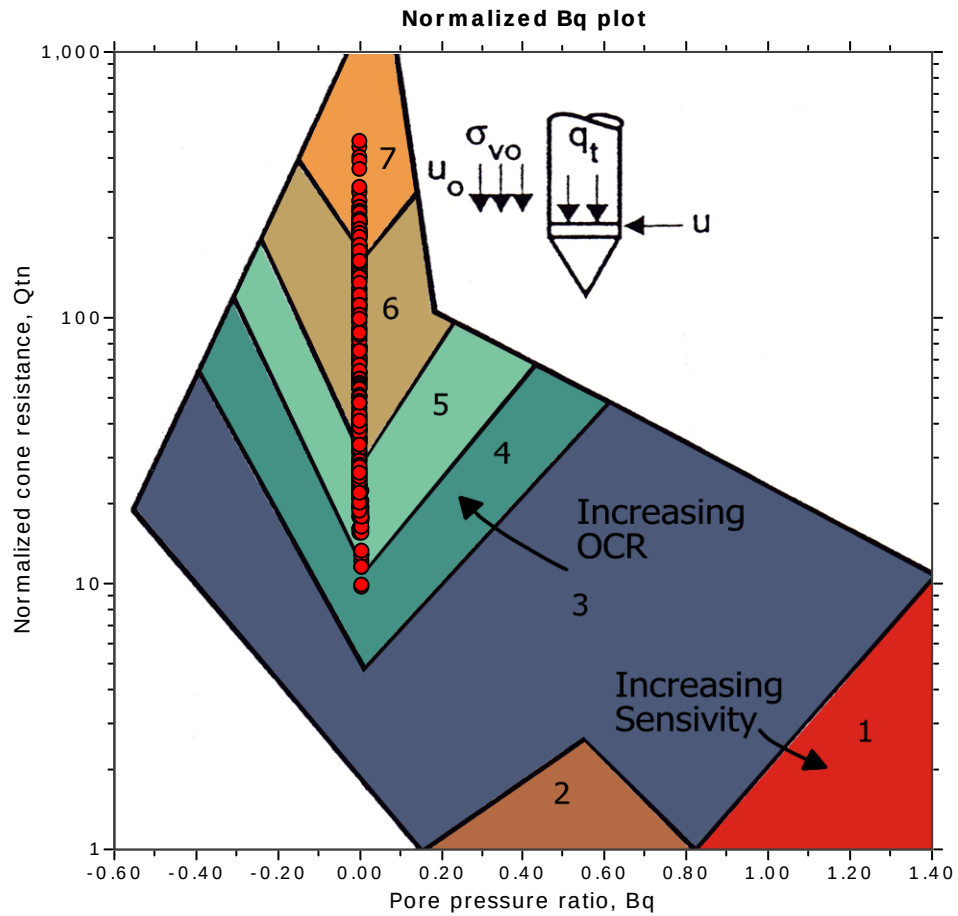
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0029CPT

Total depth: 80.05 ft

Surface Elevation: 287.88 ft

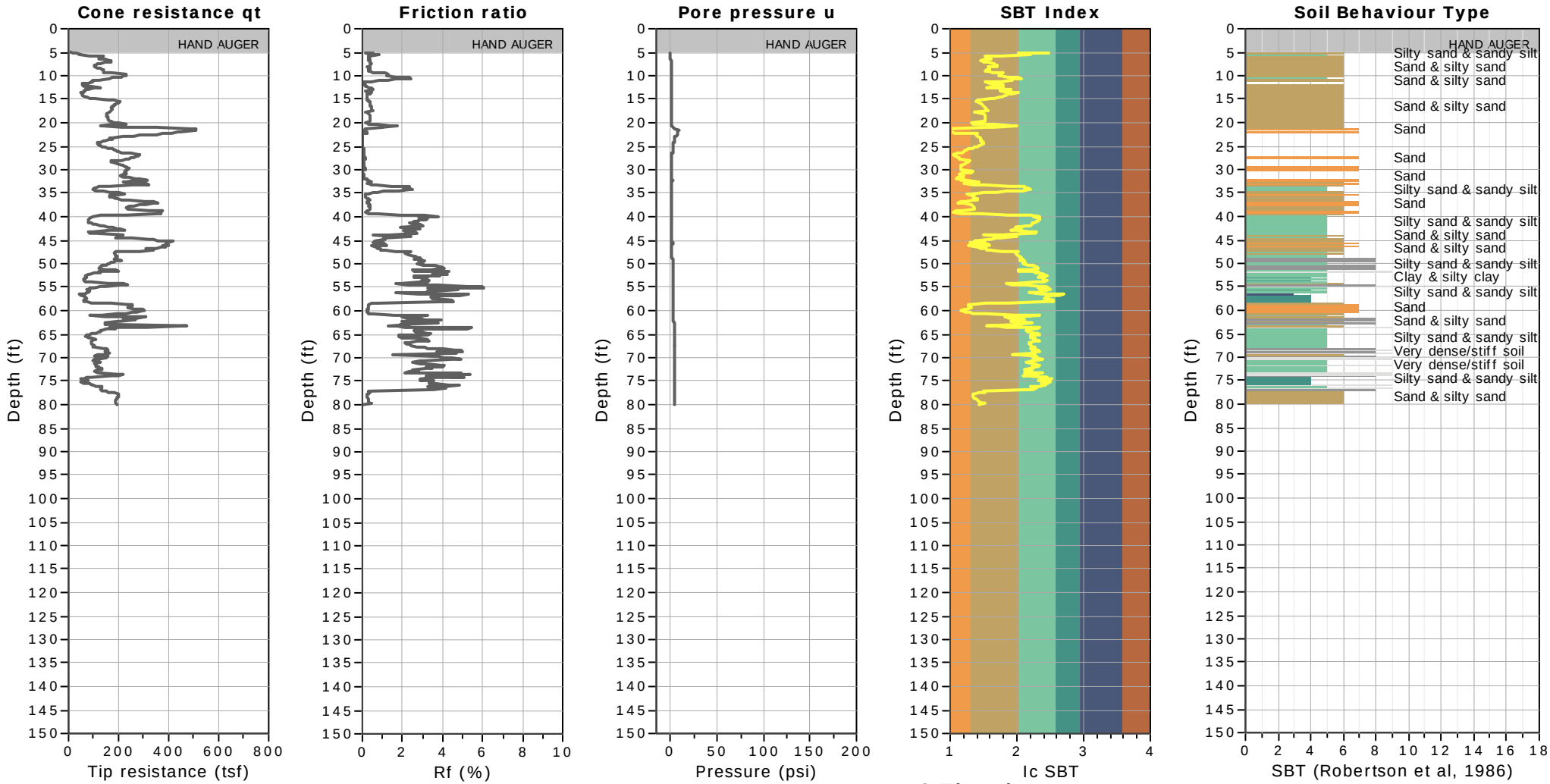
Coords: X:6337145.50, Y:2141271.50

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0029CPT

Total depth: 80.05 ft

Surface Elevation: 287.88 ft

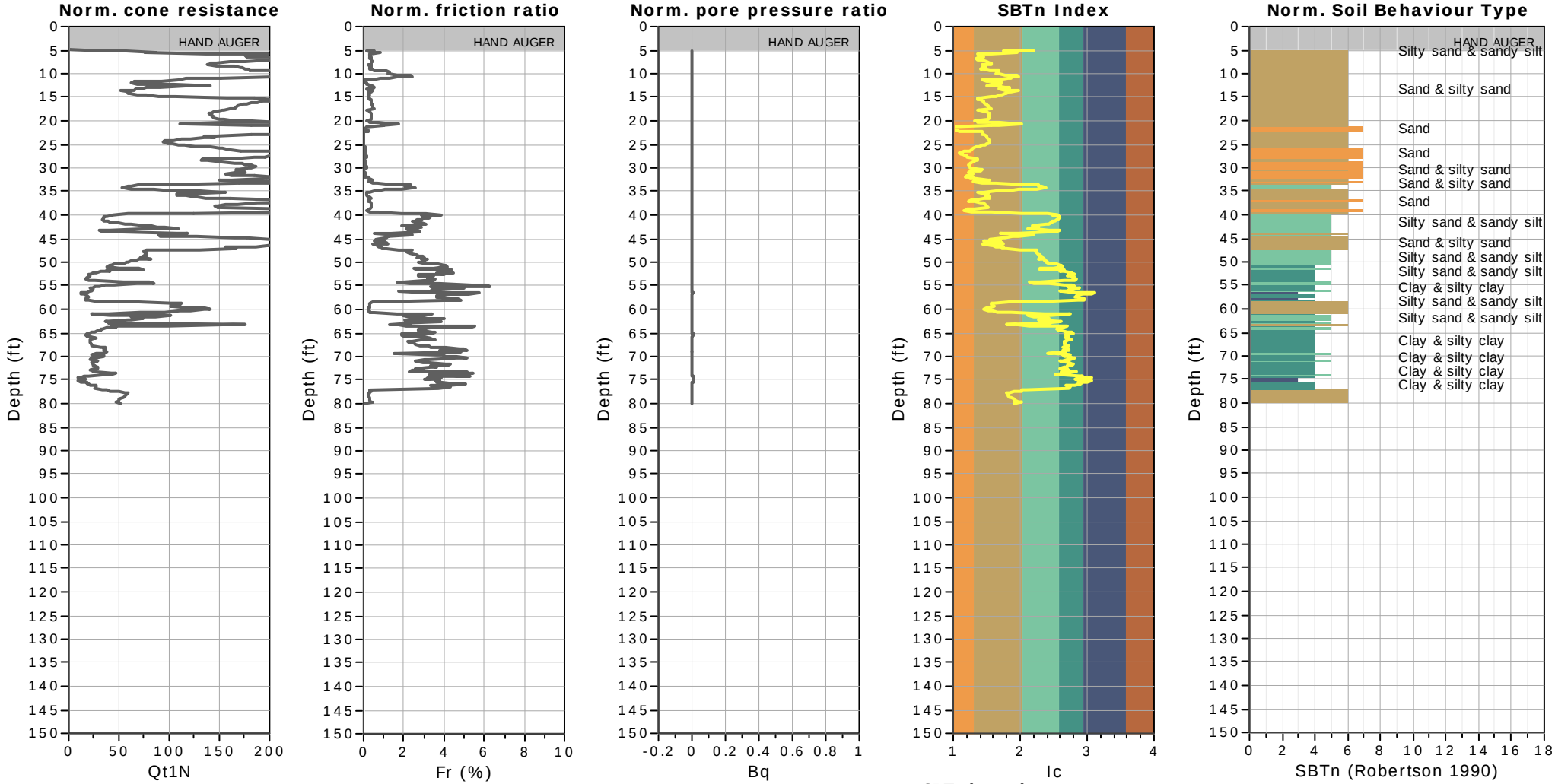
Coords: X:6337145.50, Y:2141271.50

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



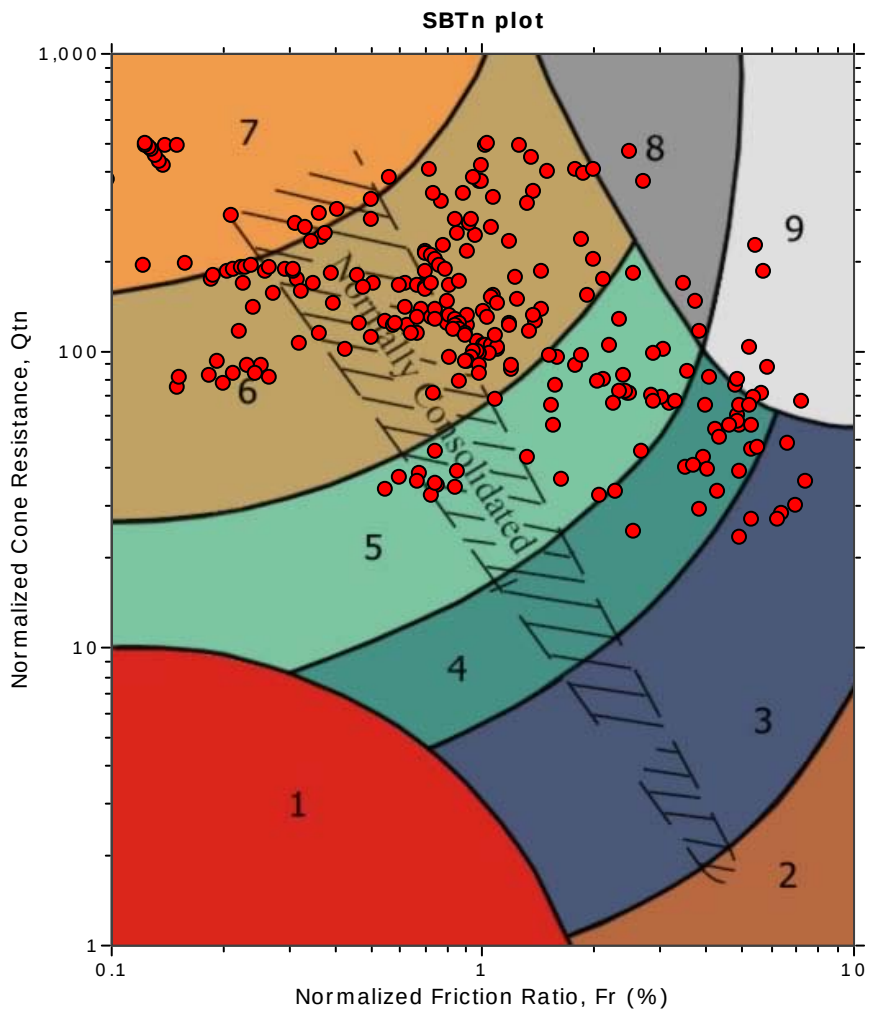
SBTn legend

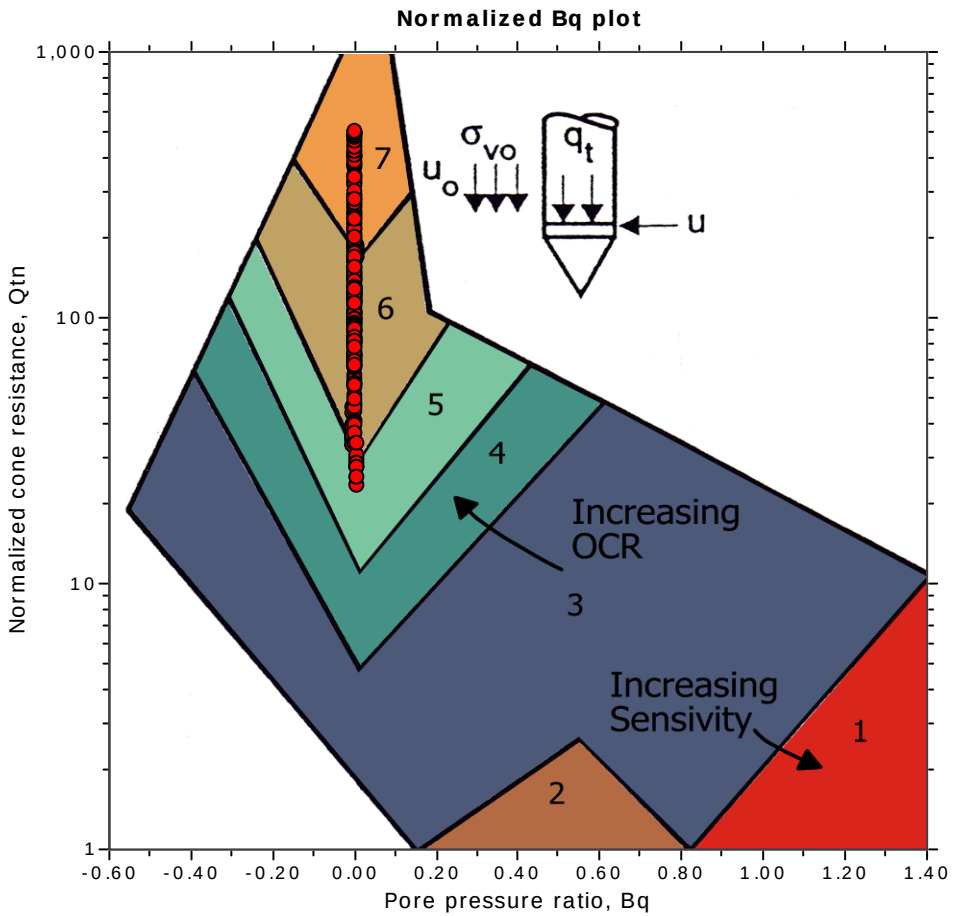
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0030CPT
Total depth: 64.14 ft
Surface Elevation: 288.89 ft
Coords: X:6338690.00, Y:2138777.75
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0030CPT

Total depth: 64.14 ft

Surface Elevation: 288.89 ft

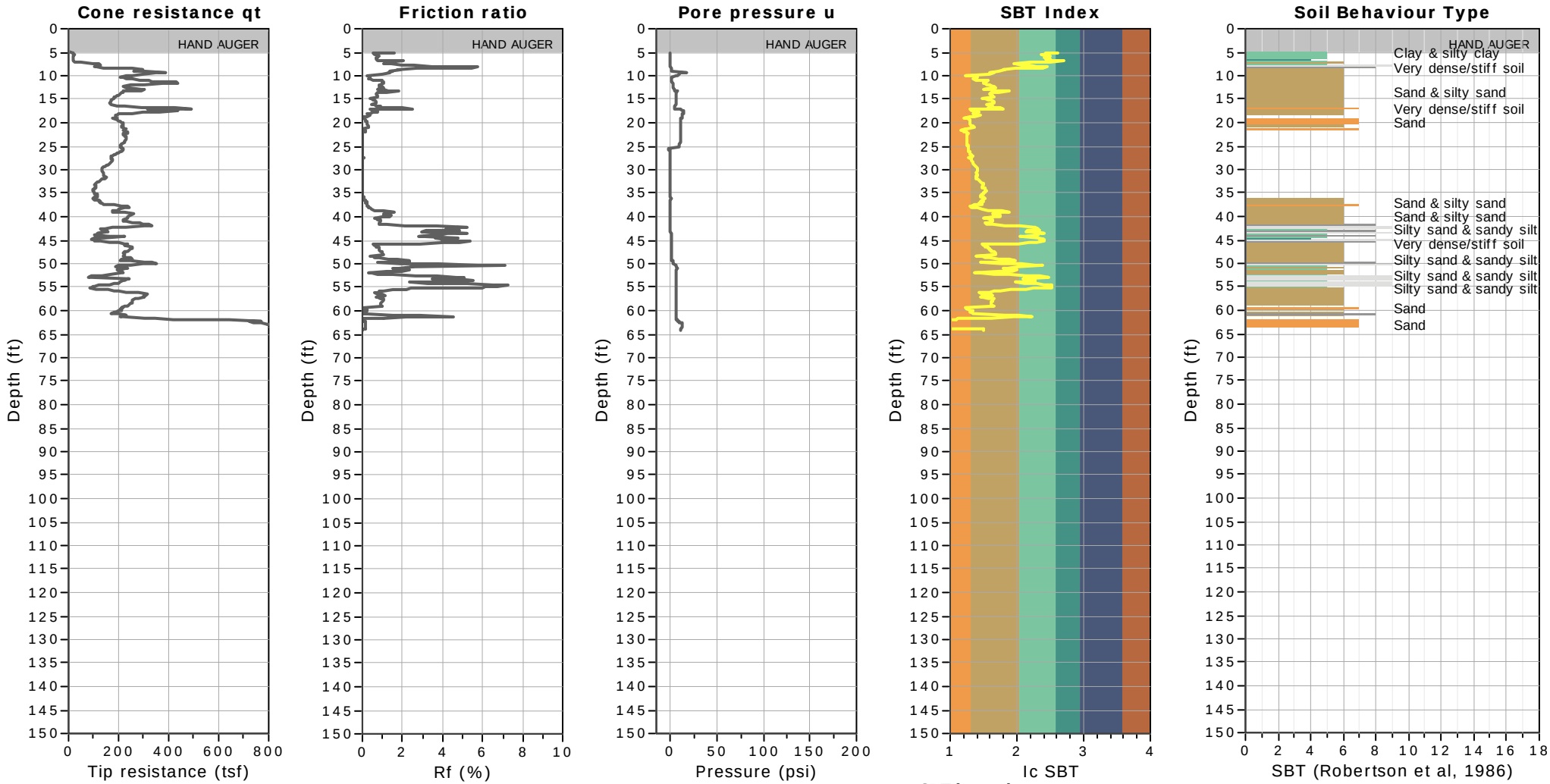
Coords: X:6338690.00, Y:2138777.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0030CPT

Total depth: 64.14 ft

Surface Elevation: 288.89 ft

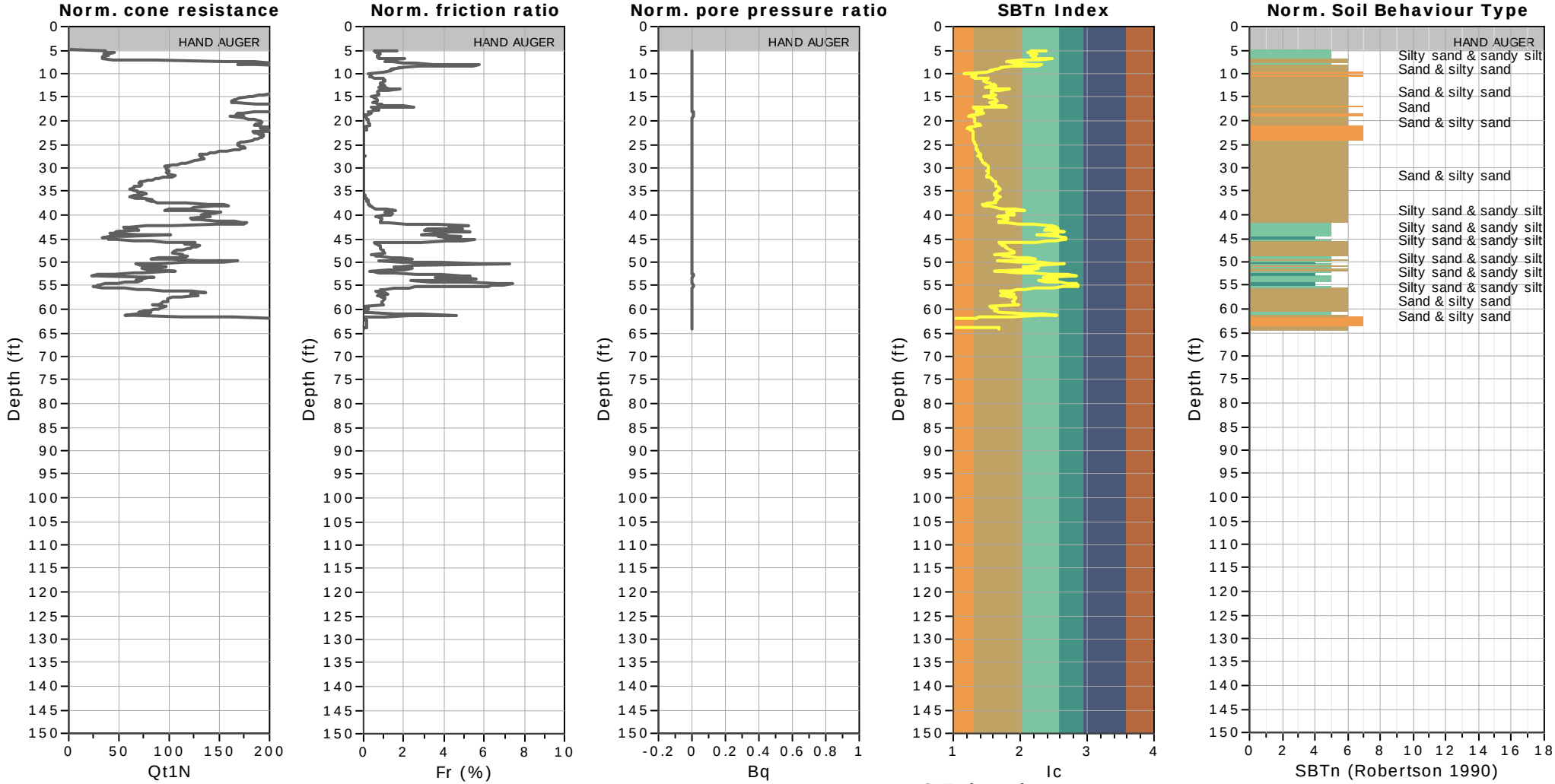
Coords: X:6338690.00, Y:2138777.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



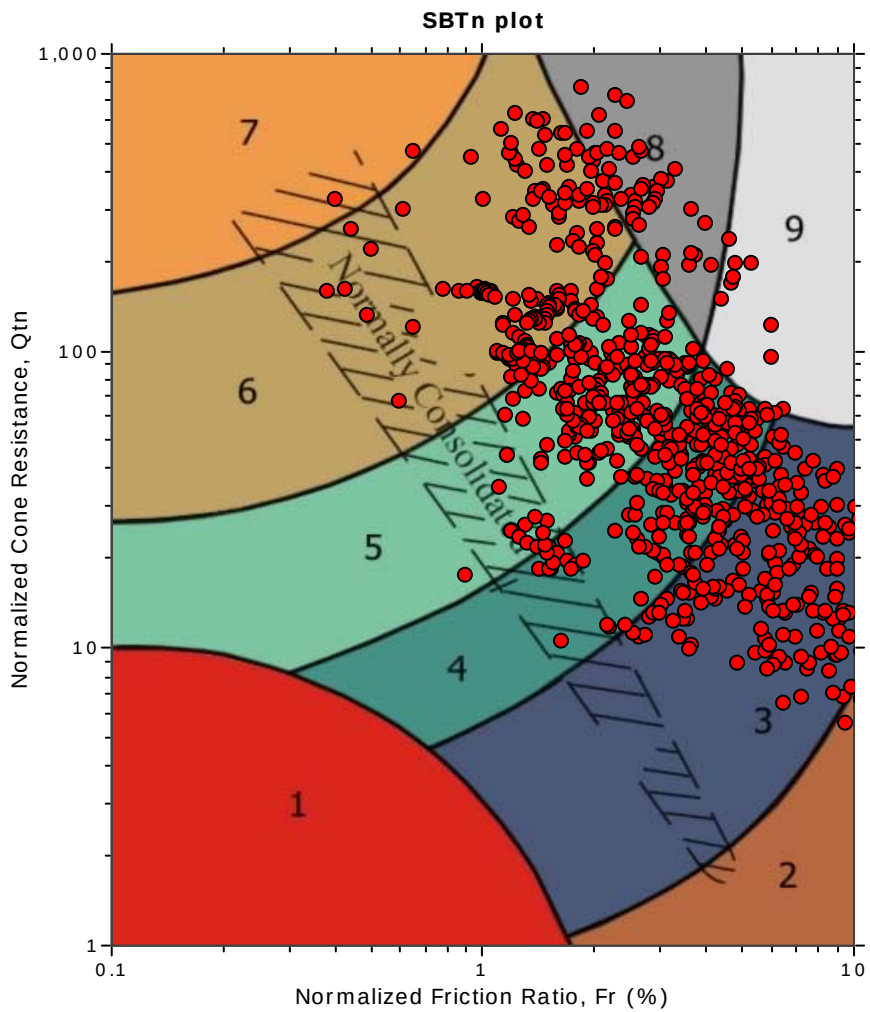
SBTn legend

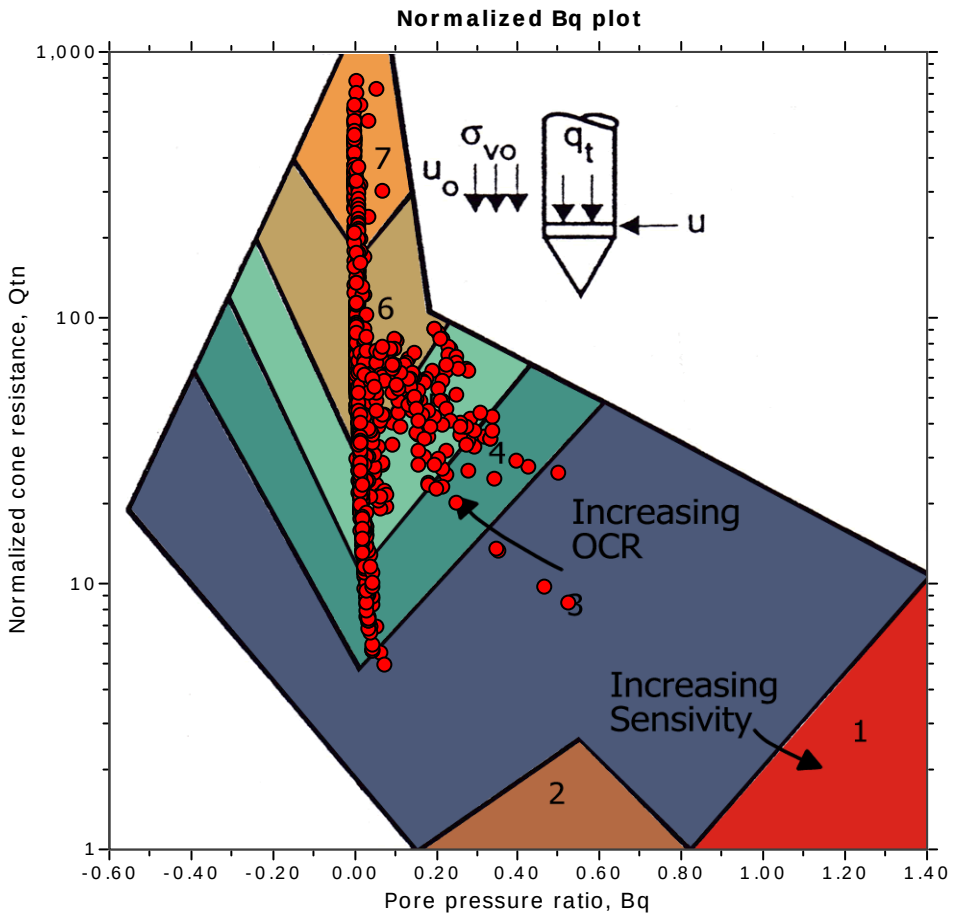
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0031CPT
Total depth: 150.43 ft
Surface Elevation: 289.27 ft
Coords: X:6338936.00, Y:2138496.75
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0031CPT

Total depth: 150.43 ft

Surface Elevation: 289.27 ft

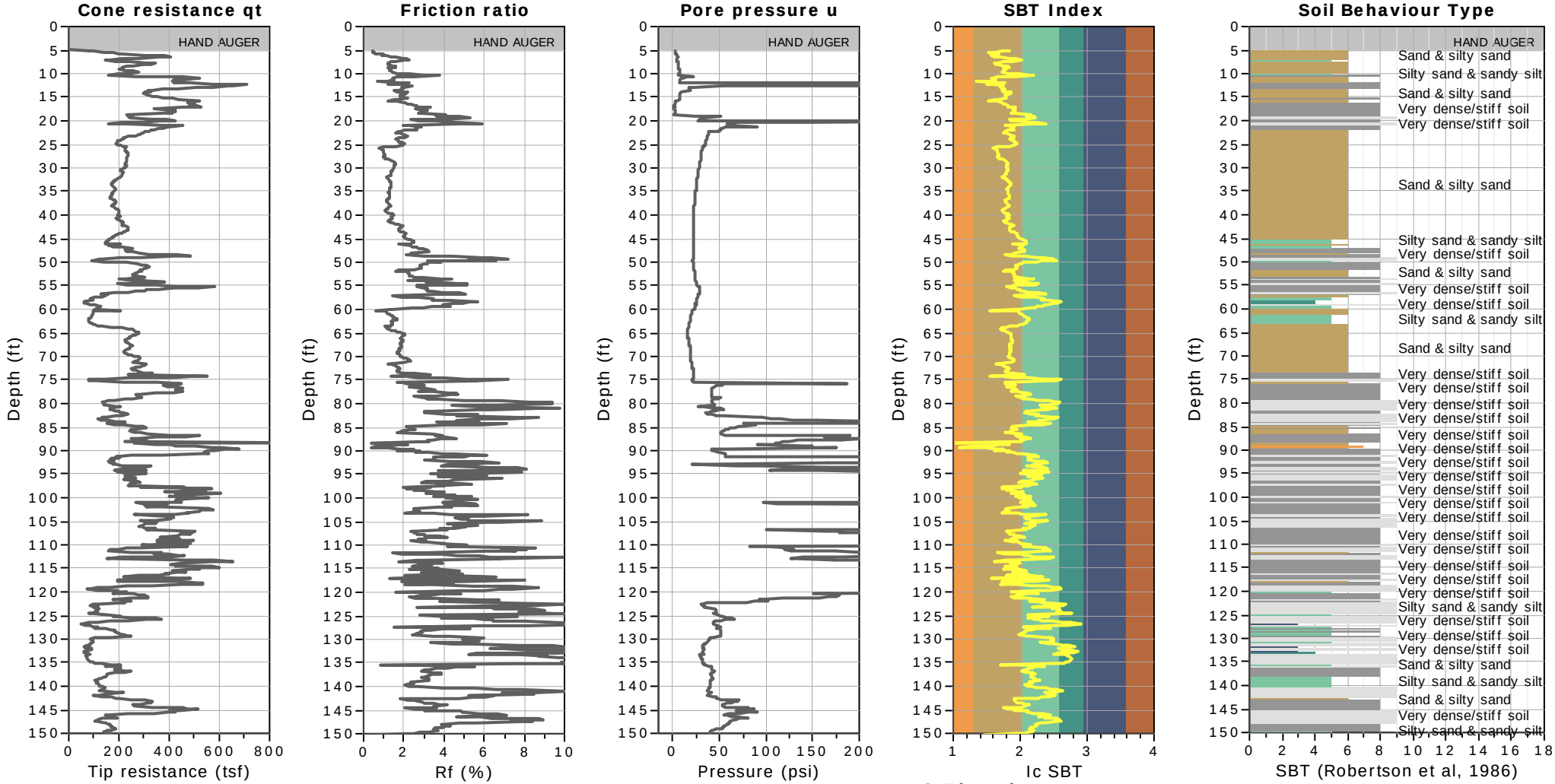
Coords: X:6338936.00, Y:2138496.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0031CPT

Total depth: 150.43 ft

Surface Elevation: 289.27 ft

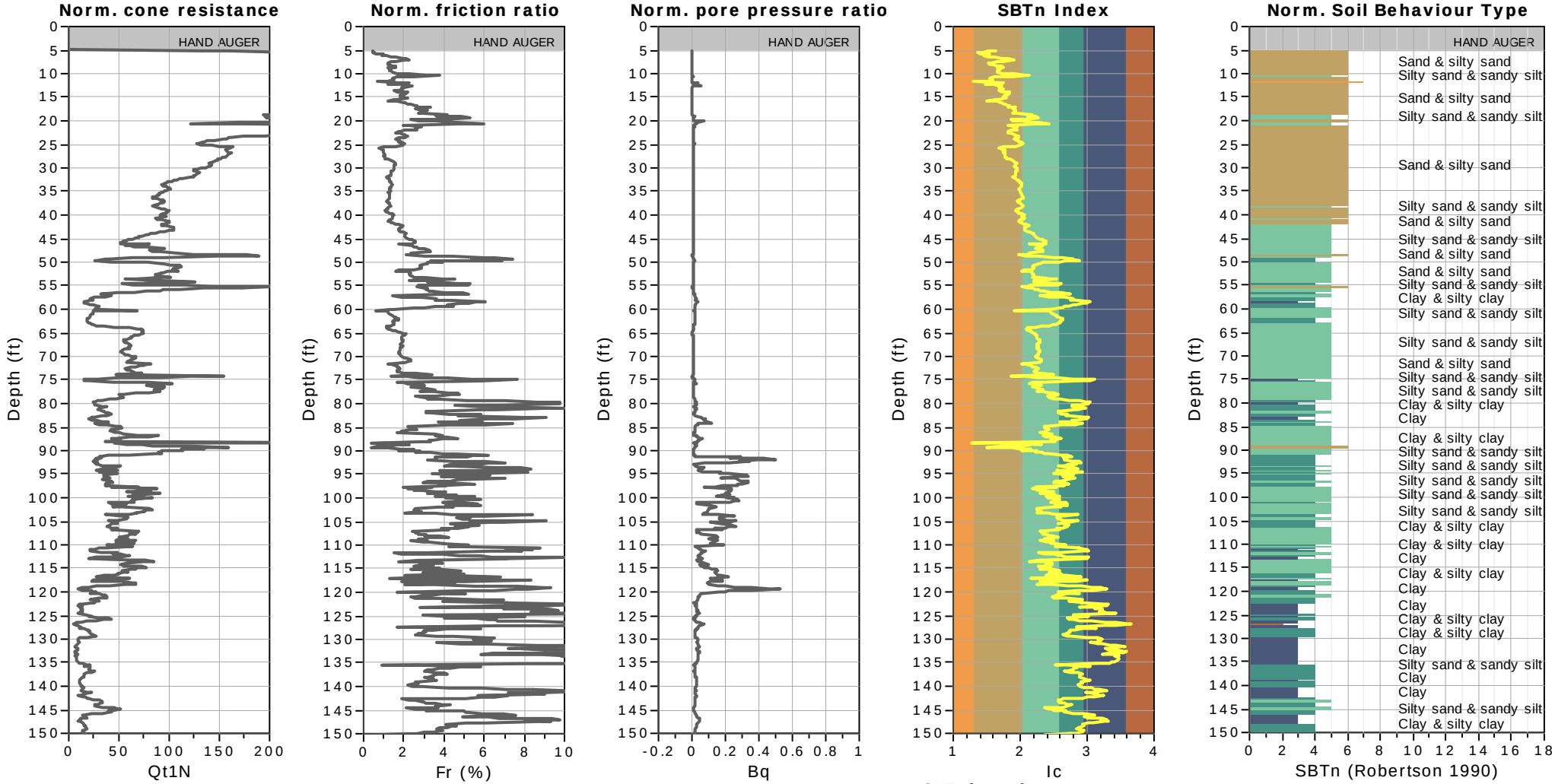
Coords: X:6338936.00, Y:2138496.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



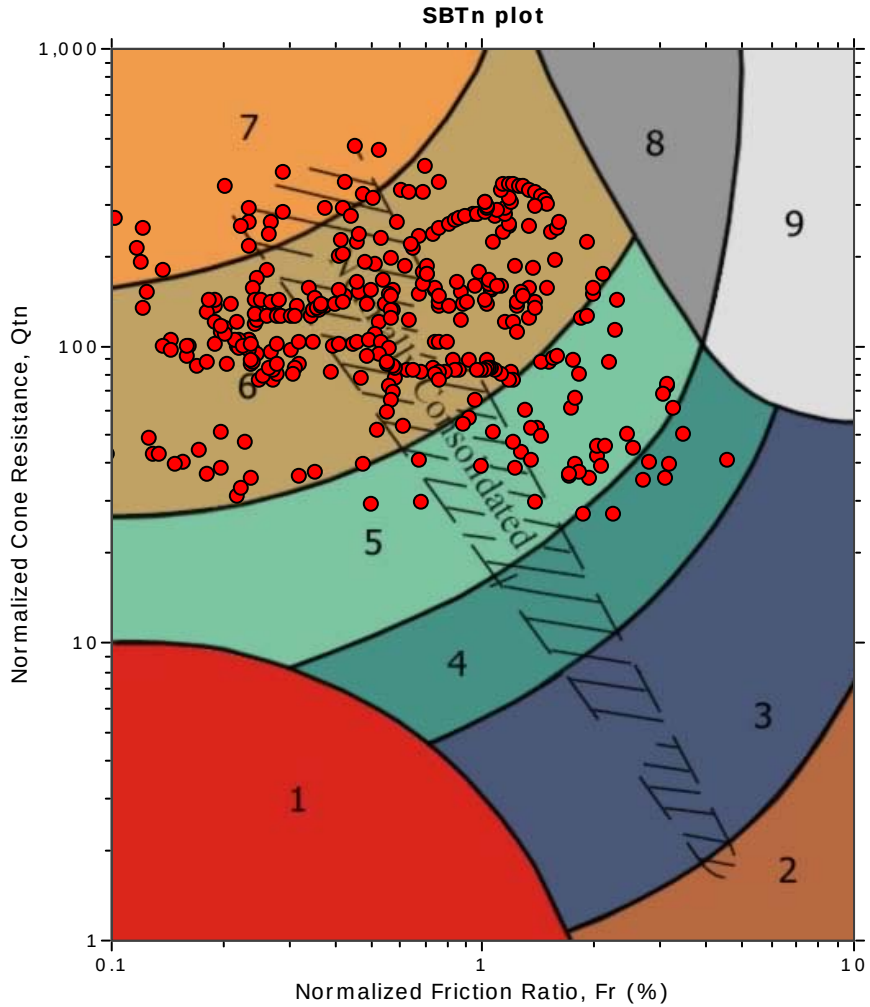
SBTn legend

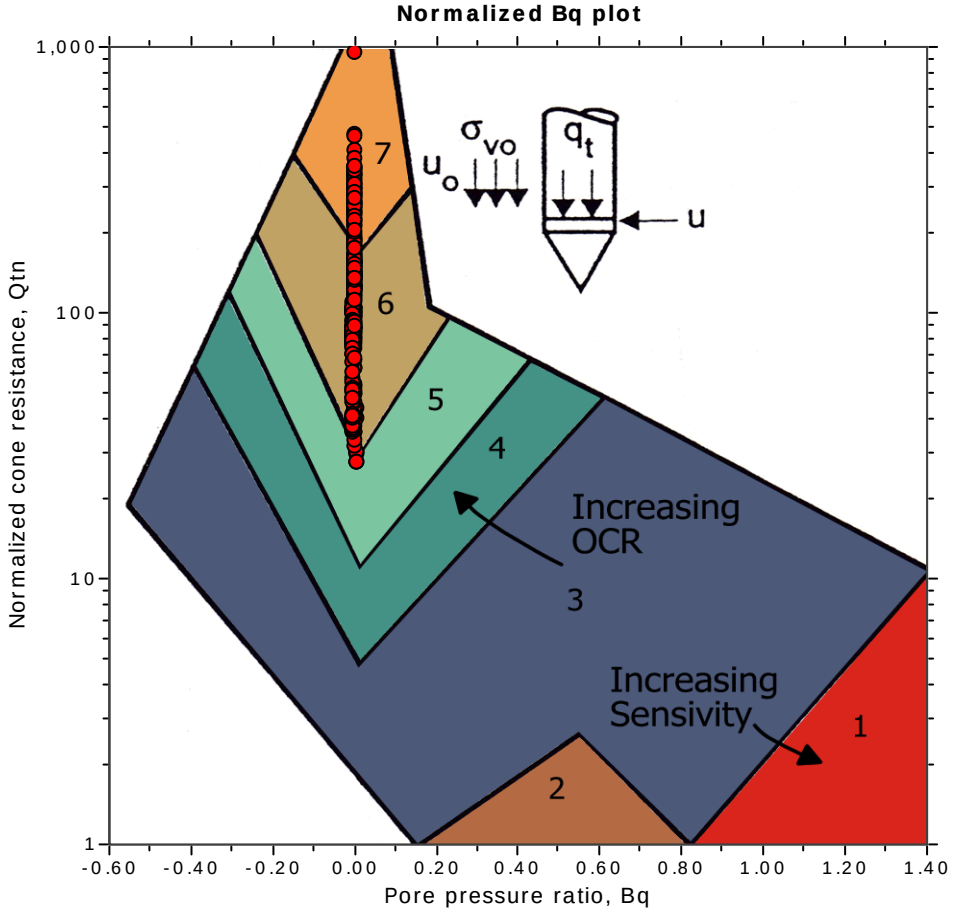
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0032CPT
Total depth: 90.72 ft
Surface Elevation: 290.12 ft
Coords: X:6339868.00, Y:2137996.50
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0032CPT

Total depth: 90.72 ft

Surface Elevation: 290.12 ft

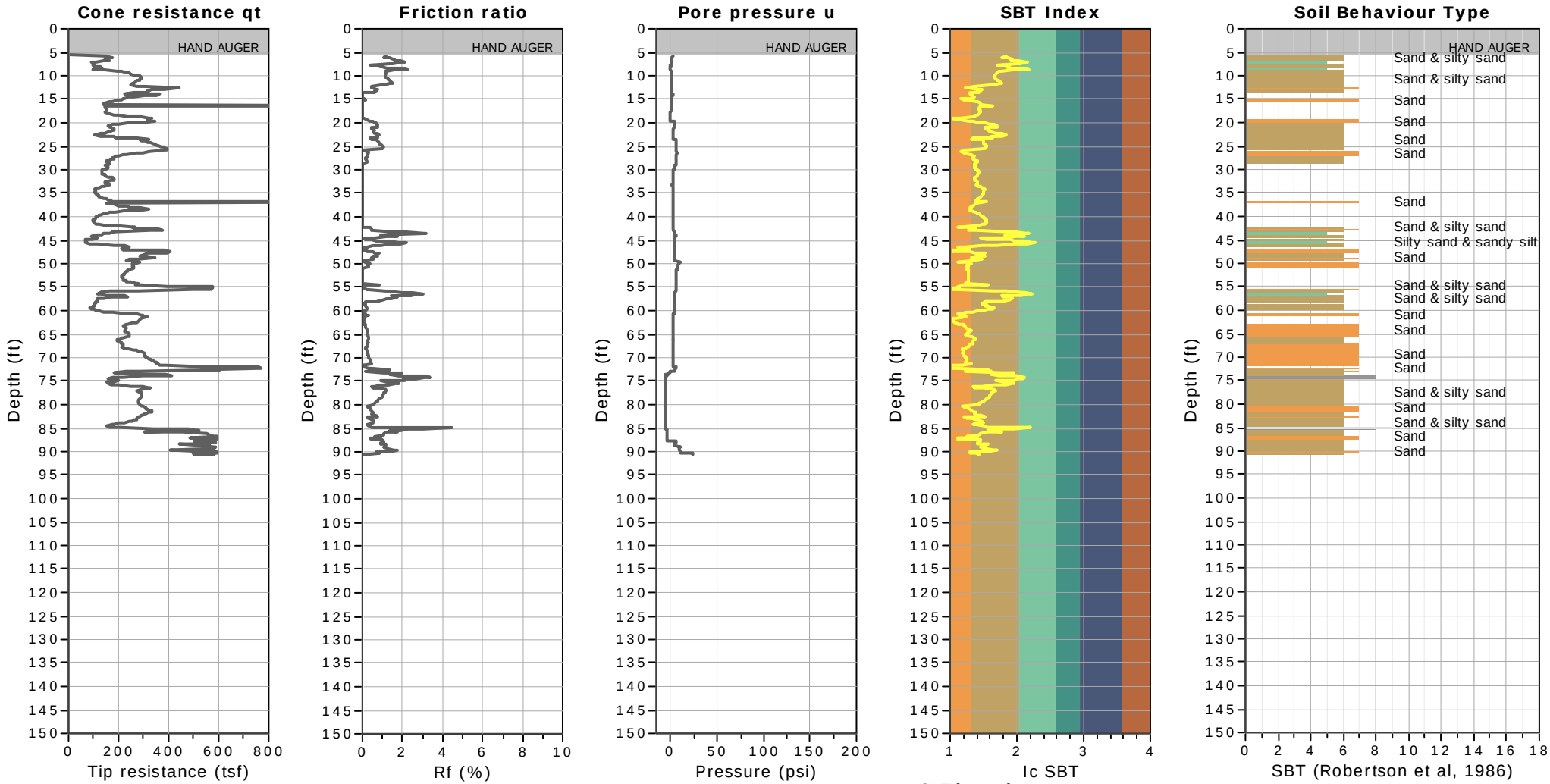
Coords: X:6339868.00, Y:2137996.50

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0032CPT

Total depth: 90.72 ft

Surface Elevation: 290.12 ft

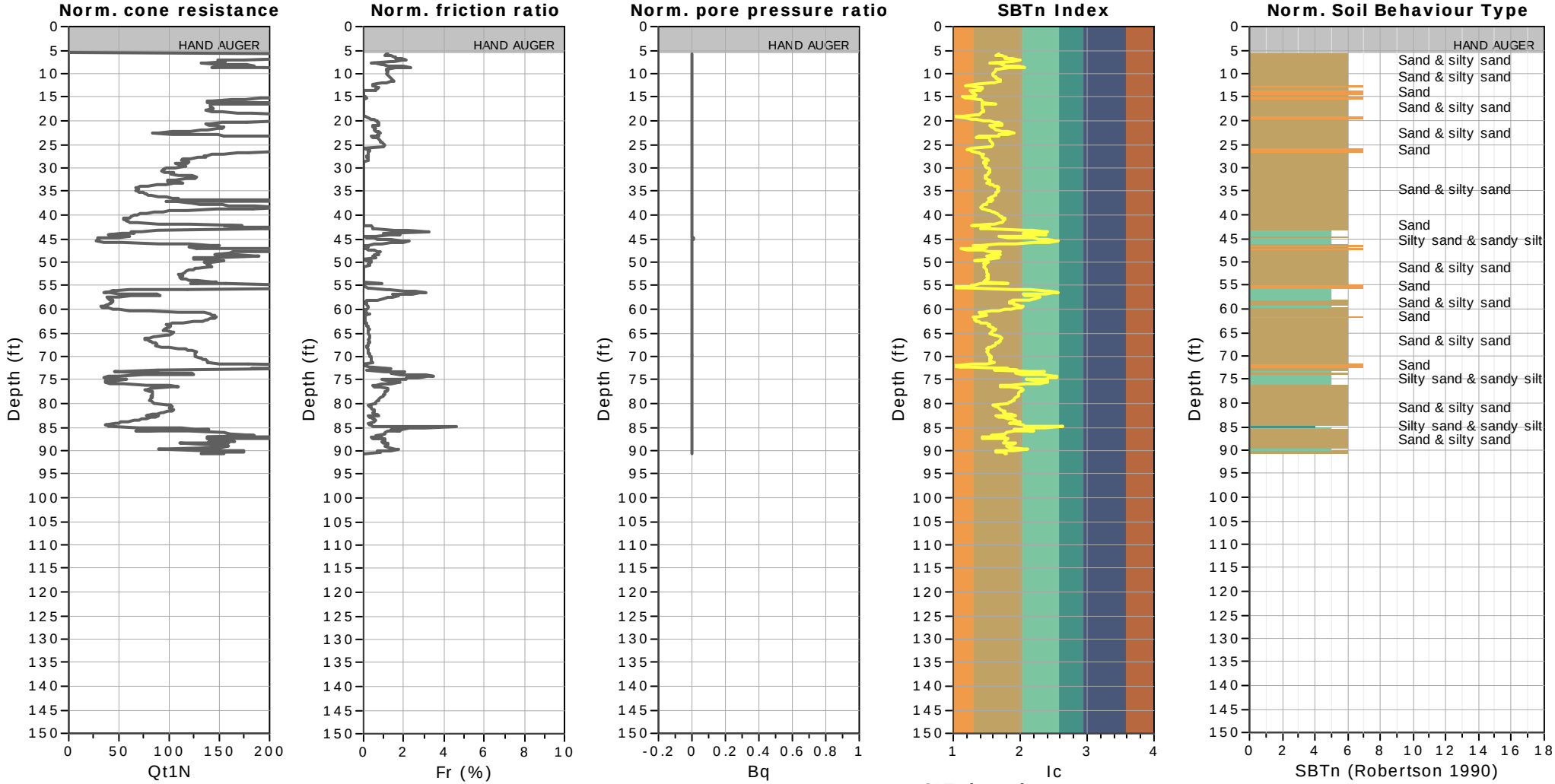
Coords: X:6339868.00, Y:2137996.50

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



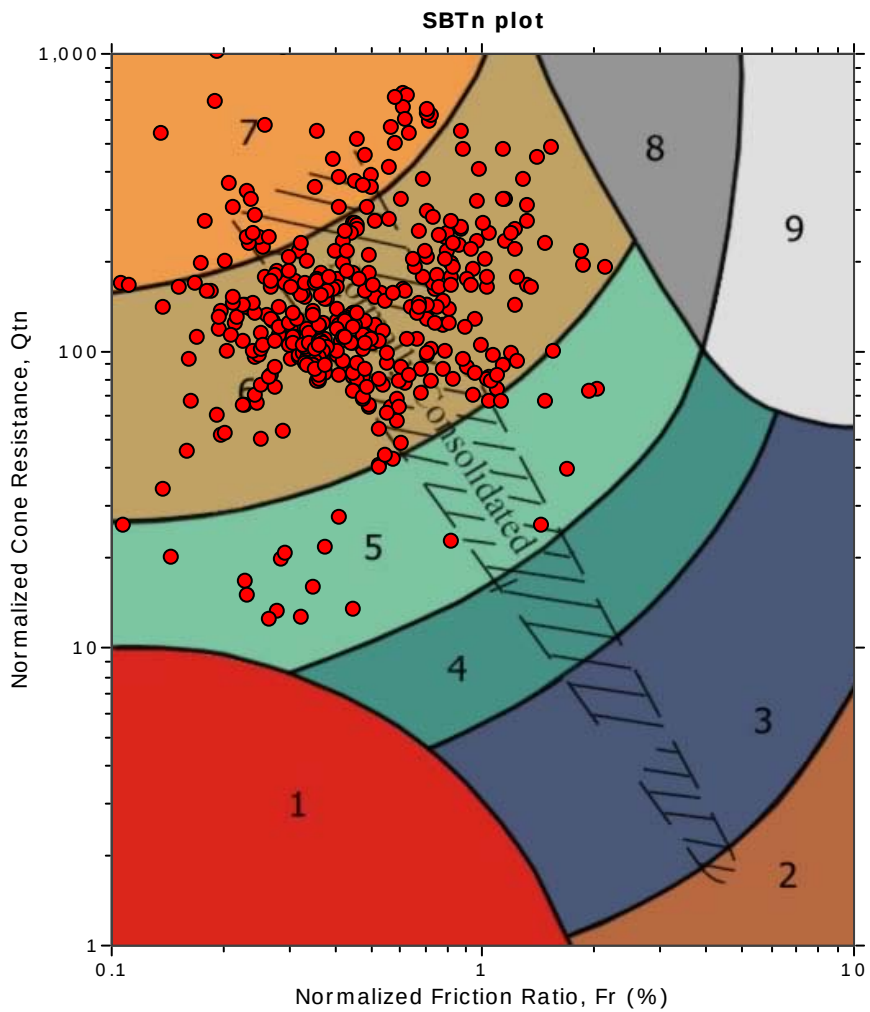
SBTn legend

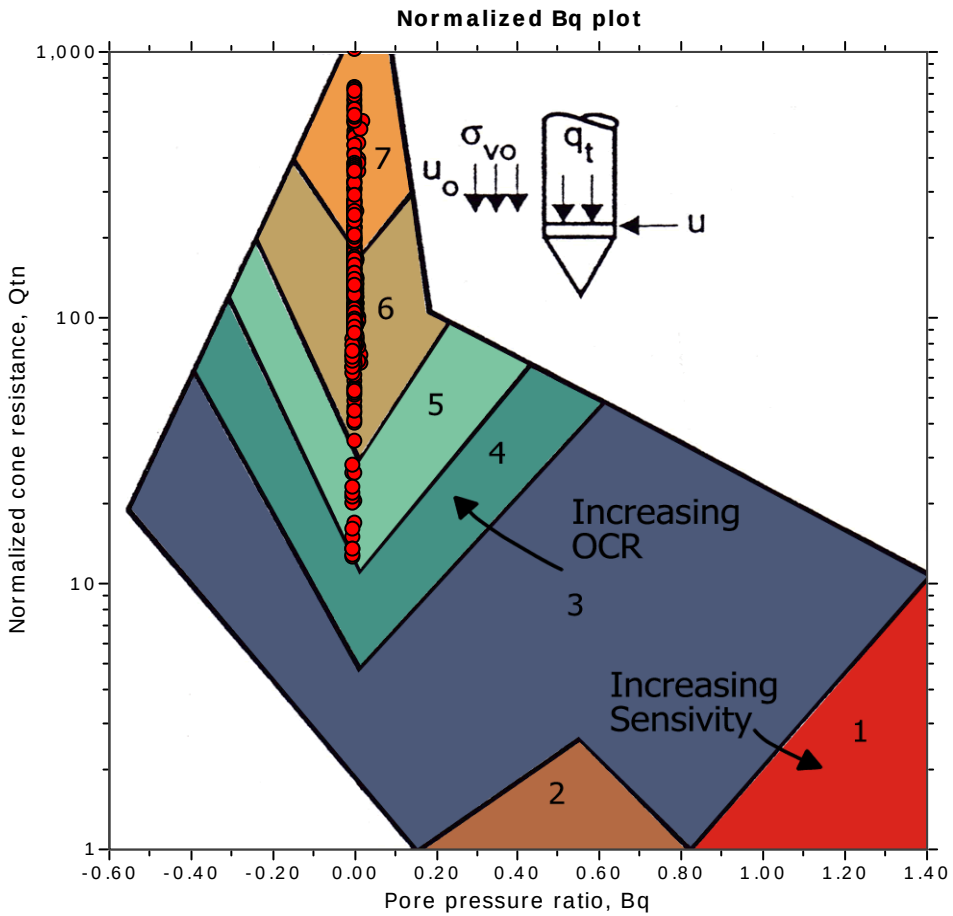
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0033CPT
Total depth: 75.13 ft
Surface Elevation: 290.53 ft
Coords: X:6340055.50, Y:2136102.75
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0033CPT

Total depth: 75.13 ft

Surface Elevation: 290.53 ft

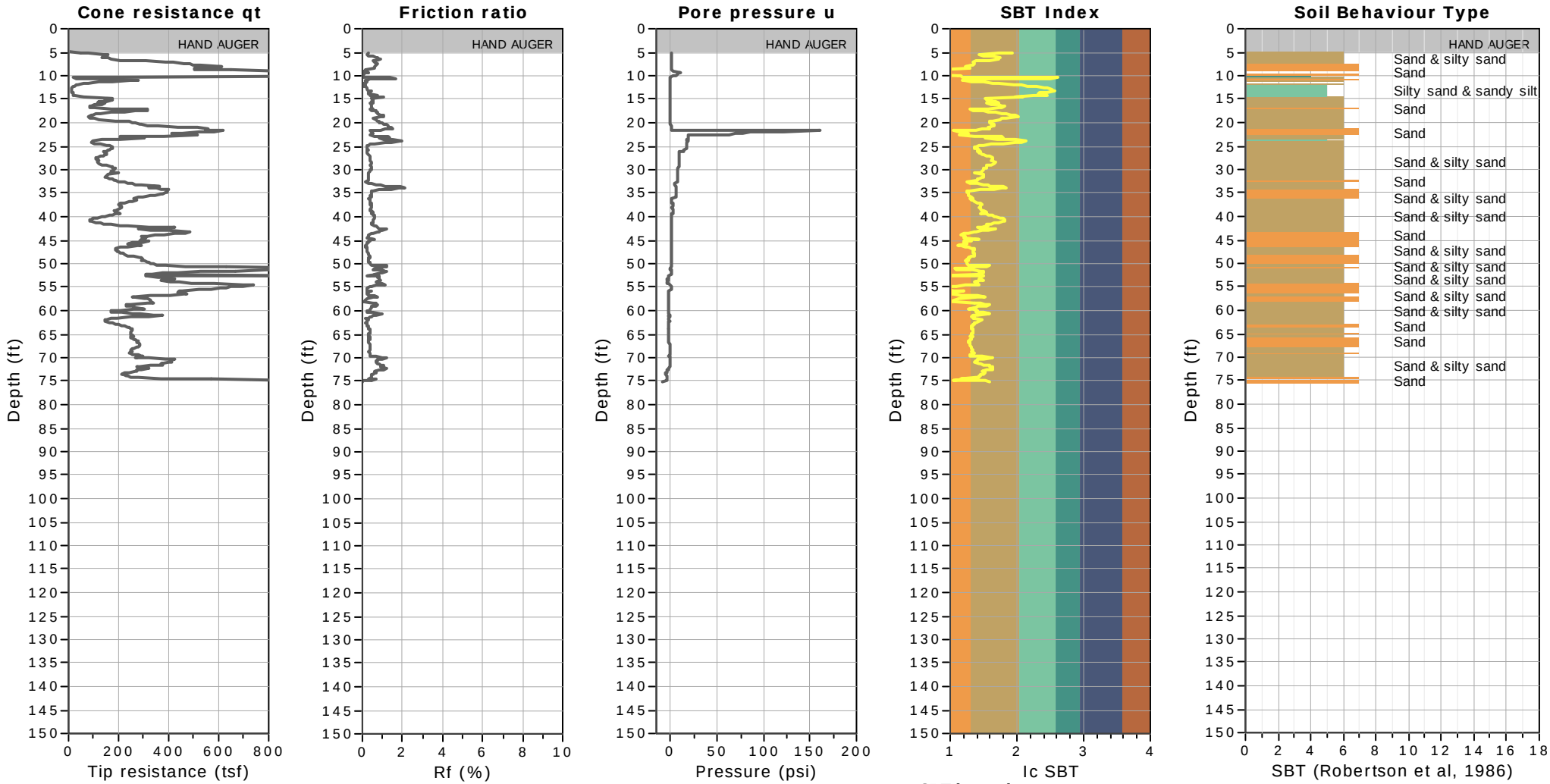
Coords: X:6340055.50, Y:2136102.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0033CPT

Total depth: 75.13 ft

Surface Elevation: 290.53 ft

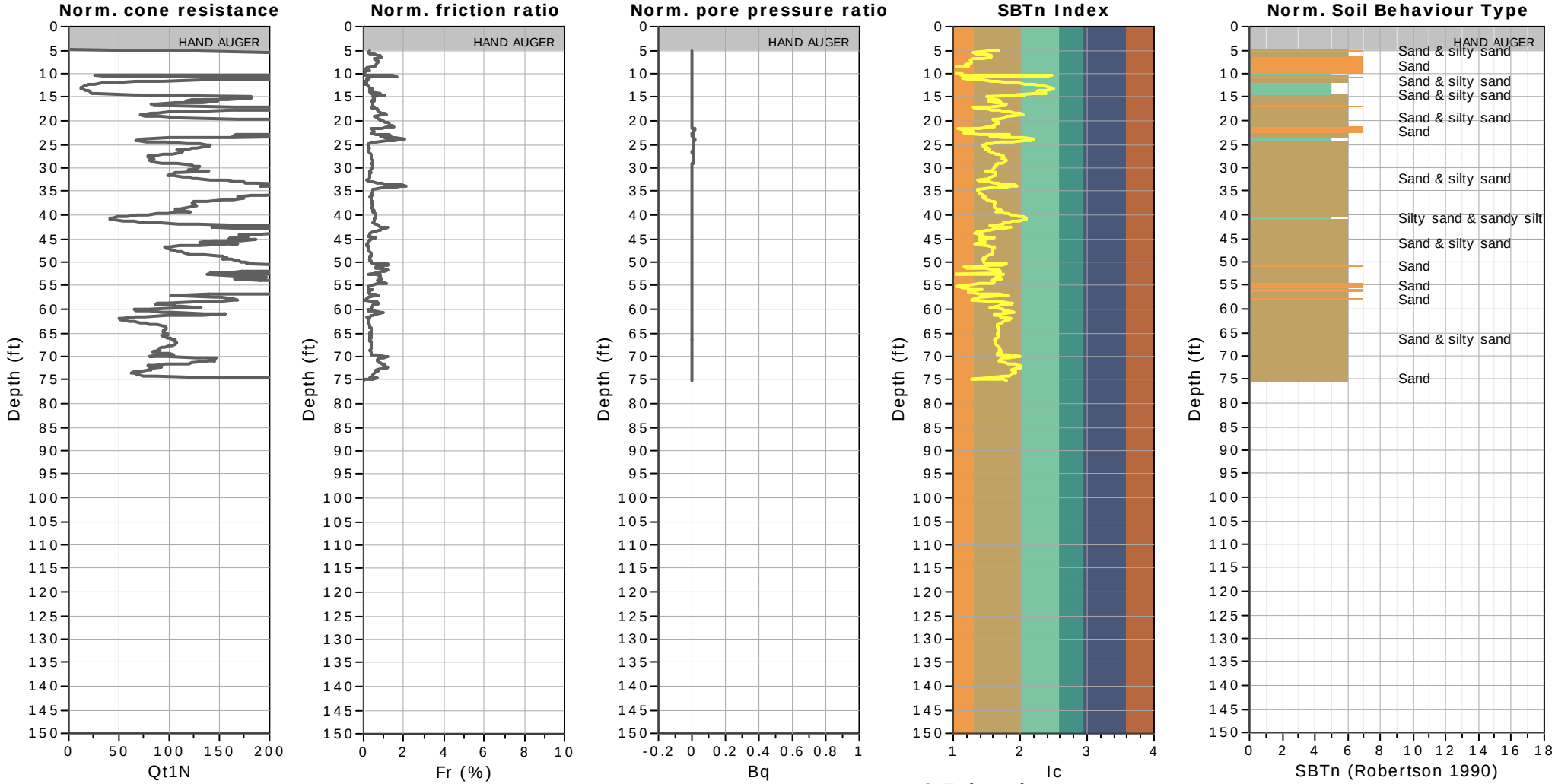
Coords: X:6340055.50, Y:2136102.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



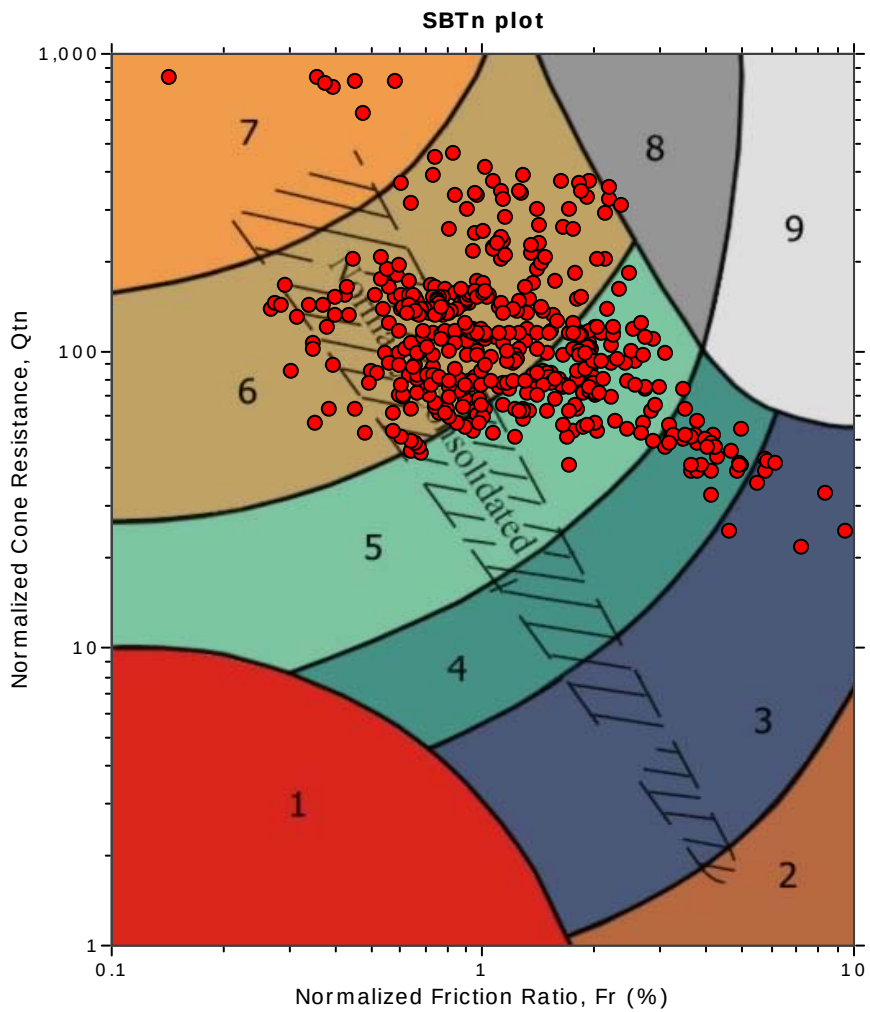
SBTn legend

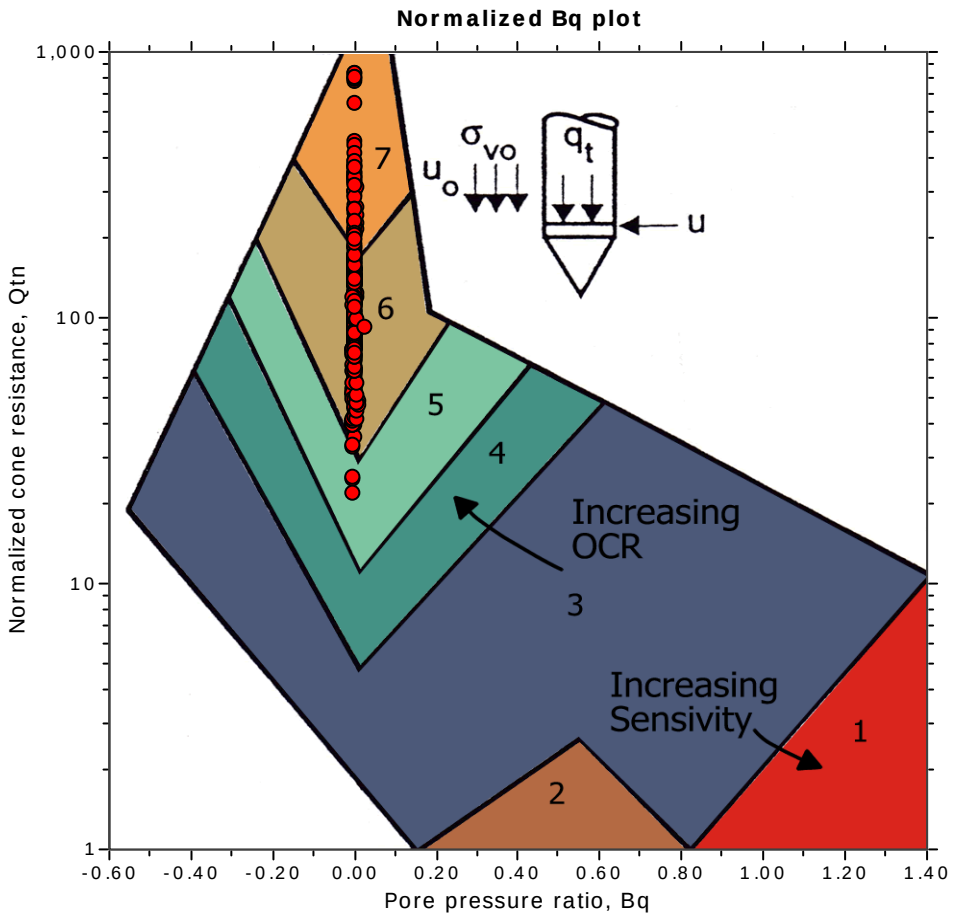
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0034CPT
Total depth: 83.99 ft
Surface Elevation: 297.03 ft
Coords: X:6340437.00, Y:2135354.25
Cone Type: GDC-24
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0034CPT

Total depth: 83.99 ft

Surface Elevation: 297.03 ft

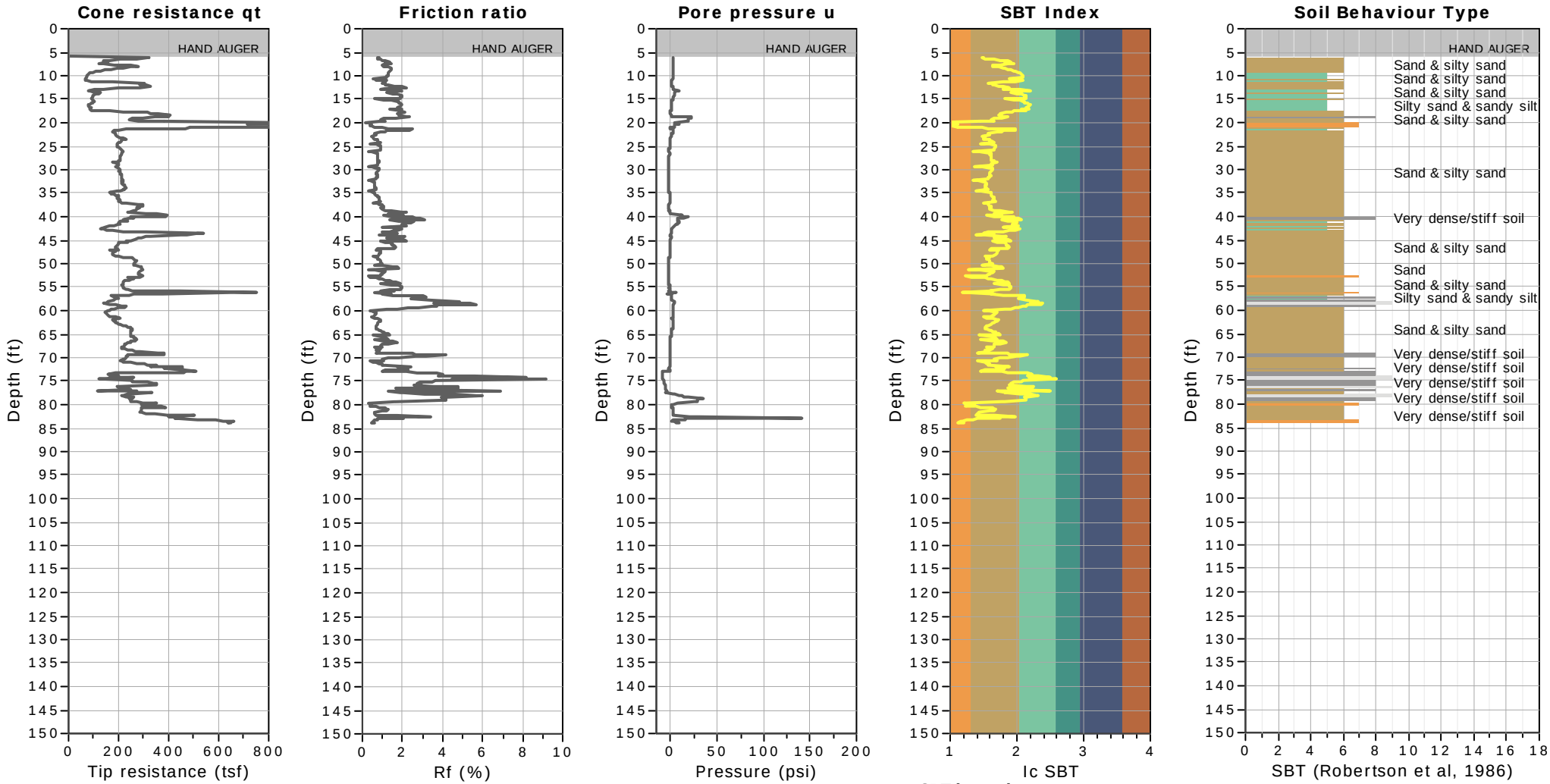
Coords: X:6340437.00, Y:2135354.25

Cone Type: GDC-24

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0034CPT

Total depth: 83.99 ft

Surface Elevation: 297.03 ft

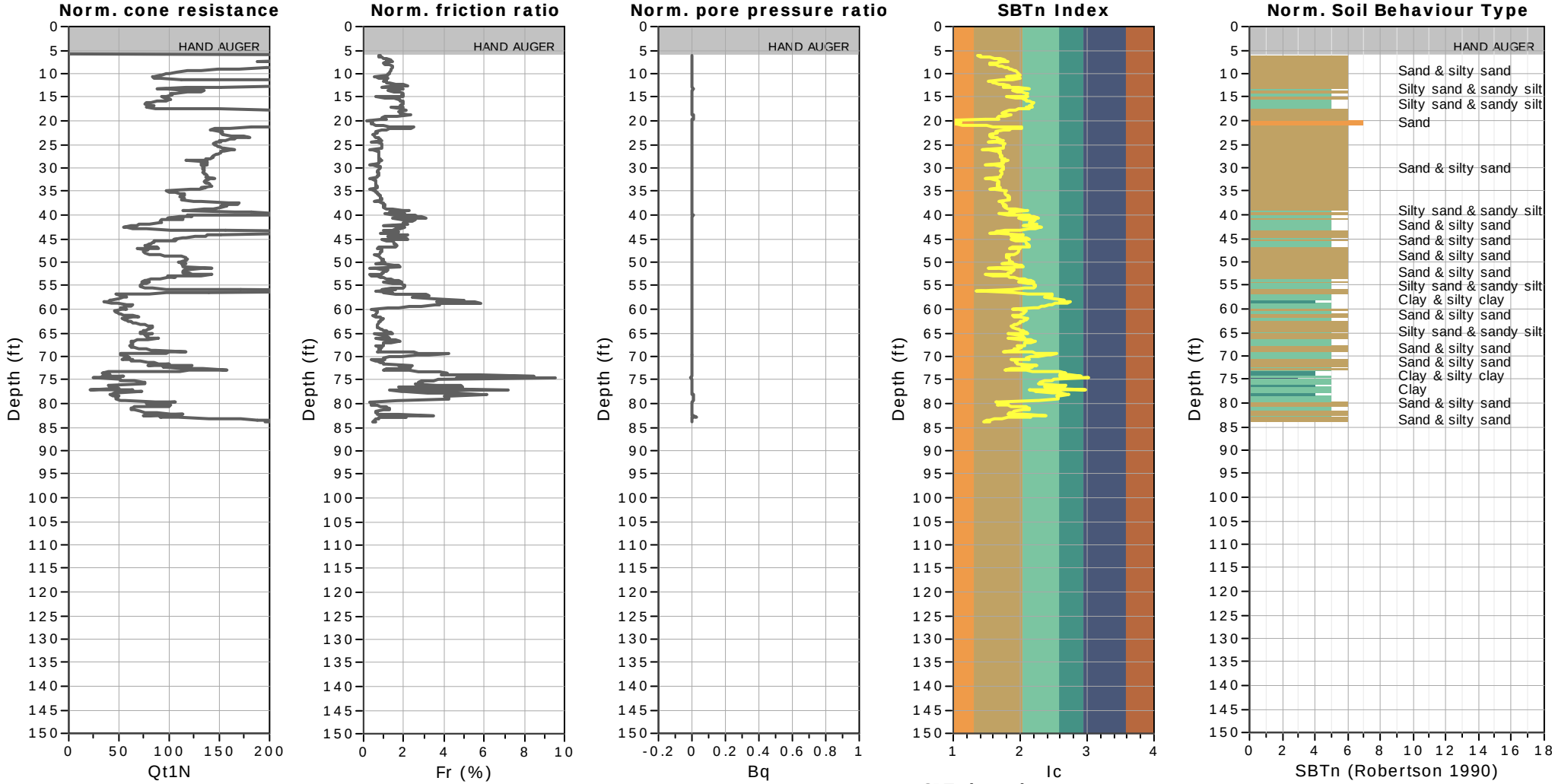
Coords: X:6340437.00, Y:2135354.25

Cone Type: GDC-24

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA

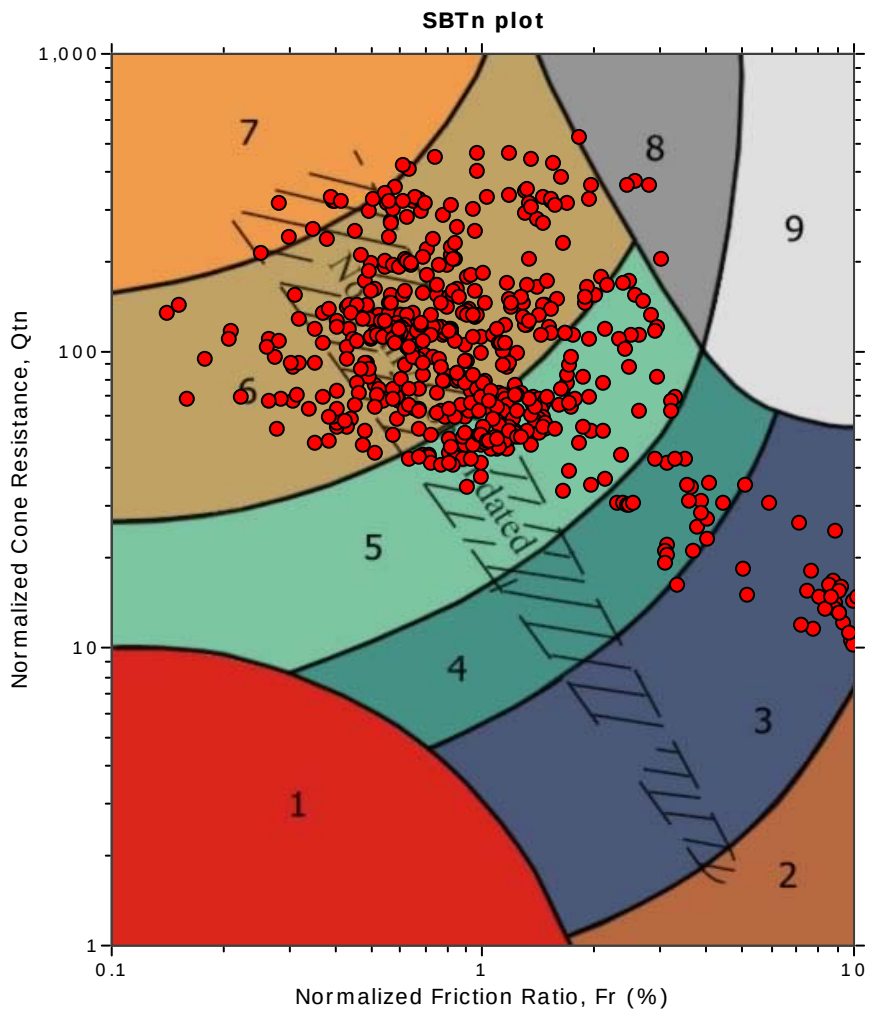


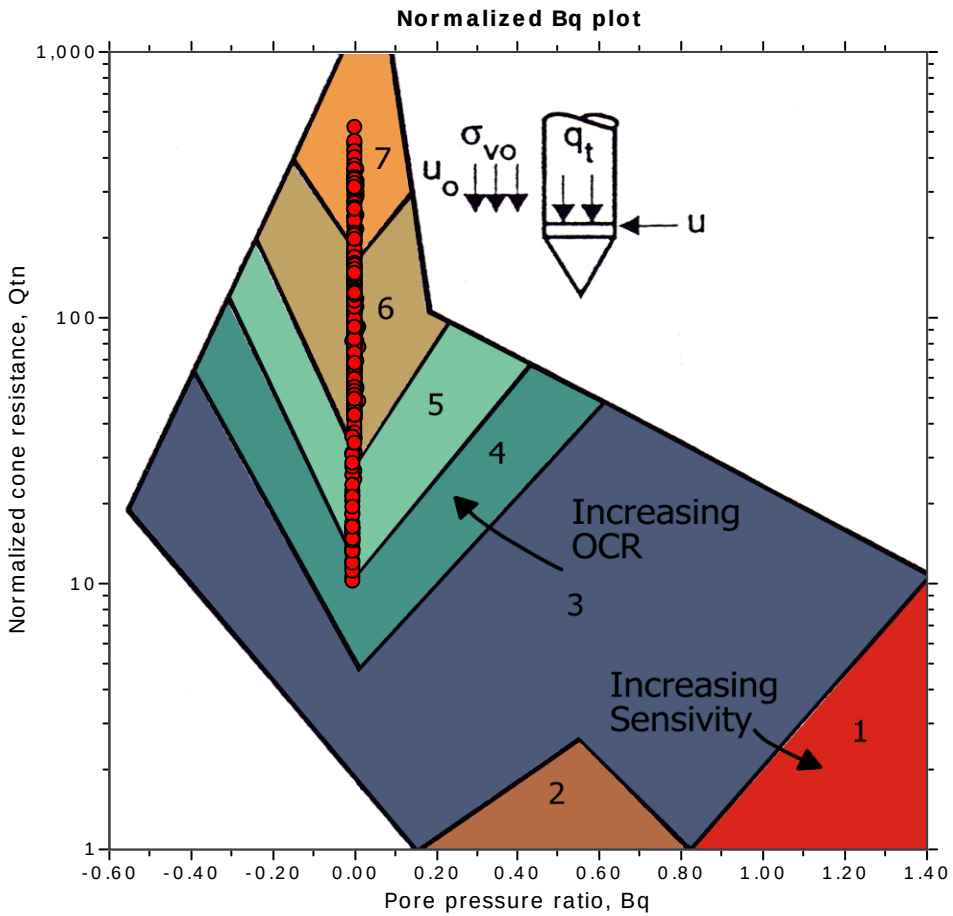
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





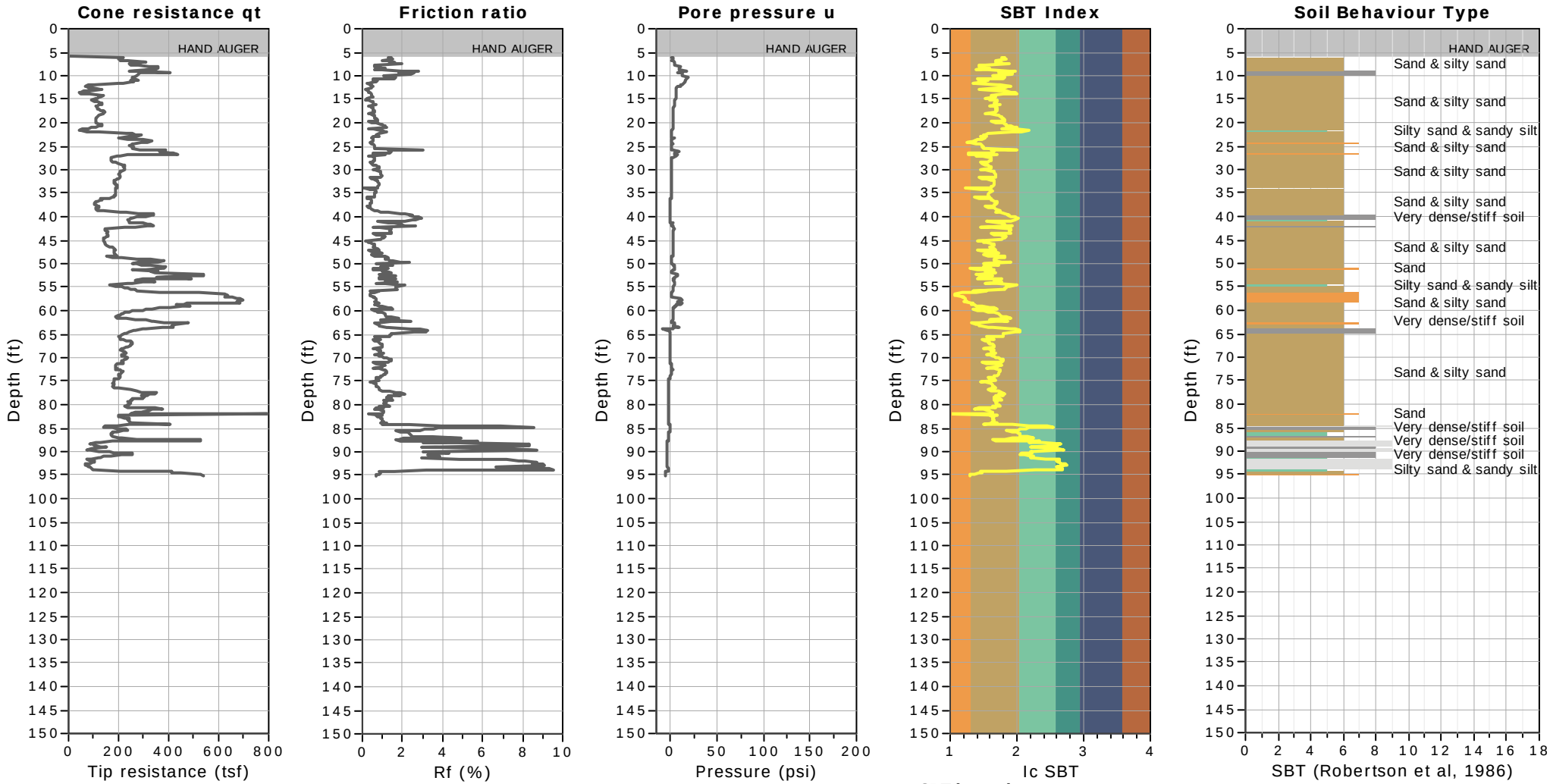
SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0034ACPT

Total depth: 95.14 ft
Surface Elevation: 303.67 ft
Coords: X:6340365.00, Y:2134383.25
Cone Type: GDC-24
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0034ACPT

Total depth: 95.14 ft

Surface Elevation: 303.67 ft

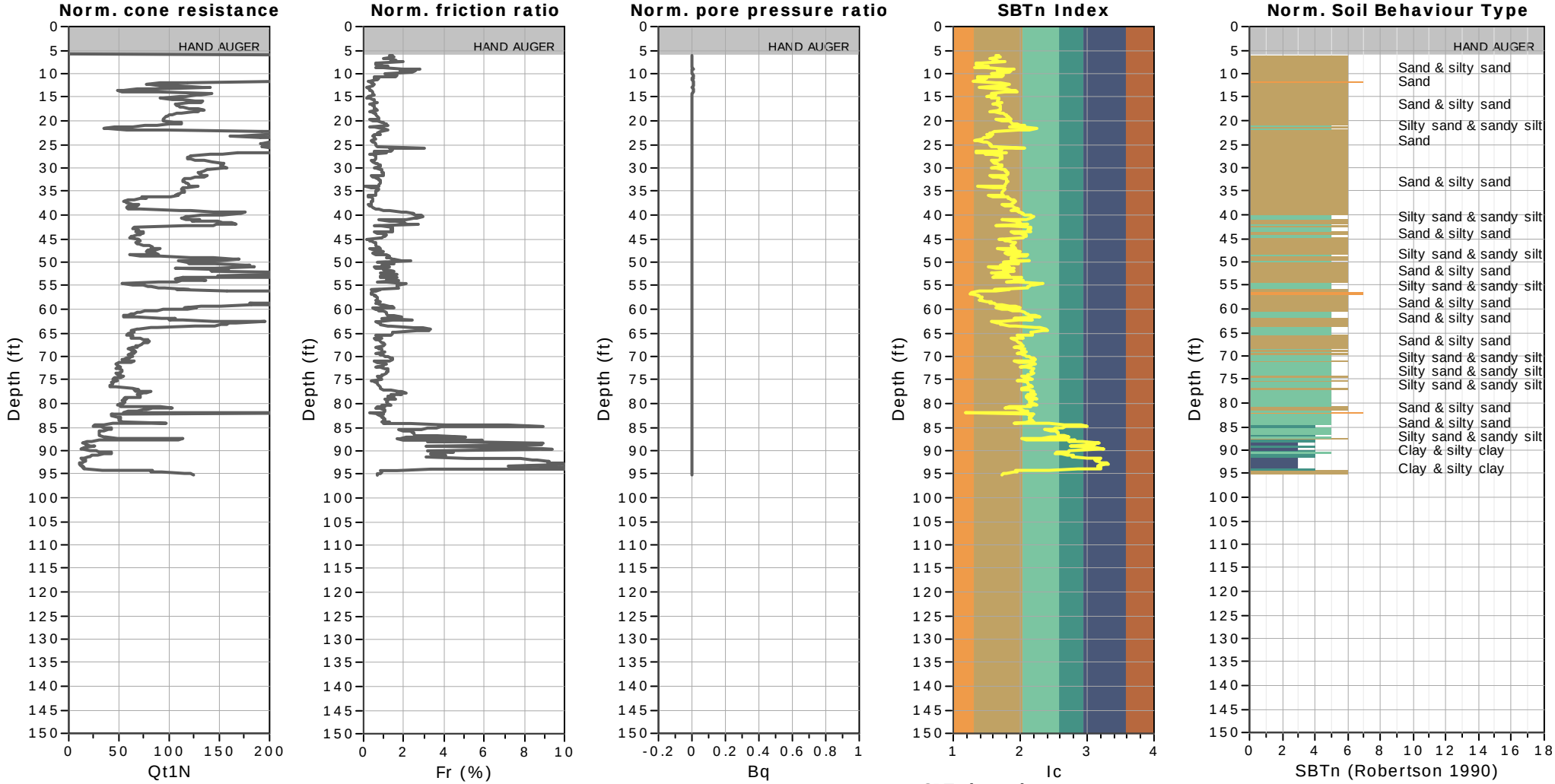
Coords: X:6340365.00, Y:2134383.25

Cone Type: GDC-24

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



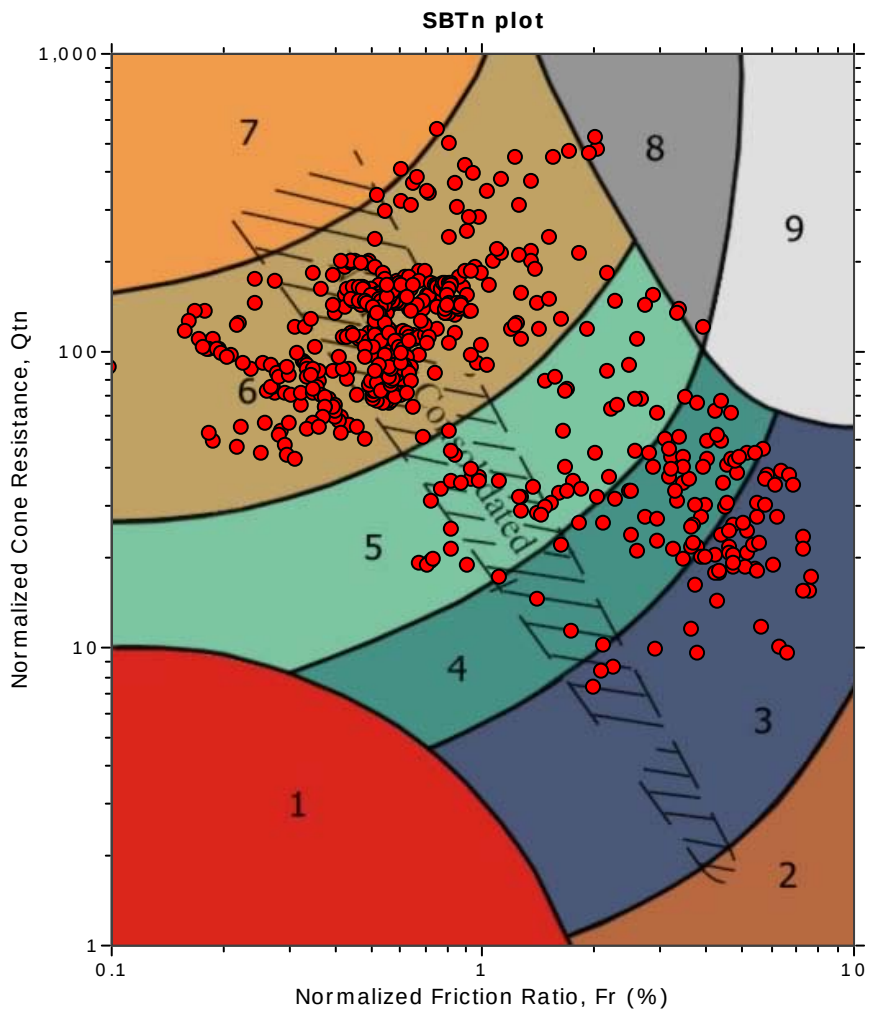
SBTn legend

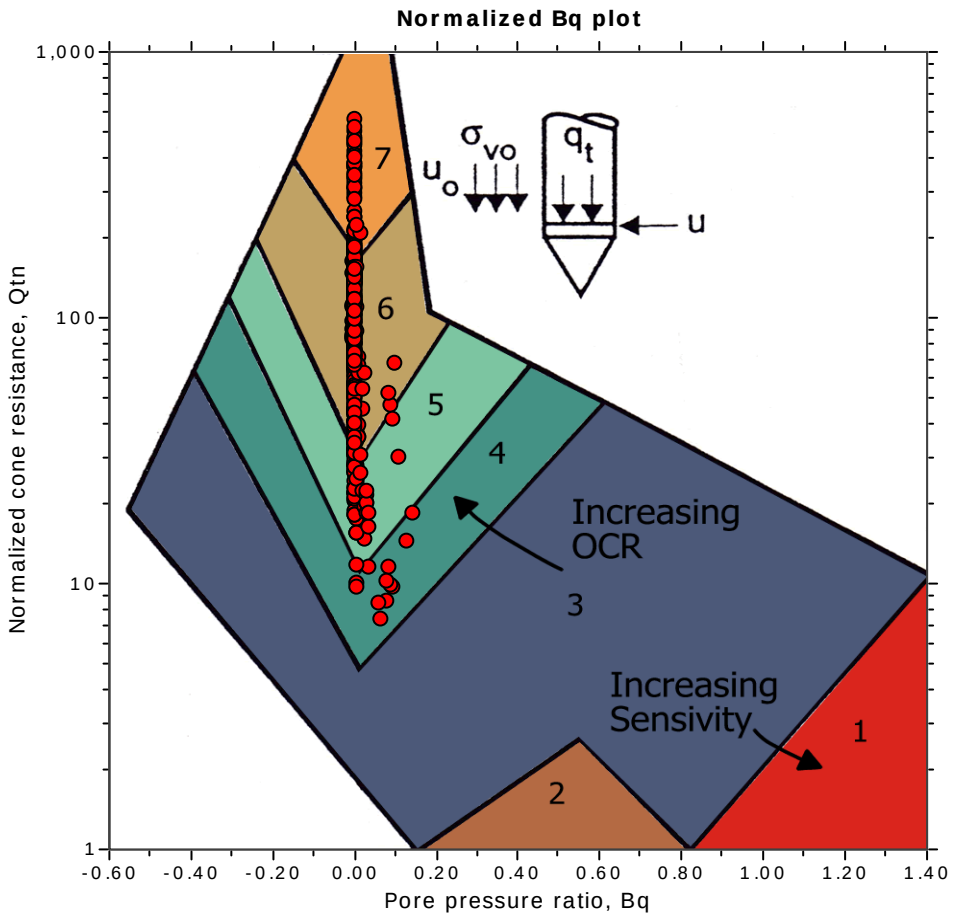
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0035CPT
Total depth: 100.23 ft
Surface Elevation: 289.15 ft
Coords: X:6340899.50, Y:2133420.25
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0035CPT

Total depth: 100.23 ft

Surface Elevation: 289.15 ft

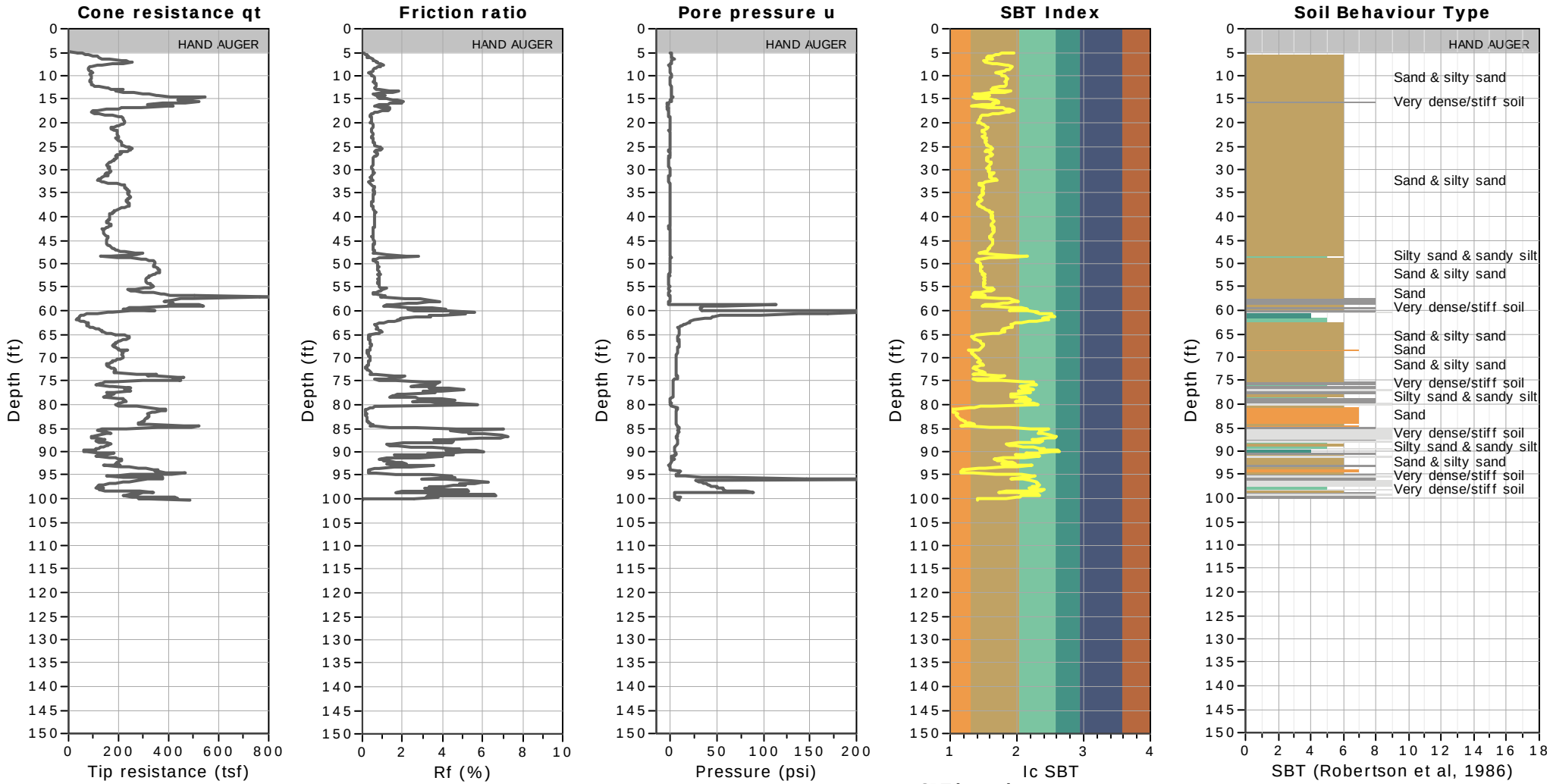
Coords: X:6340899.50, Y:2133420.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0035CPT

Total depth: 100.23 ft

Surface Elevation: 289.15 ft

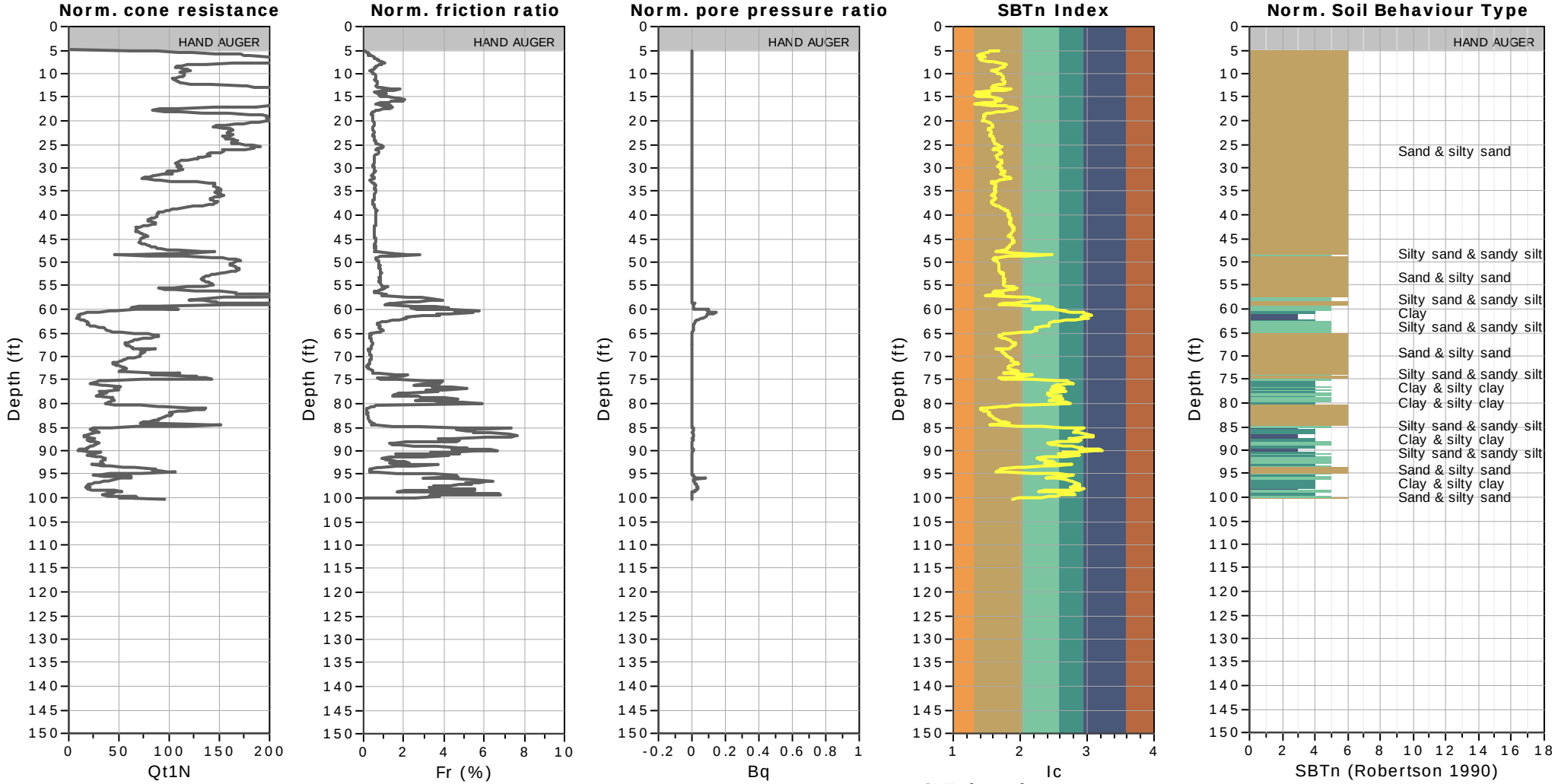
Coords: X:6340899.50, Y:2133420.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBTn legend

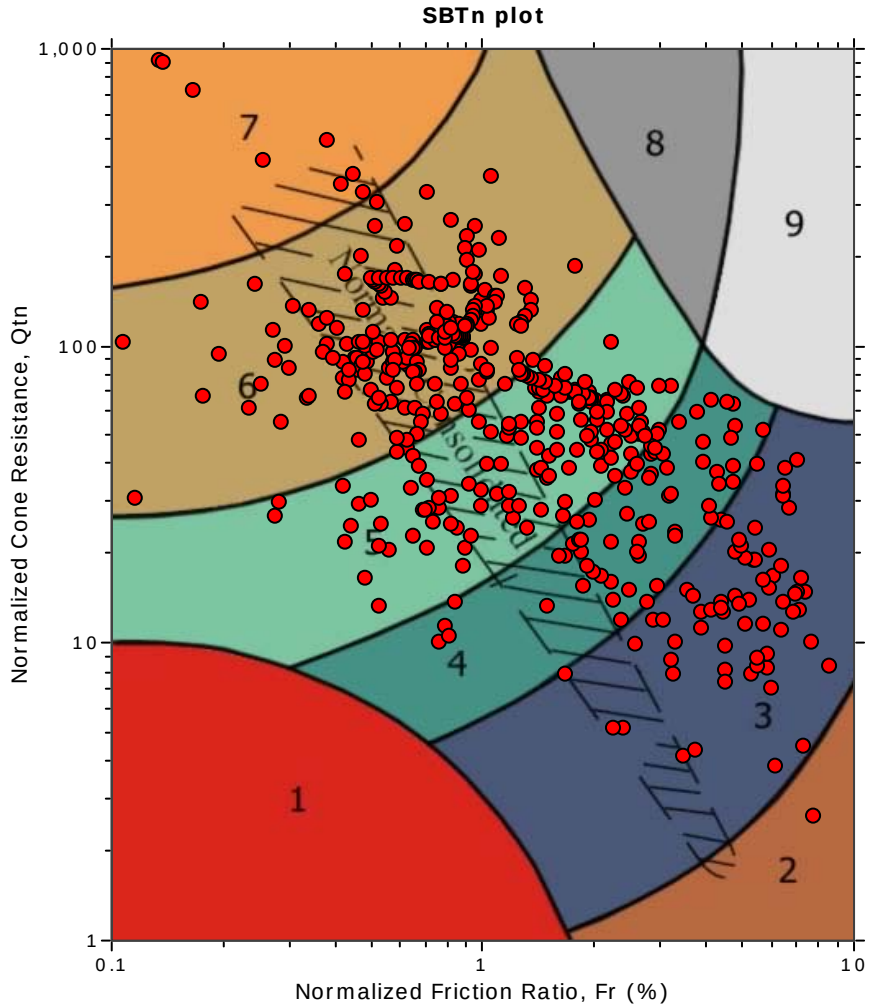
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

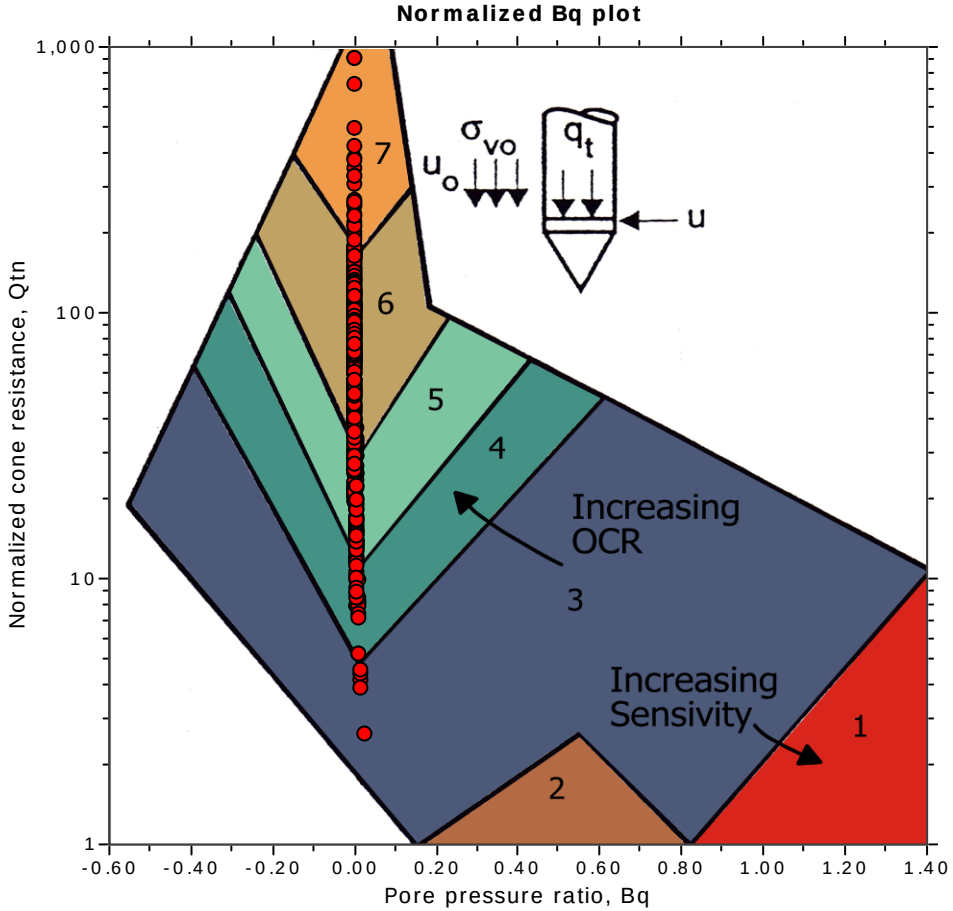
CPT: S0036CPT

Total depth: 100.23 ft
Surface Elevation: 288.02 ft
Coords: X:6340355.00, Y:2132620.75
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0036CPT

Total depth: 100.23 ft

Surface Elevation: 288.02 ft

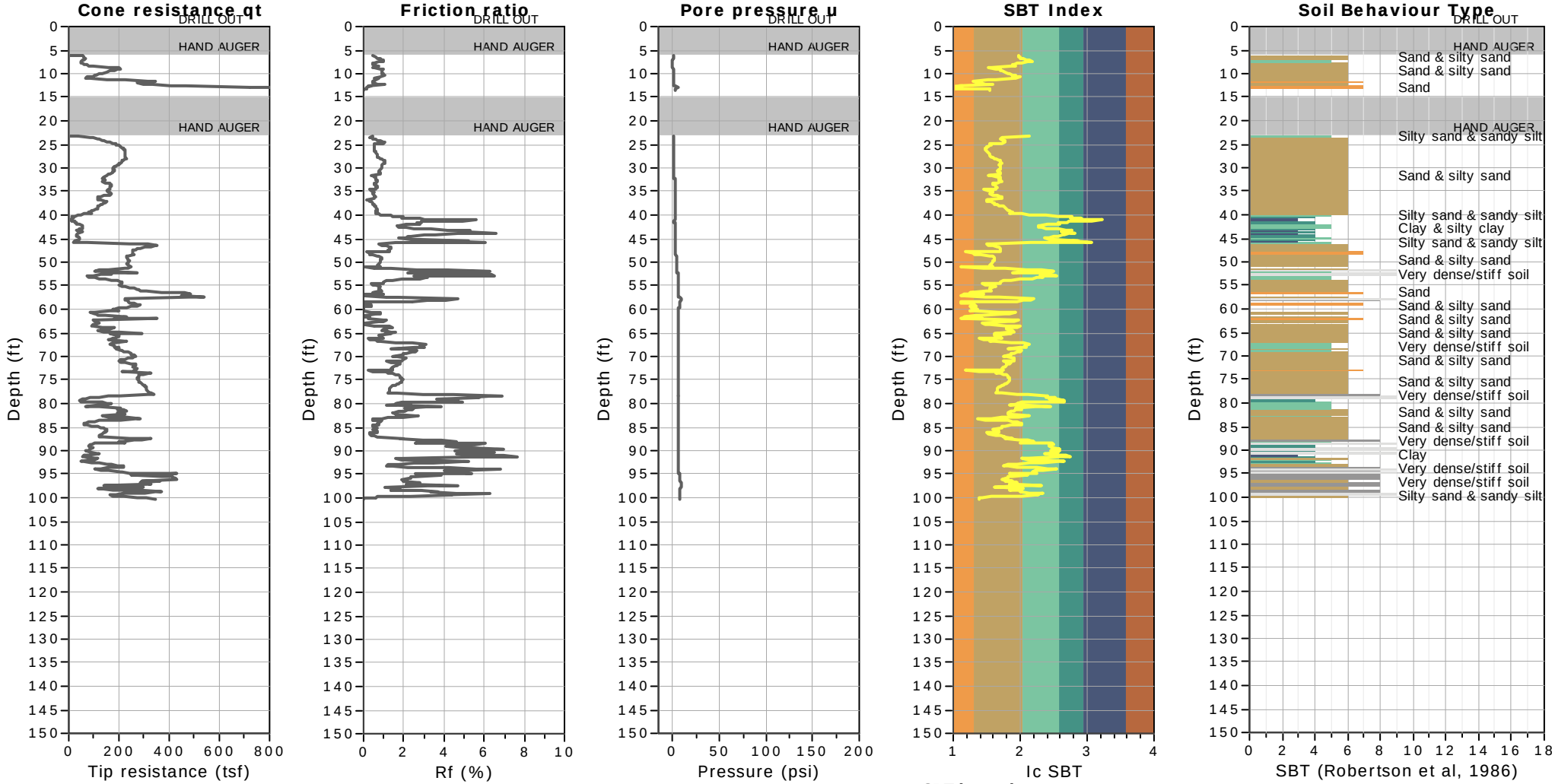
Coords: X:6340355.00, Y:2132620.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0036CPT

Total depth: 100.23 ft

Surface Elevation: 288.02 ft

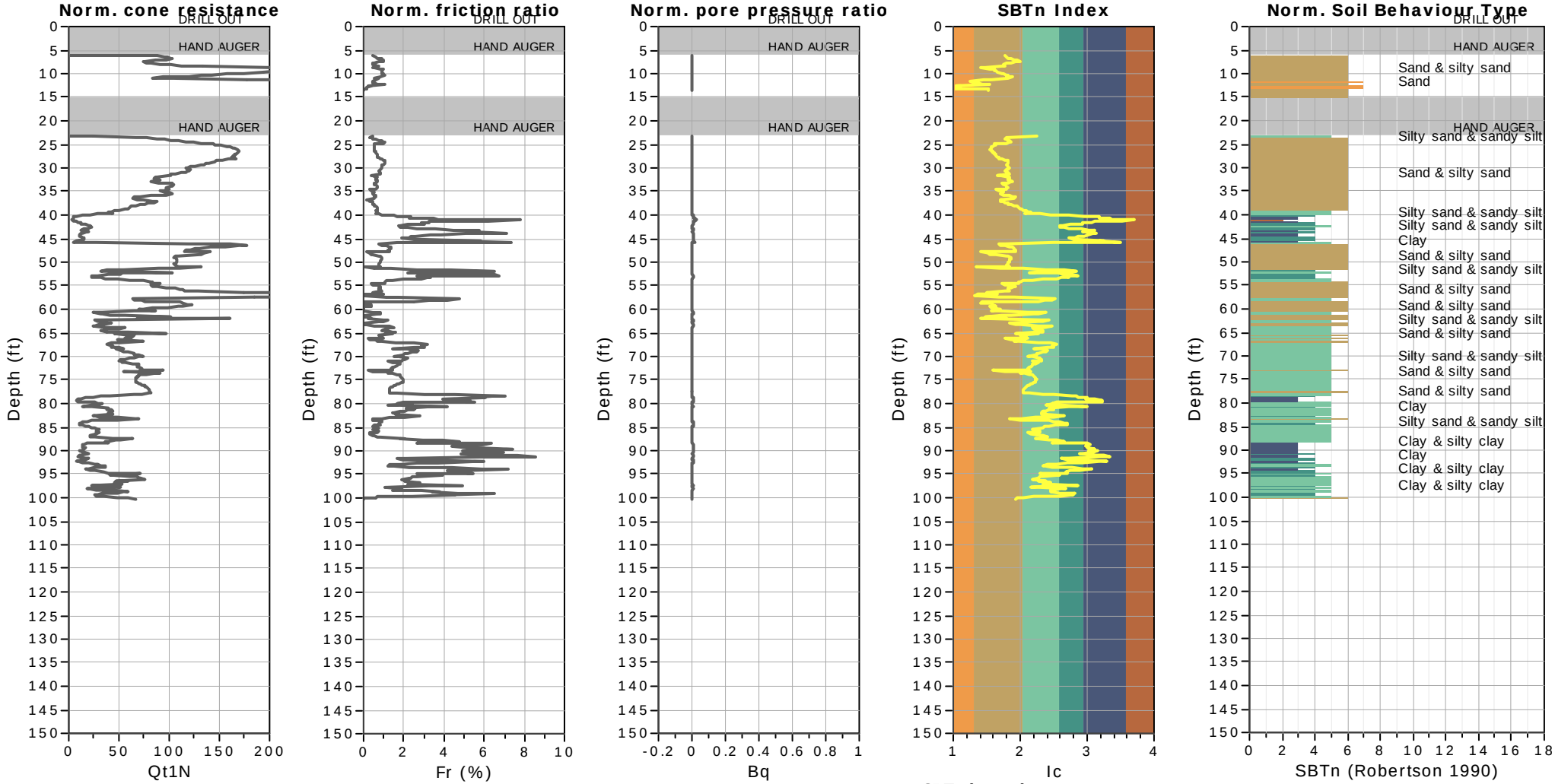
Coords: X:6340355.00, Y:2132620.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



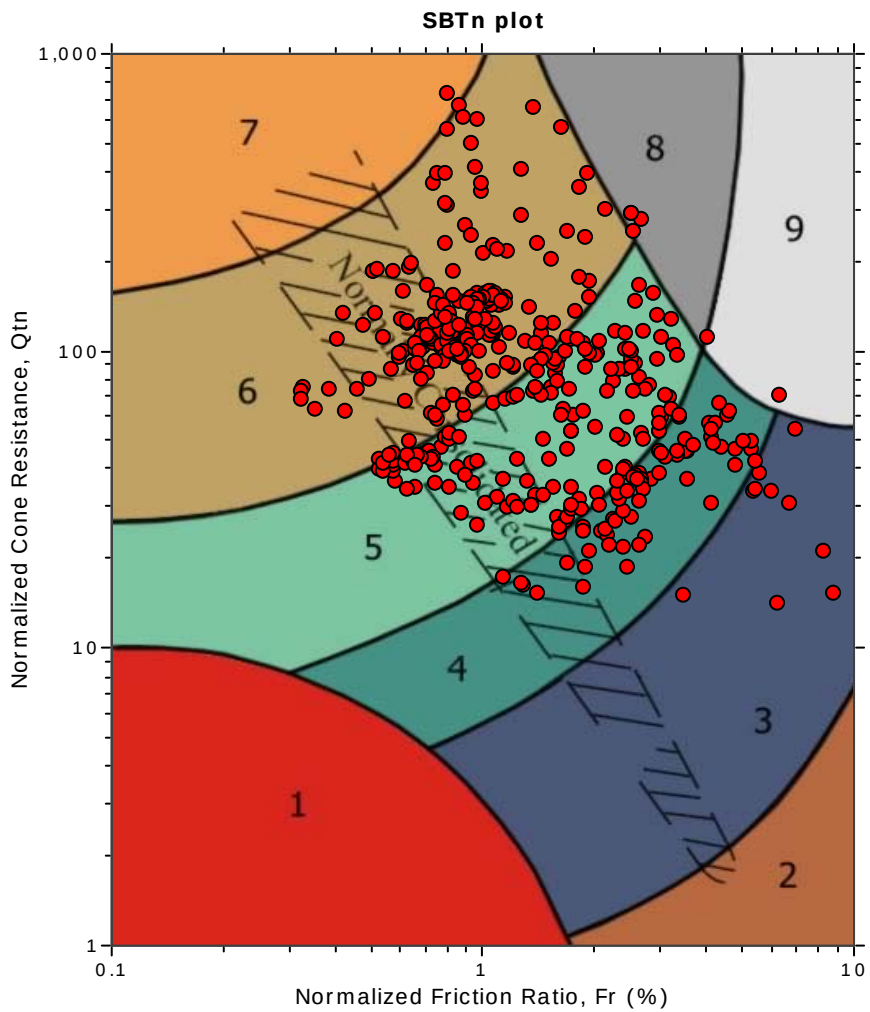
SBTn legend

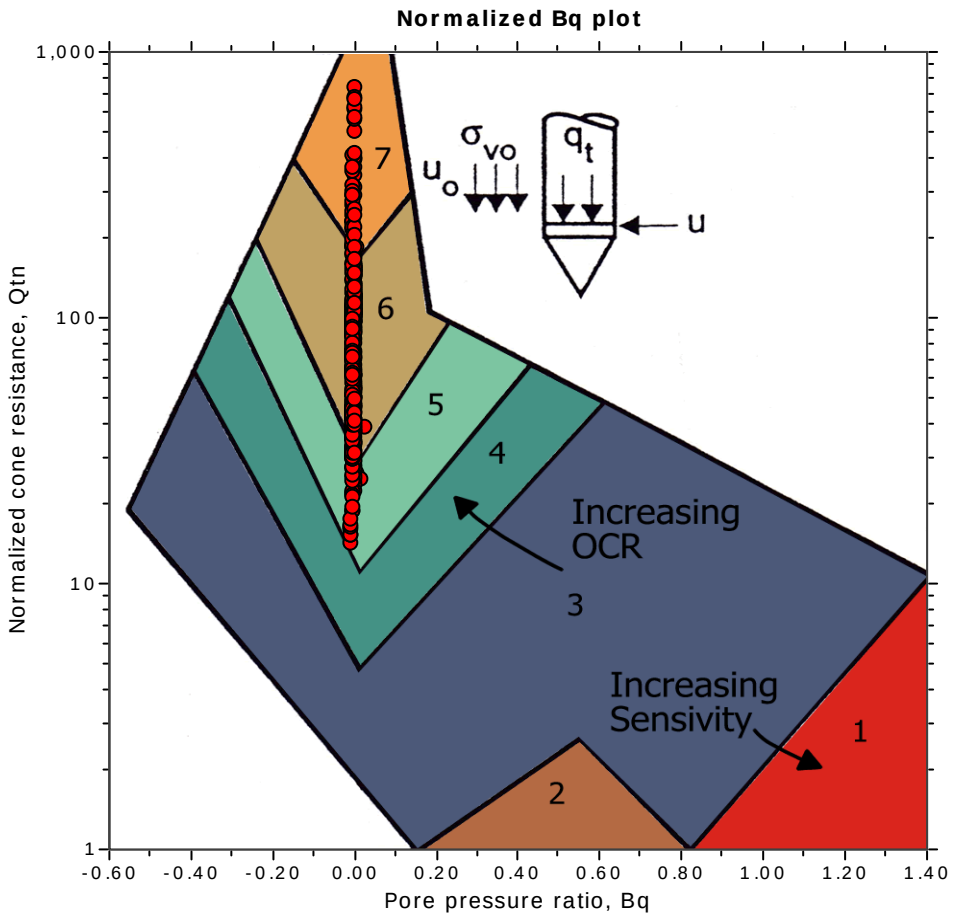
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0037CPT
Total depth: 80.05 ft
Surface Elevation: 289.27 ft
Coords: X:6341444.00, Y:2130805.75
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0037CPT

Total depth: 80.05 ft

Surface Elevation: 289.27 ft

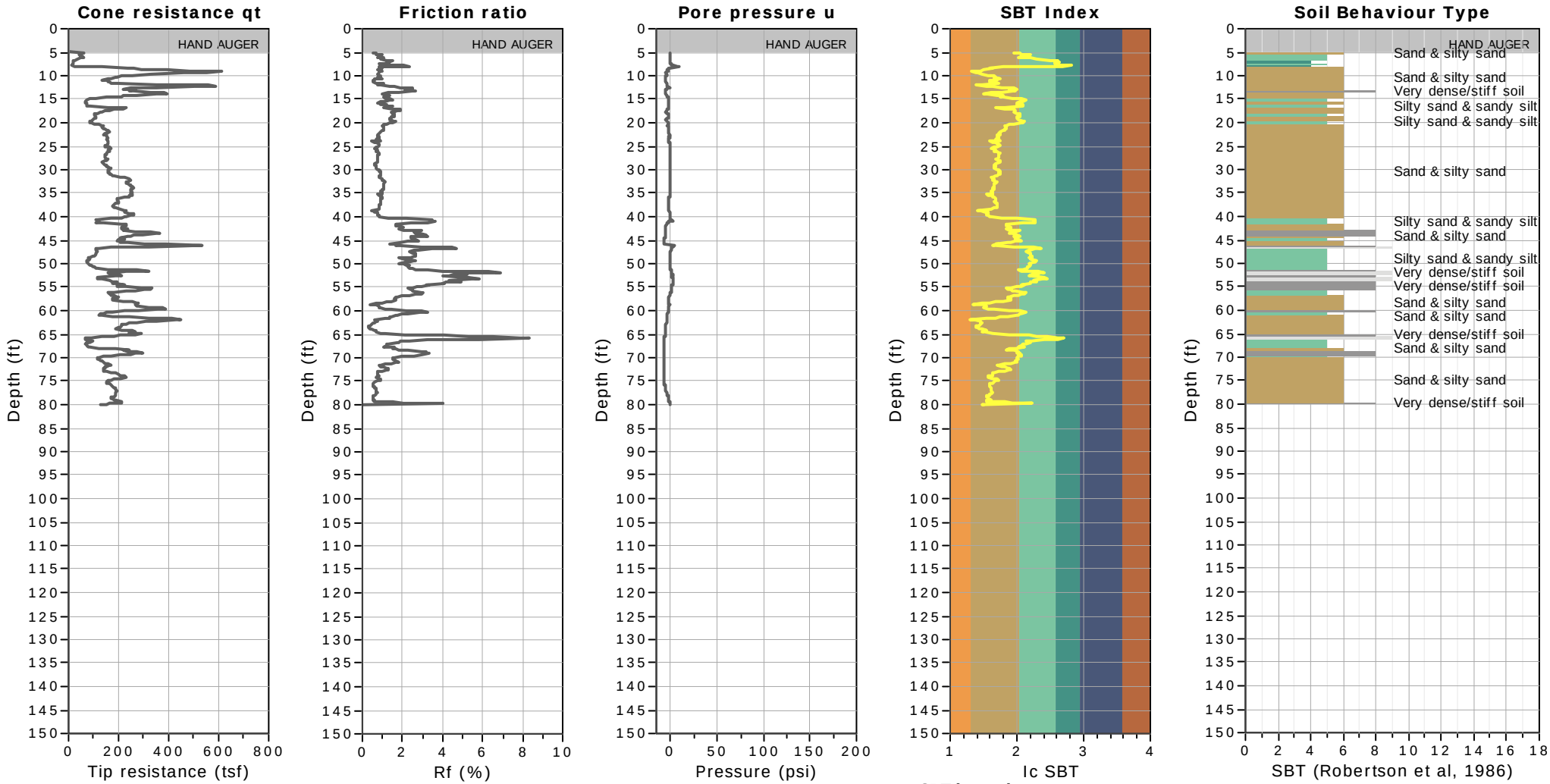
Coords: X:6341444.00, Y:2130805.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0037CPT

Total depth: 80.05 ft

Surface Elevation: 289.27 ft

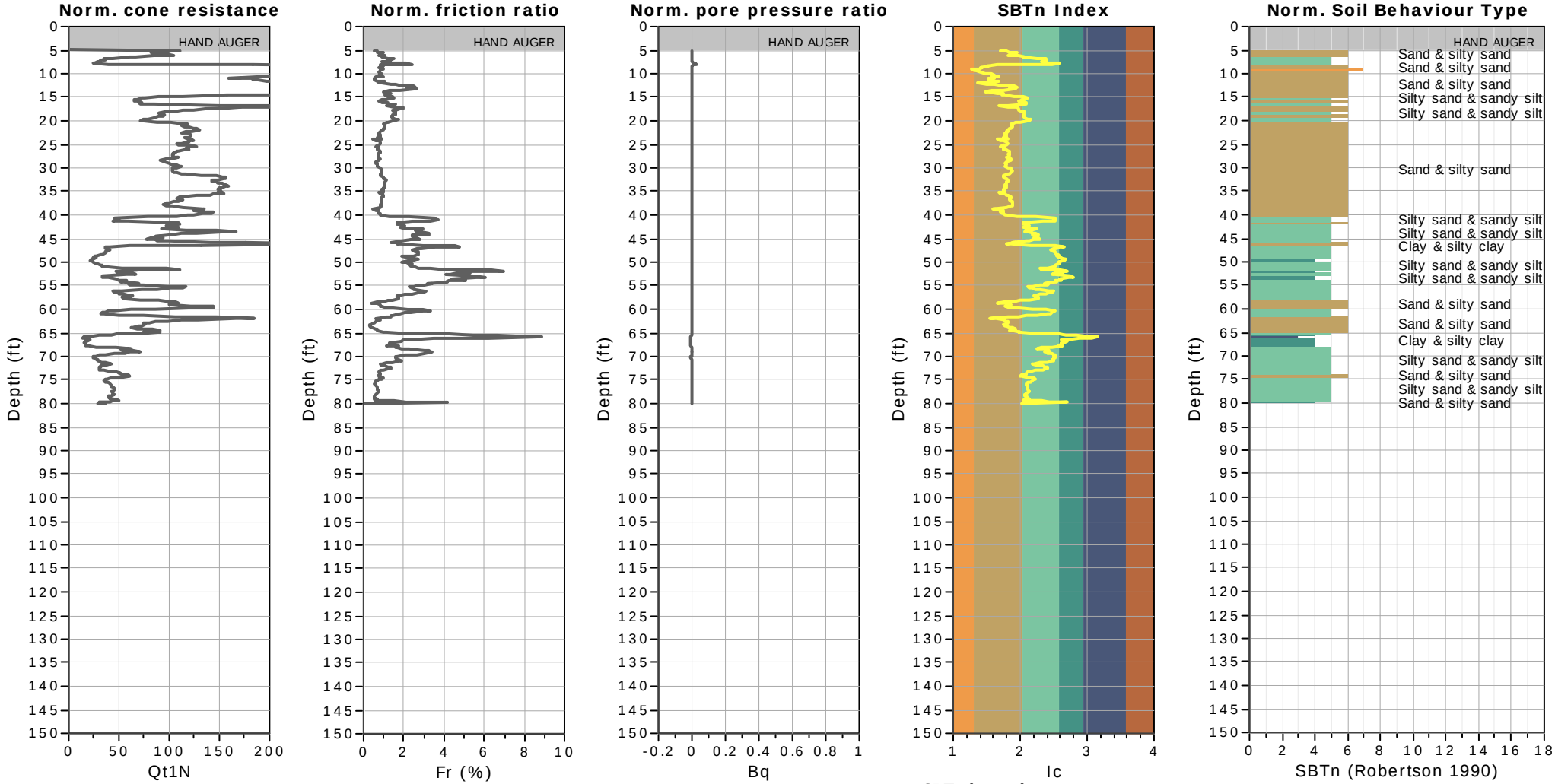
Coords: X:6341444.00, Y:2130805.75

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



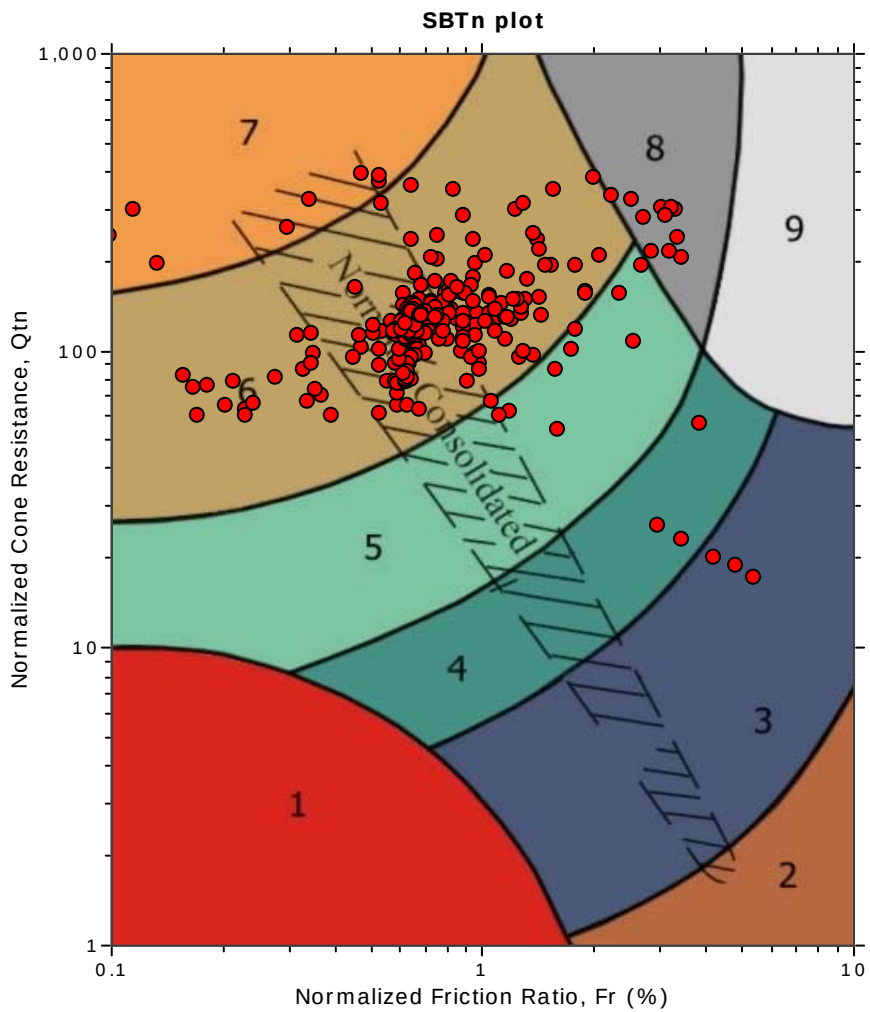
SBTn legend

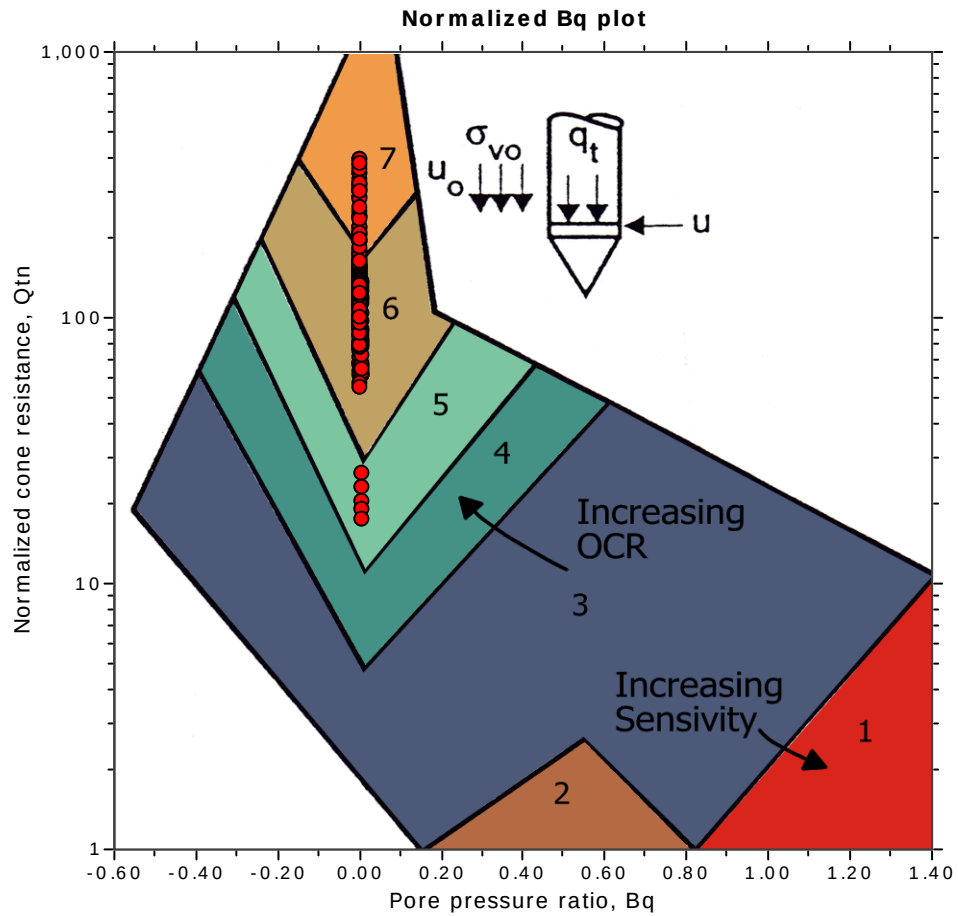
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0038CPT
Total depth: 50.20 ft
Surface Elevation: 287.29 ft
Coords: X:6340323.50, Y:2129825.00
Cone Type: GDC-51
Cone Operator: A.Sancen

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0038CPT

Total depth: 50.20 ft

Surface Elevation: 287.29 ft

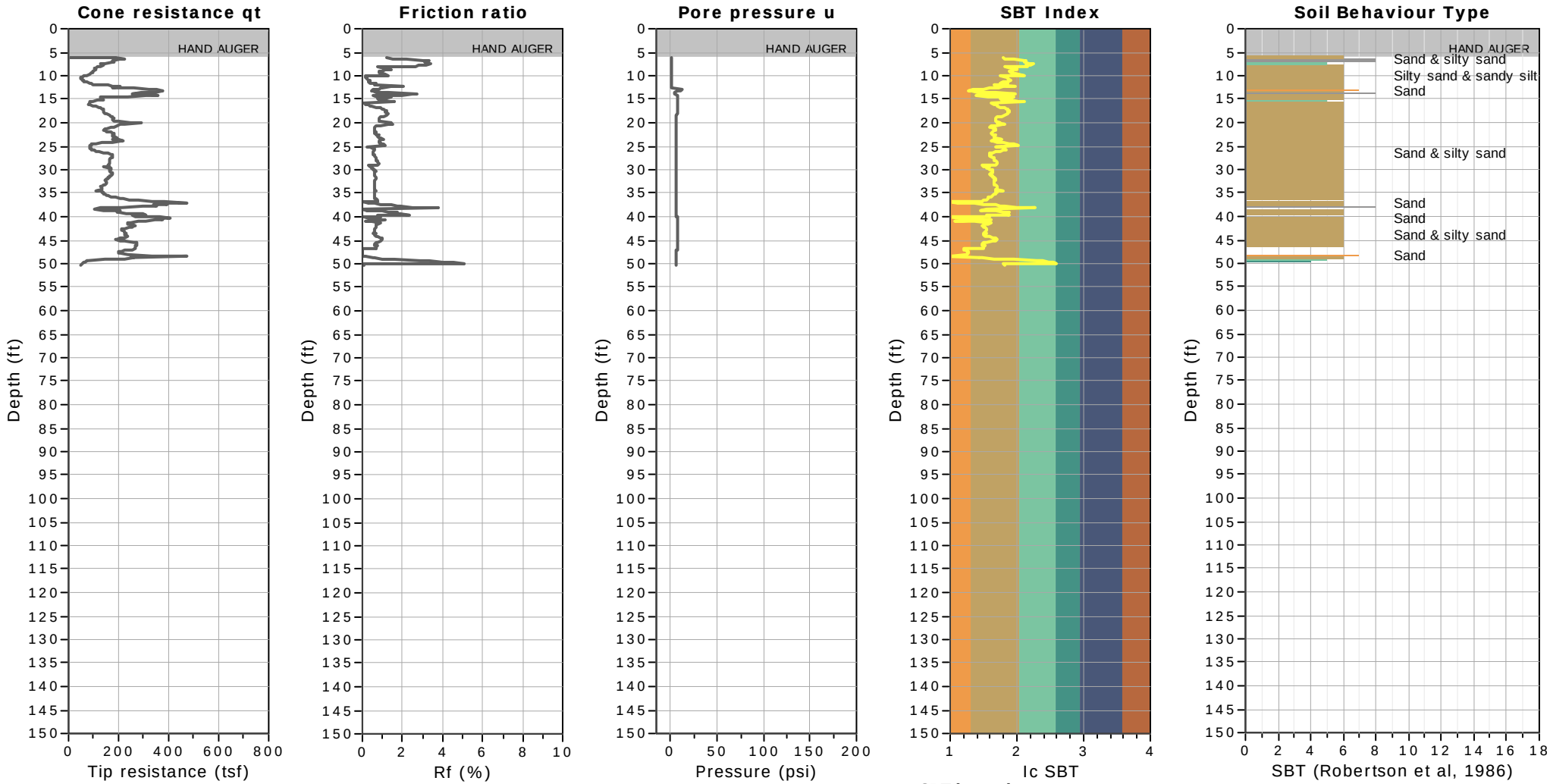
Coords: X:6340323.50, Y:2129825.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0038CPT

Total depth: 50.20 ft

Surface Elevation: 287.29 ft

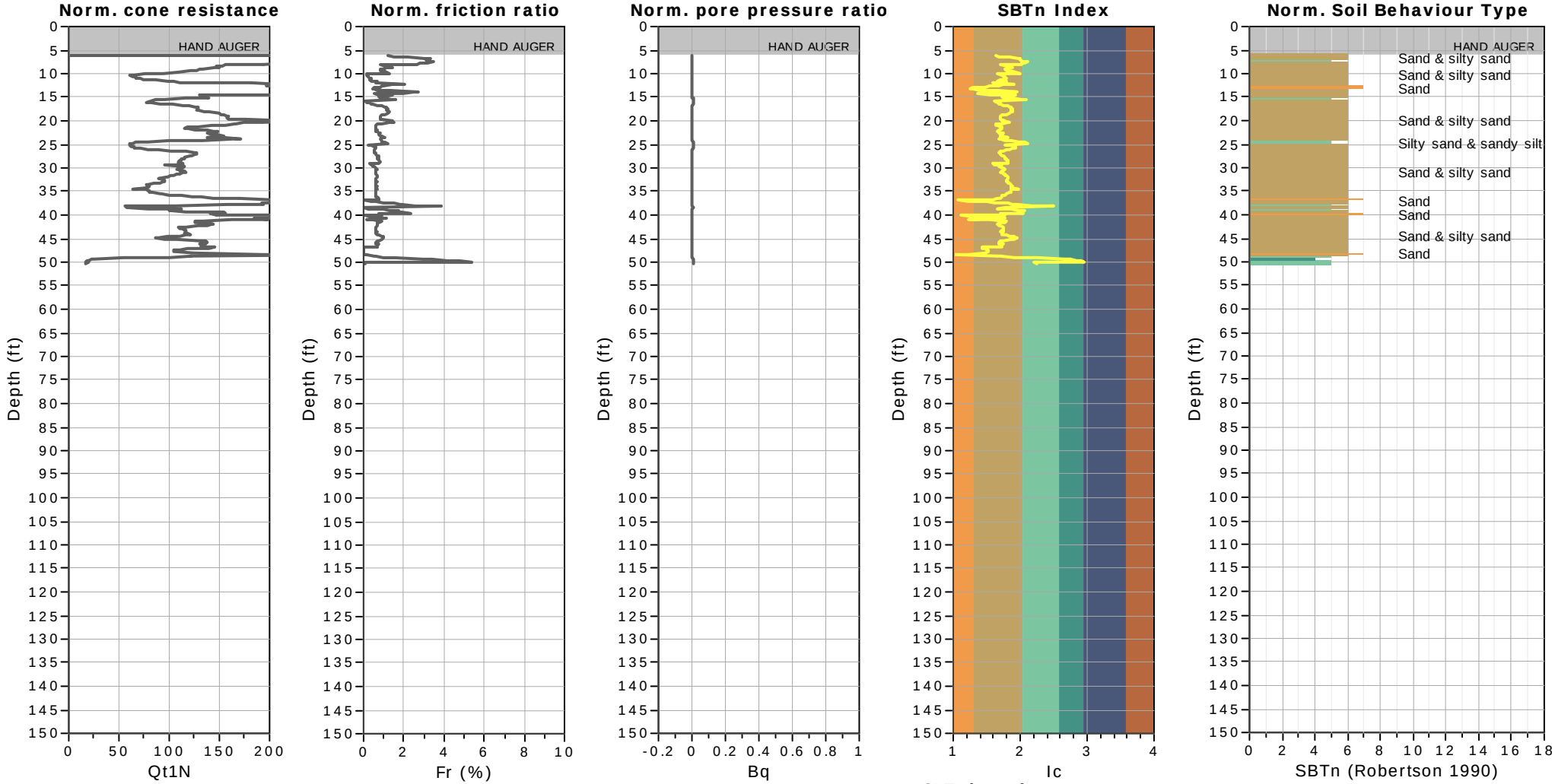
Coords: X:6340323.50, Y:2129825.00

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



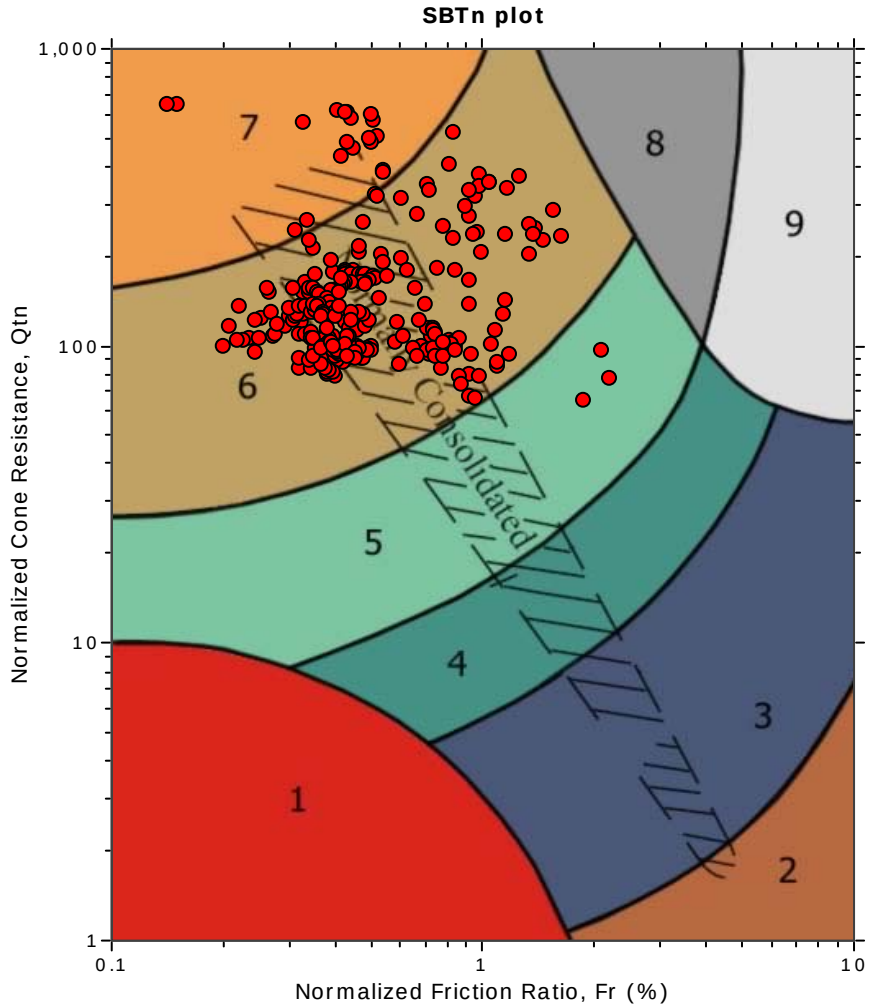
SBTn legend

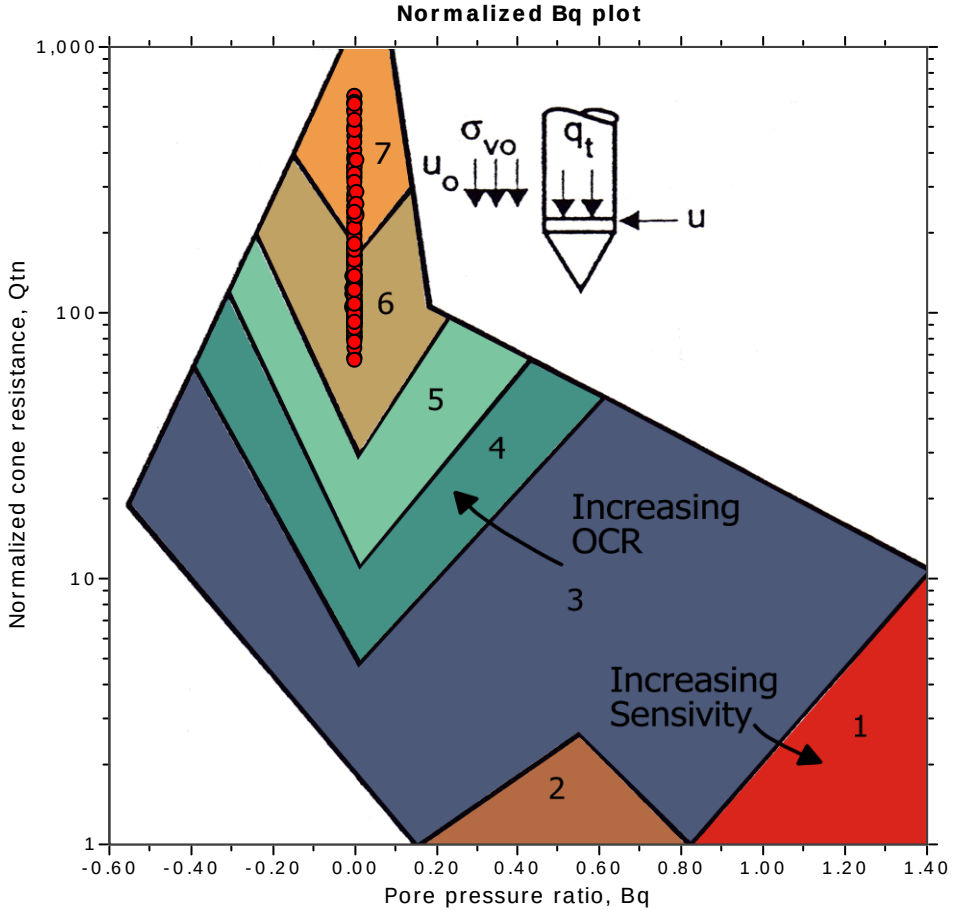
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0039CPT
Total depth: 50.36 ft
Surface Elevation: 290.43 ft
Coords: X:6341850.00, Y:2128141.50
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0039CPT

Total depth: 50.36 ft

Surface Elevation: 290.43 ft

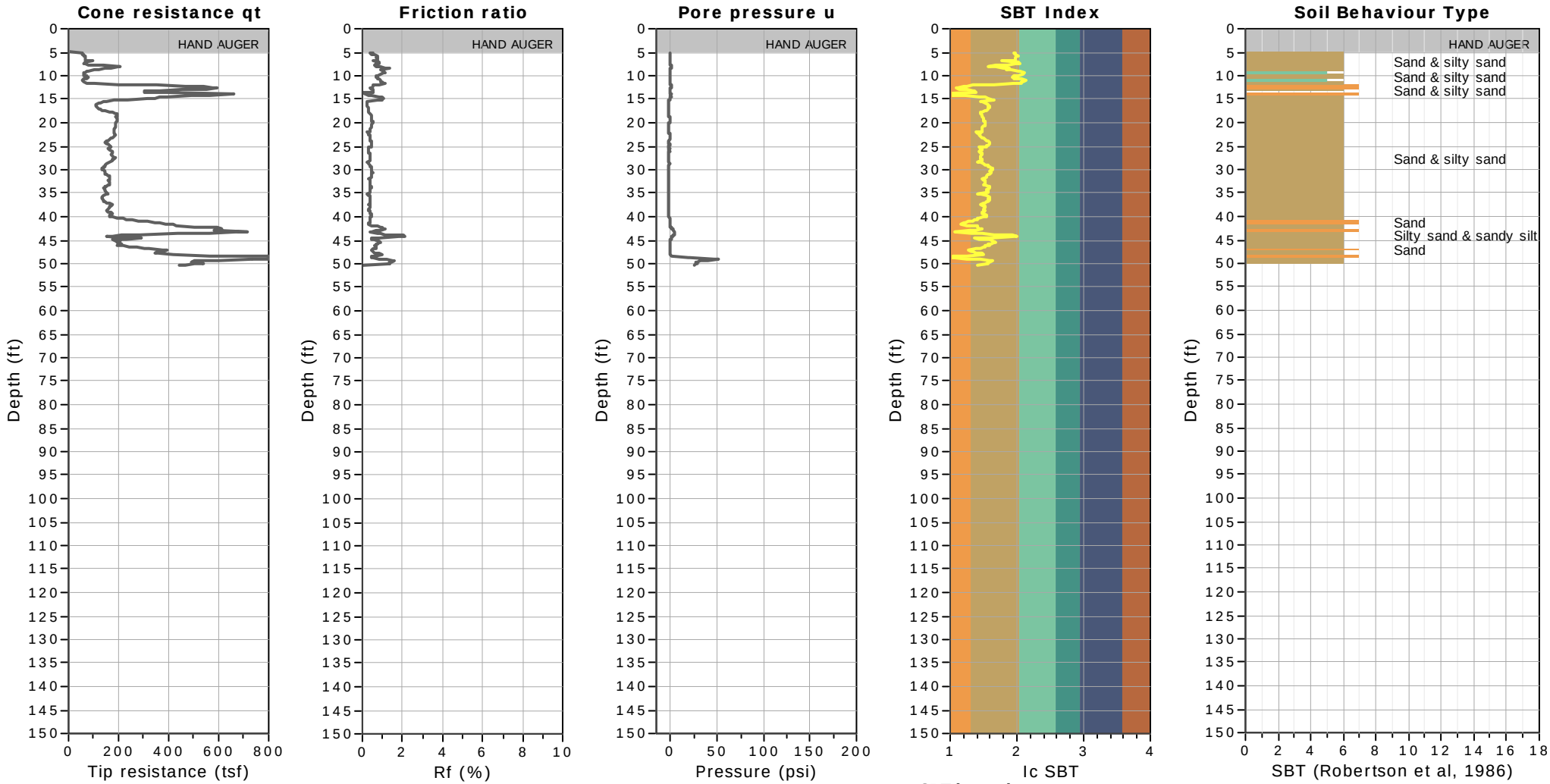
Coords: X:6341850.00, Y:2128141.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0039CPT

Total depth: 50.36 ft

Surface Elevation: 290.43 ft

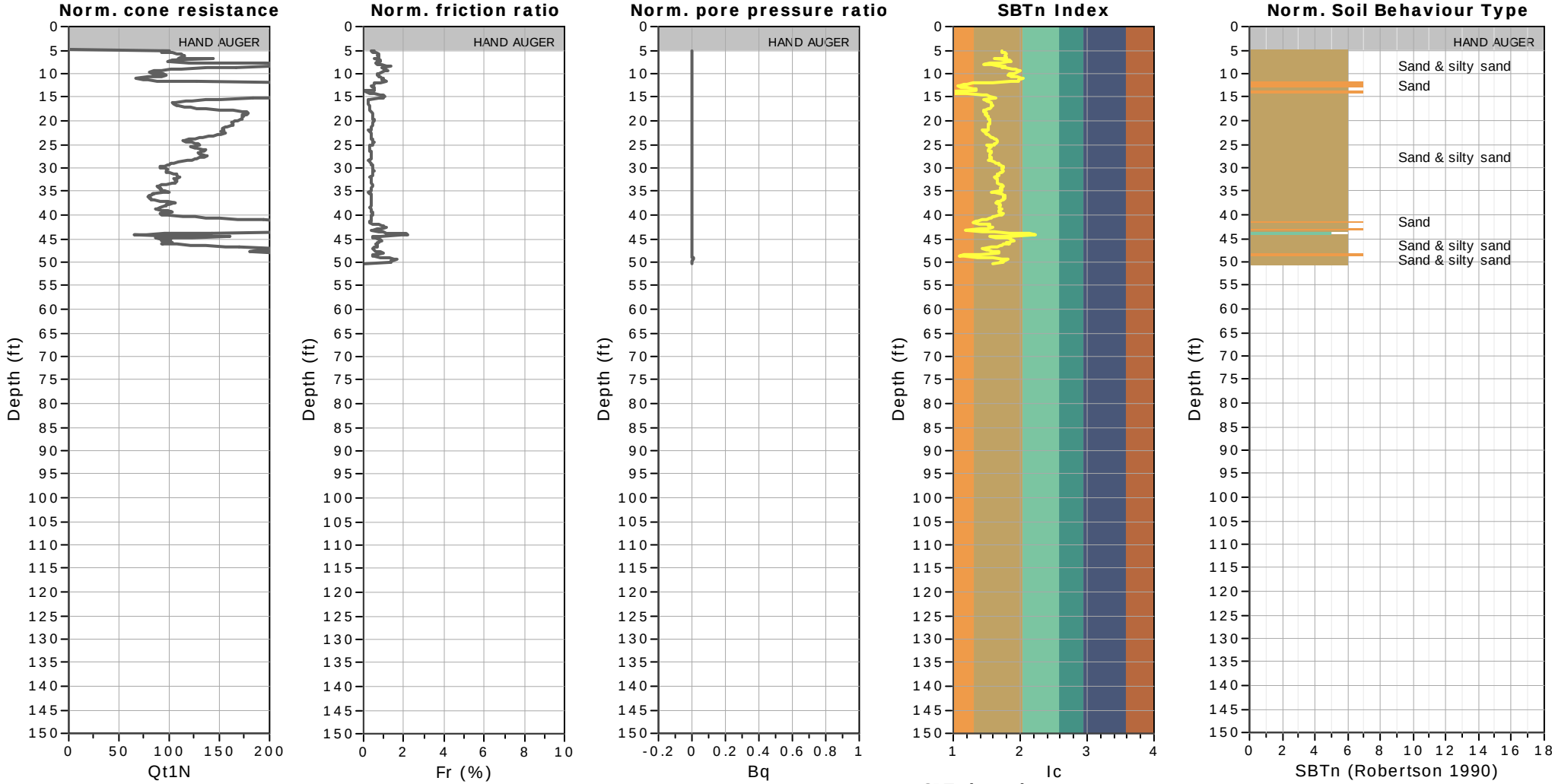
Coords: X:6341850.00, Y:2128141.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA

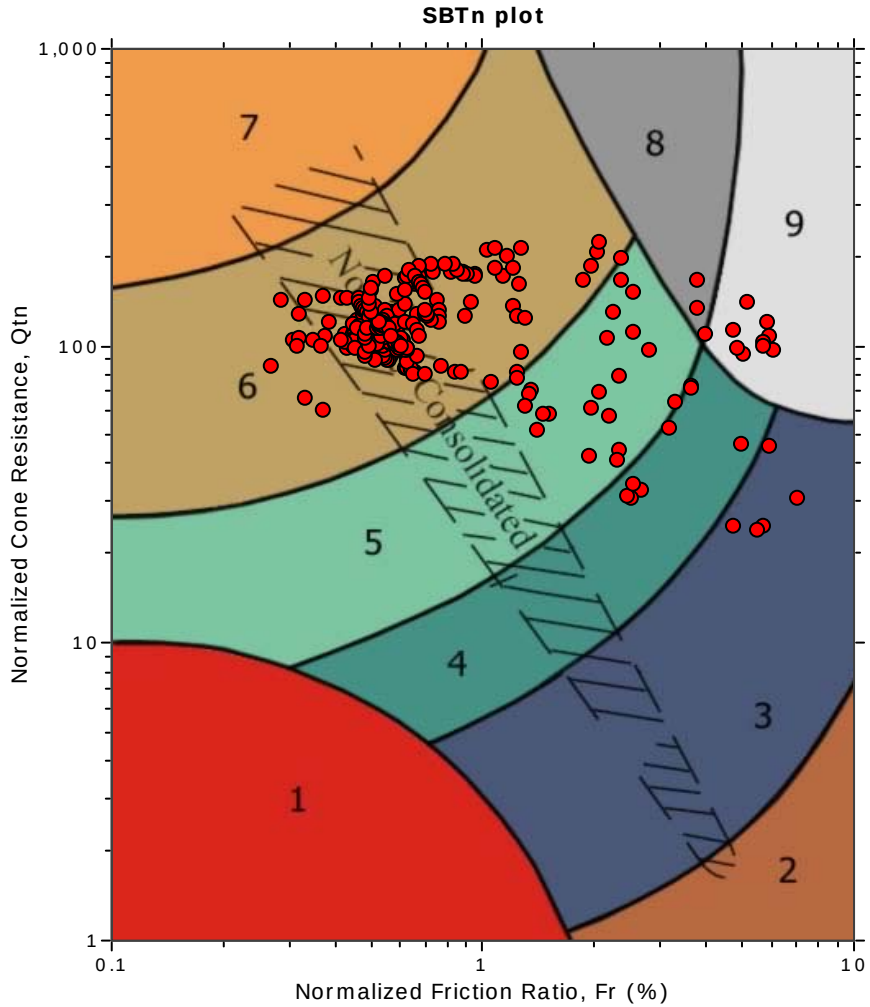


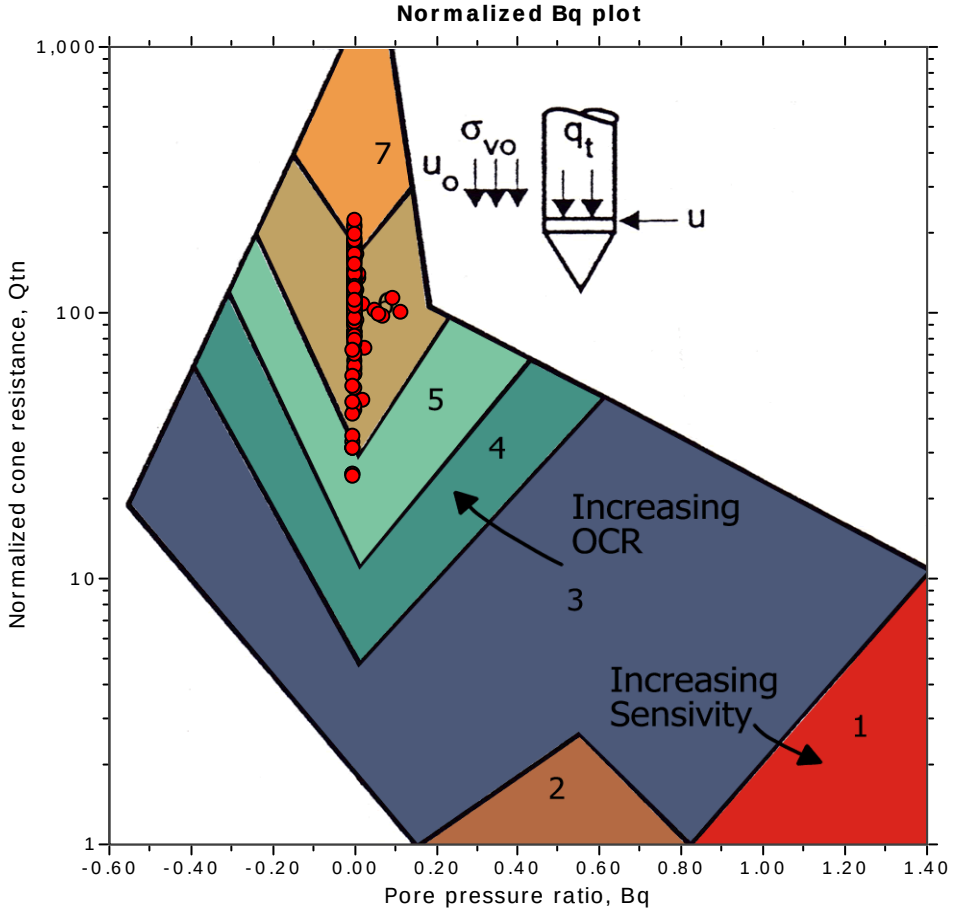
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0040CPT

Total depth: 55.61 ft

Surface Elevation: 289.19 ft

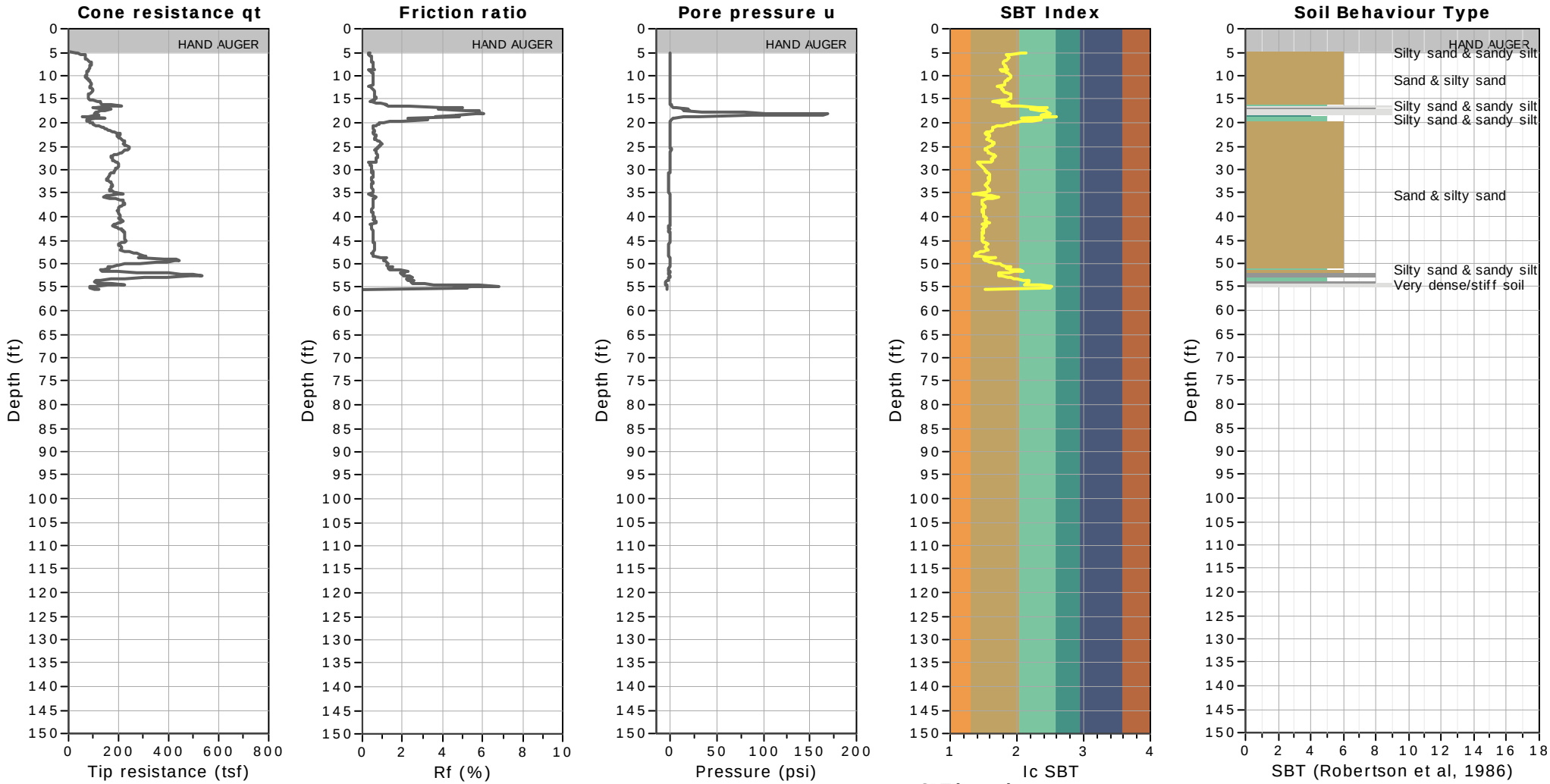
Coords: X:6340332.00, Y:2126307.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0040CPT

Total depth: 55.61 ft

Surface Elevation: 289.19 ft

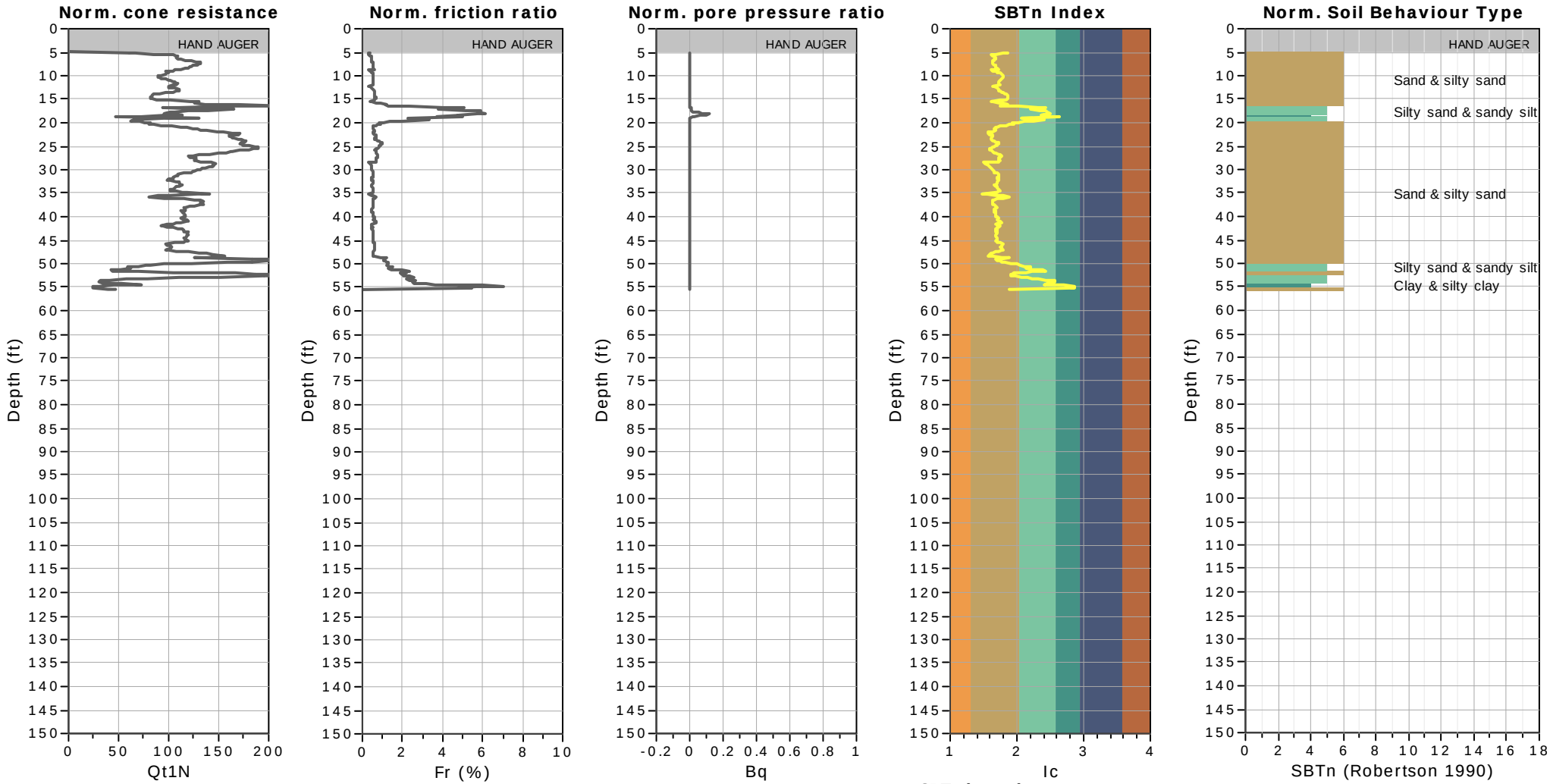
Coords: X:6340332.00, Y:2126307.25

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



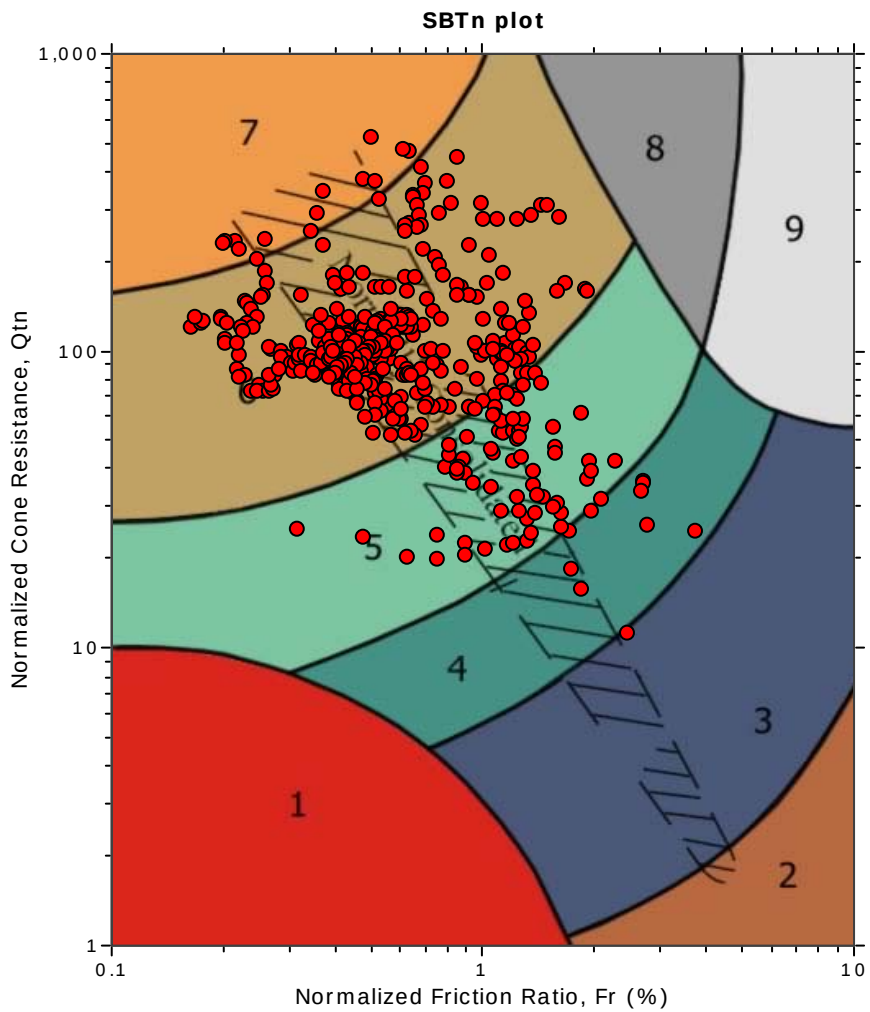
SBTn legend

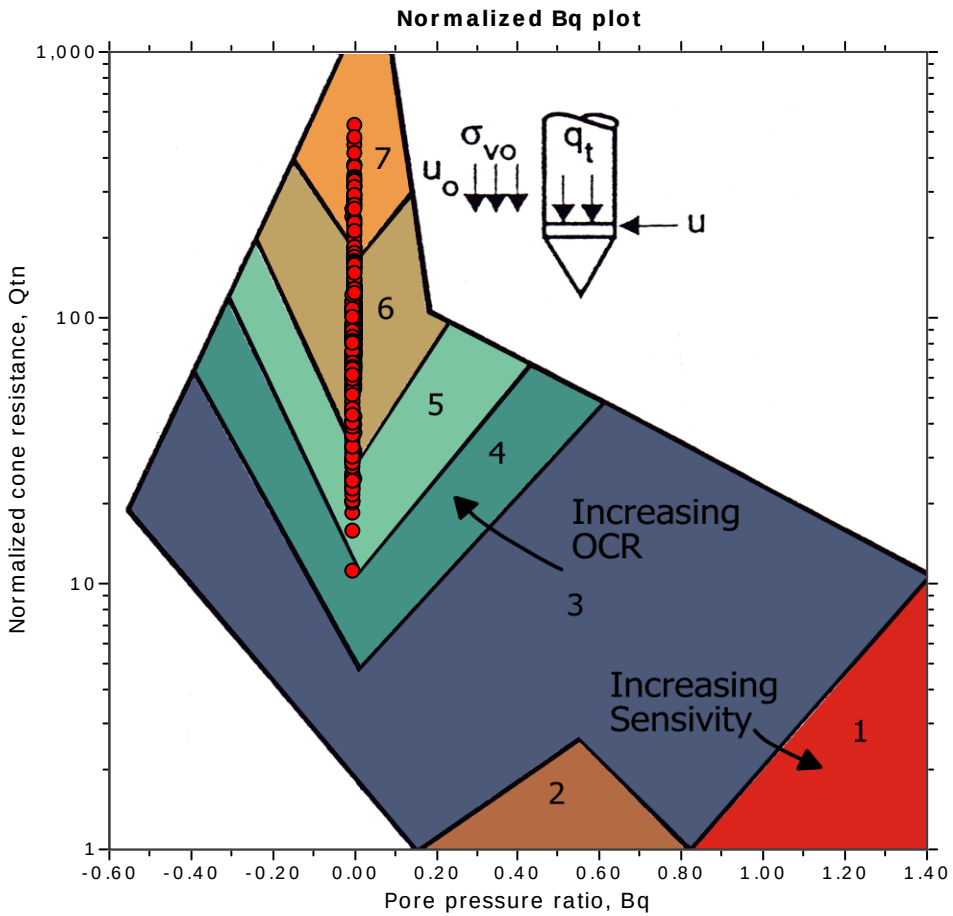
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0041CPT
Total depth: 80.22 ft
Surface Elevation: 293.06 ft
Coords: X:6341313.00, Y:2125479.50
Cone Type: GDC-32
Cone Operator: J.Hancock

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

CPT: S0041CPT

Total depth: 80.22 ft

Surface Elevation: 293.06 ft

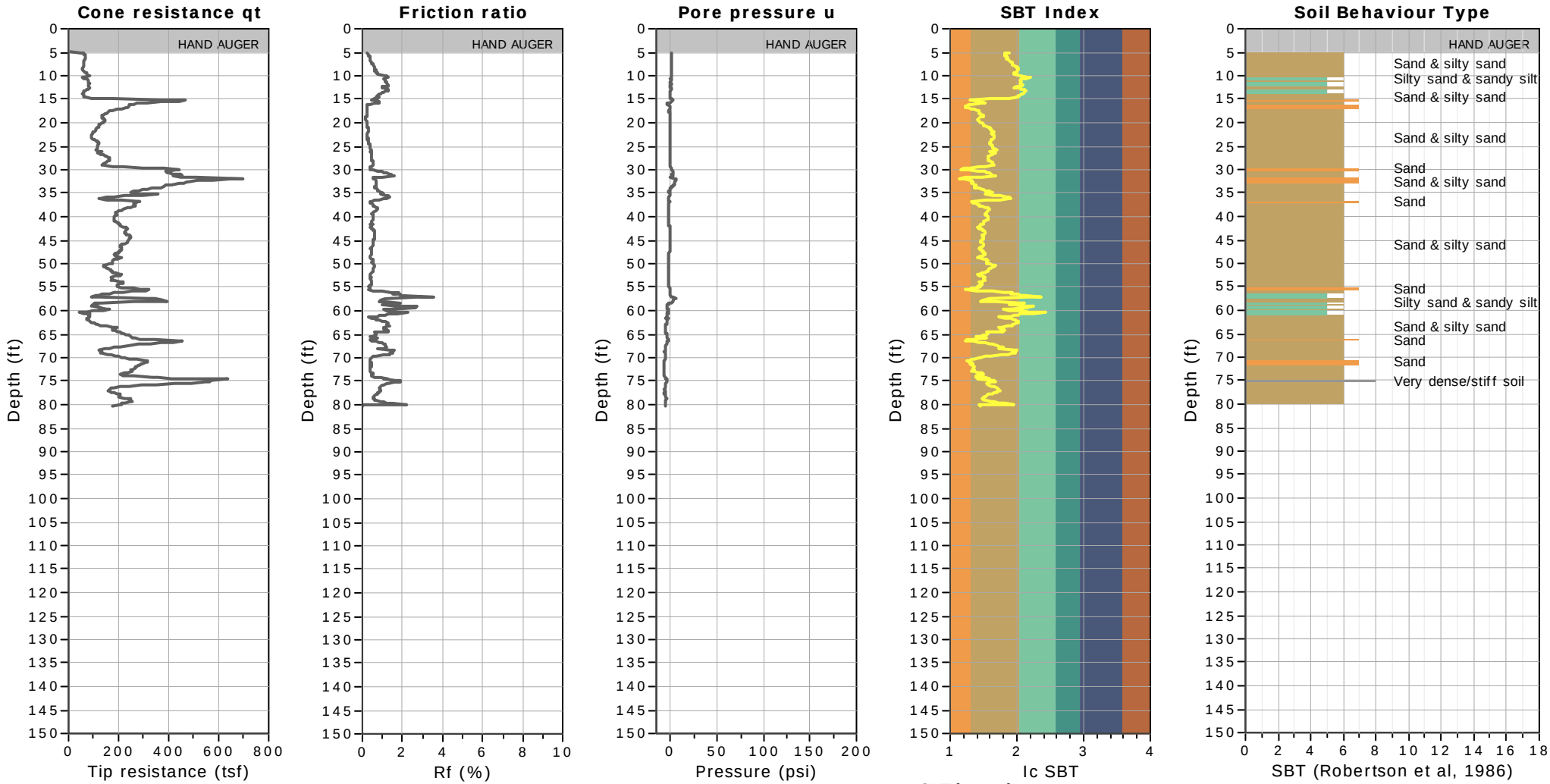
Coords: X:6341313.00, Y:2125479.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0041CPT

Total depth: 80.22 ft

Surface Elevation: 293.06 ft

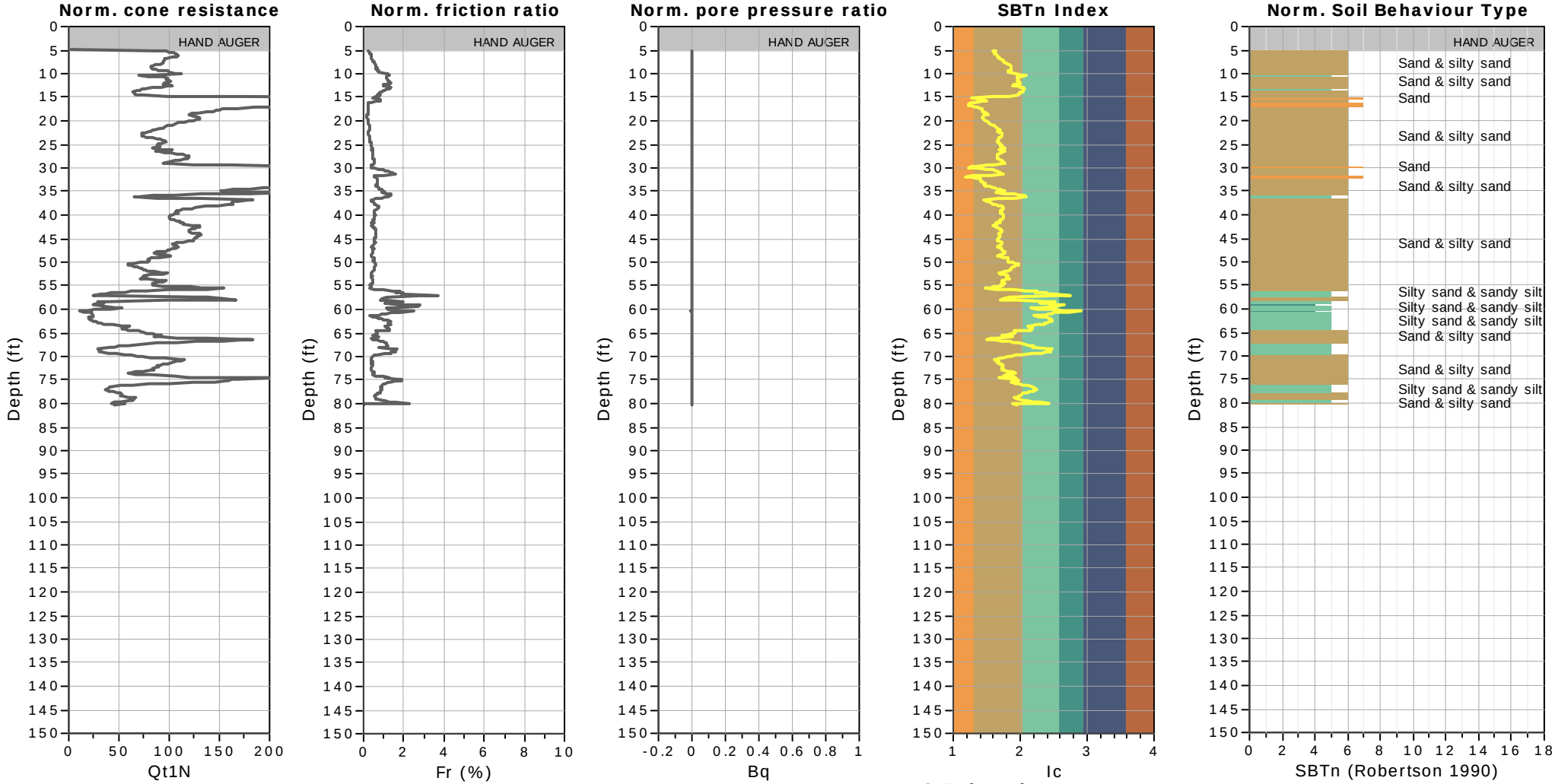
Coords: X:6341313.00, Y:2125479.50

Cone Type: GDC-32

Cone Operator: J.Hancock

Project: California High-Speed Train

Location: Fresno, CA

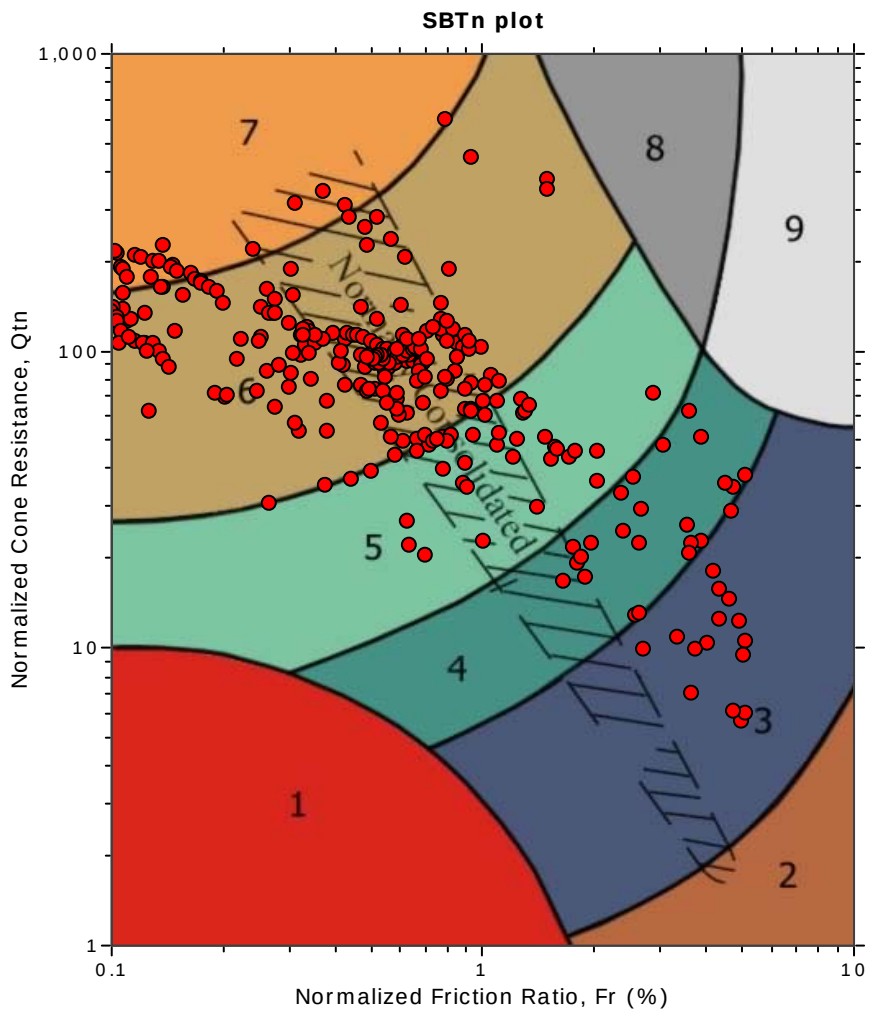


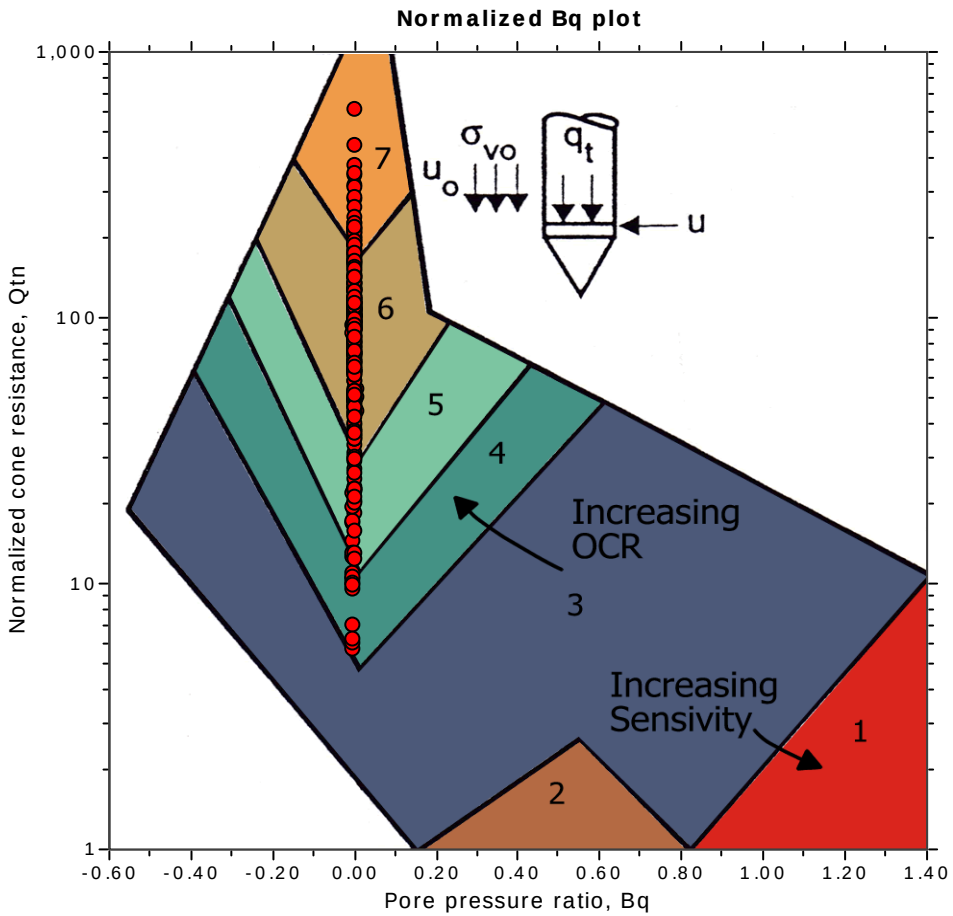
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Project: California High-Speed Train
Location: Fresno, CA

SBT - Bq plots (normalized)





SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

CPT: S0042CPT

Total depth: 80.05 ft

Surface Elevation: 291.50 ft

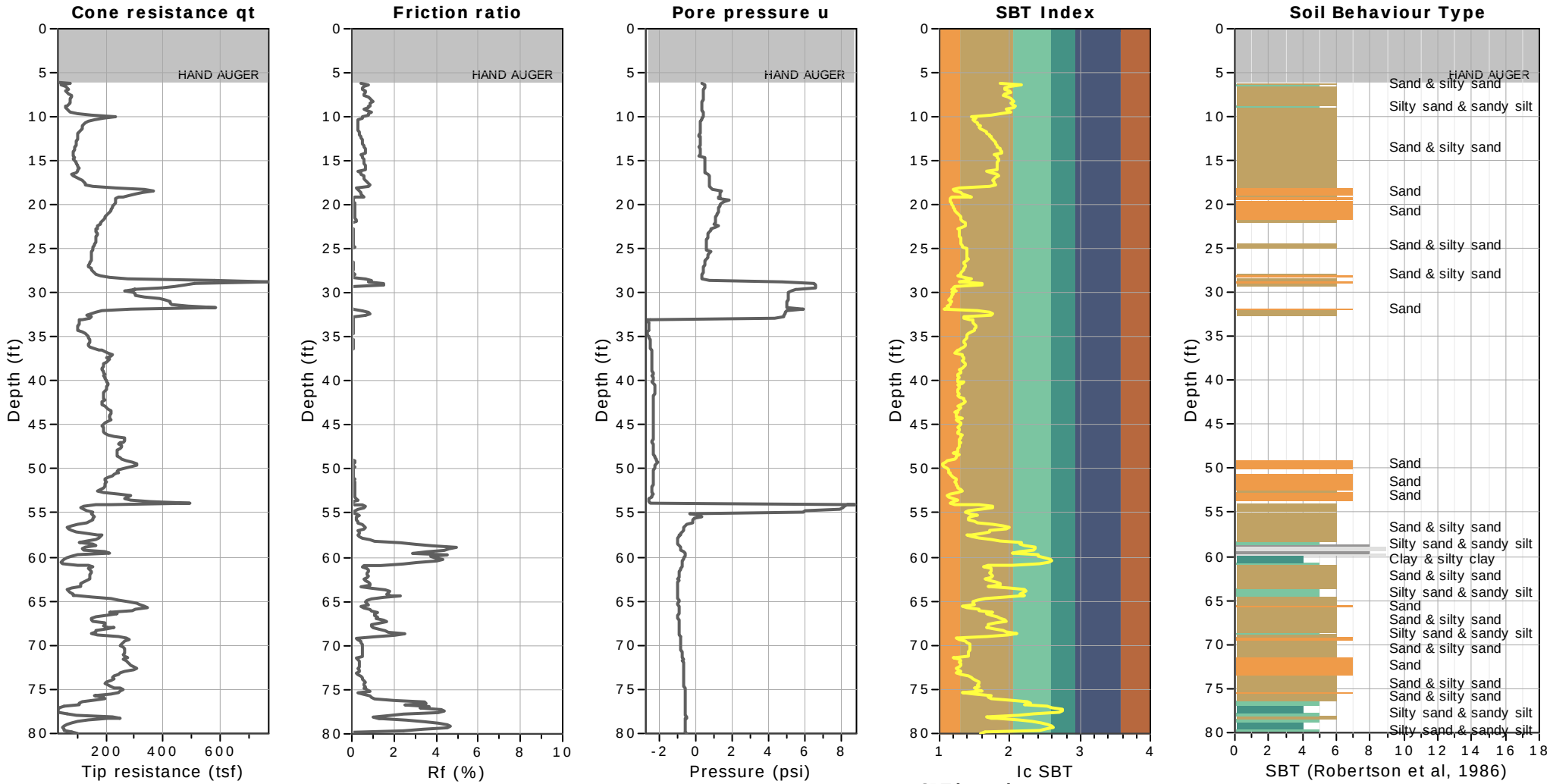
Coords: X:6341813.50, Y:2125509.75

Cone Type: GDC-51

Cone Operator: A.Sancen

Project: California High-Speed Train

Location: Fresno, CA



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
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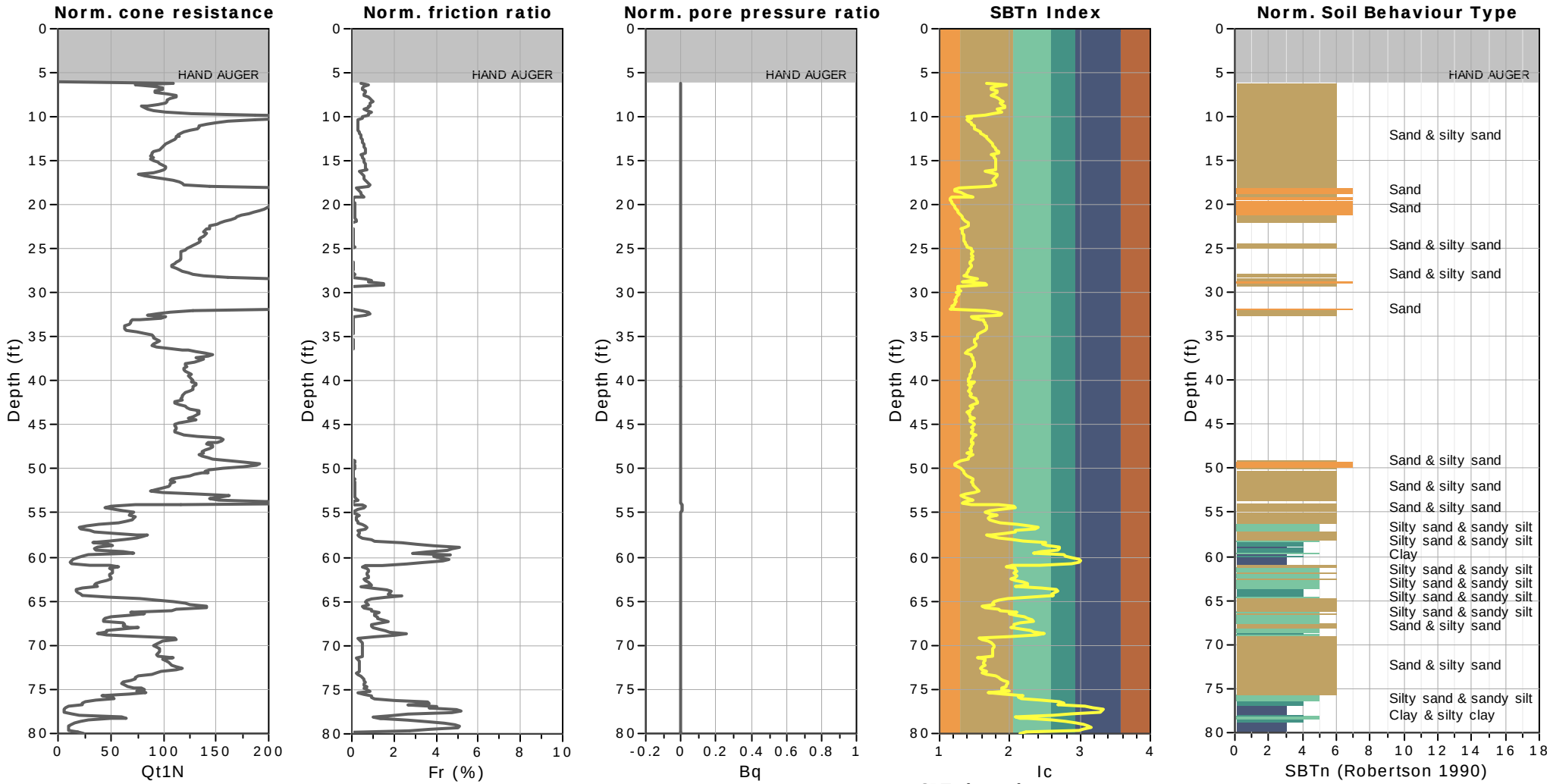


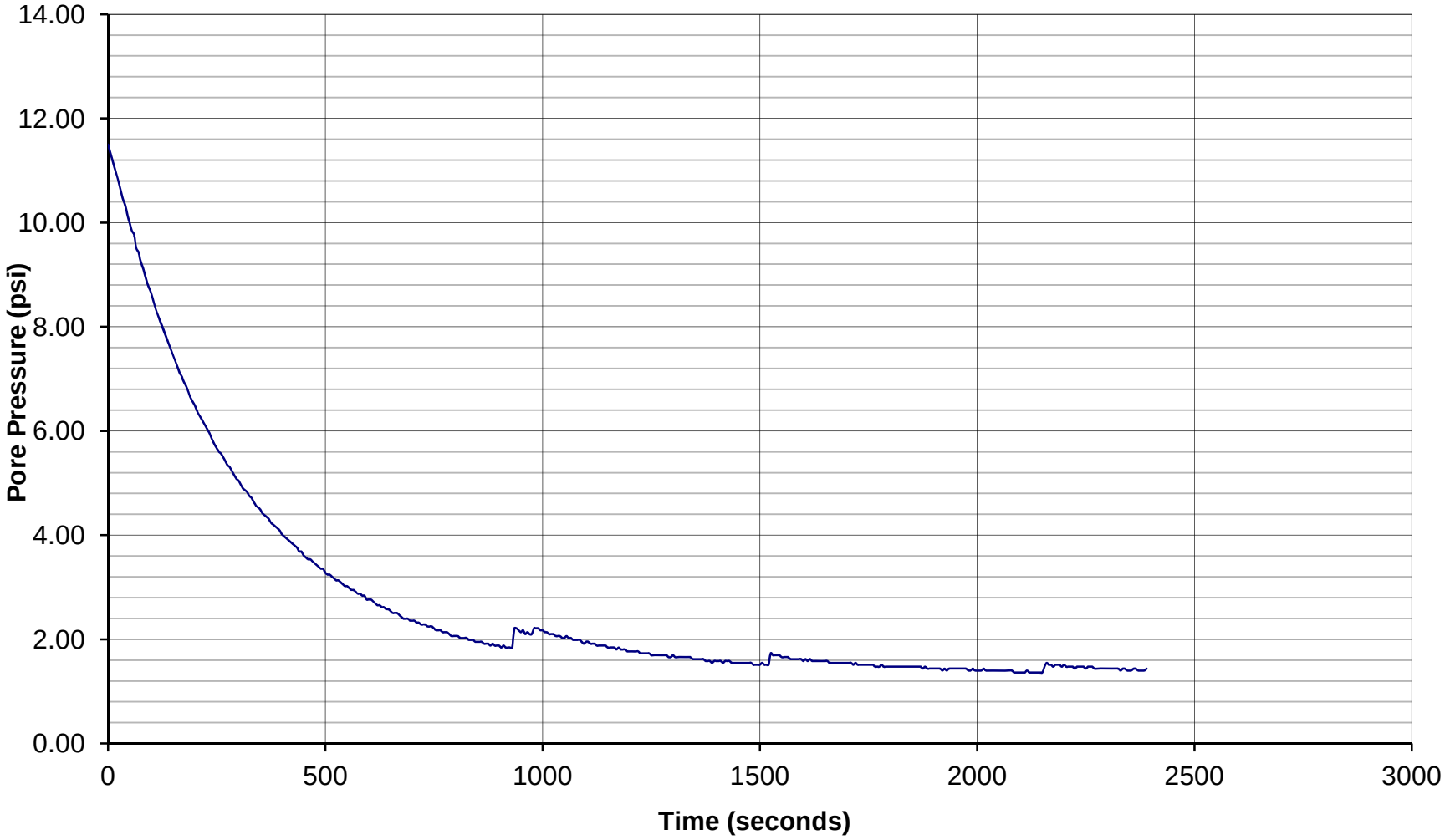
SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

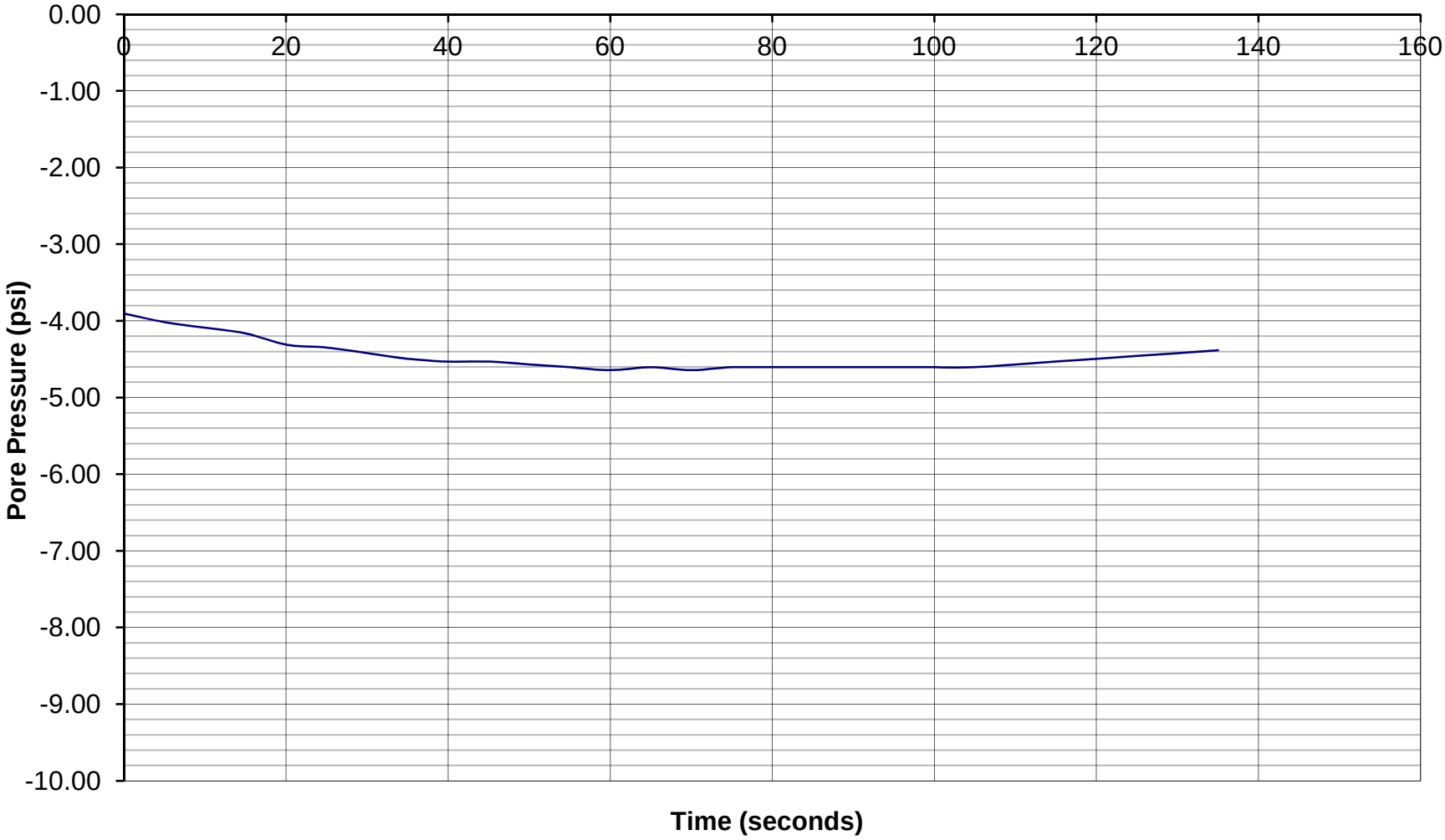
Sounding: S0001CPT
Depth: 50.03 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

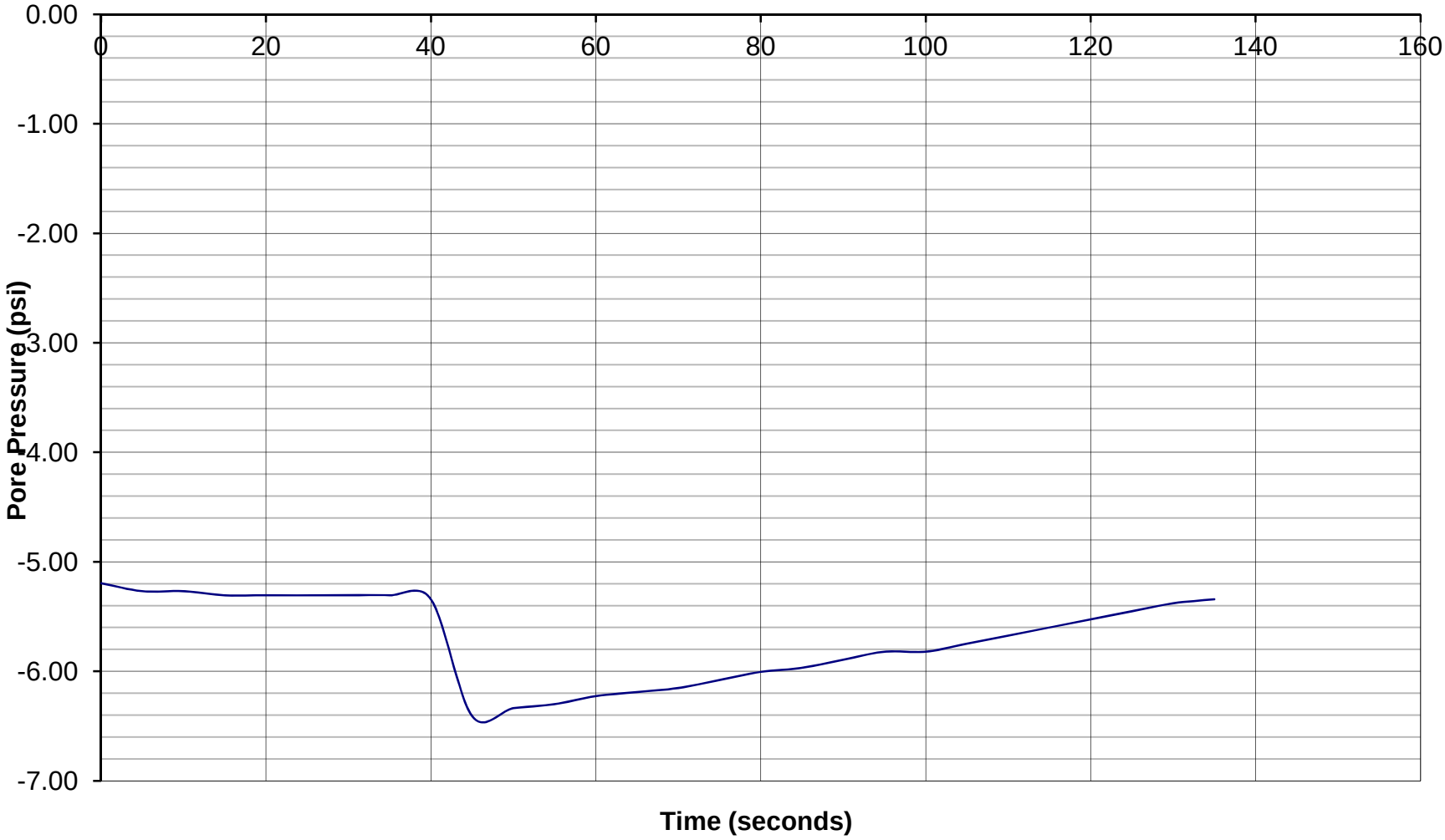
Sounding: S0005CPT
Depth: 76.77 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

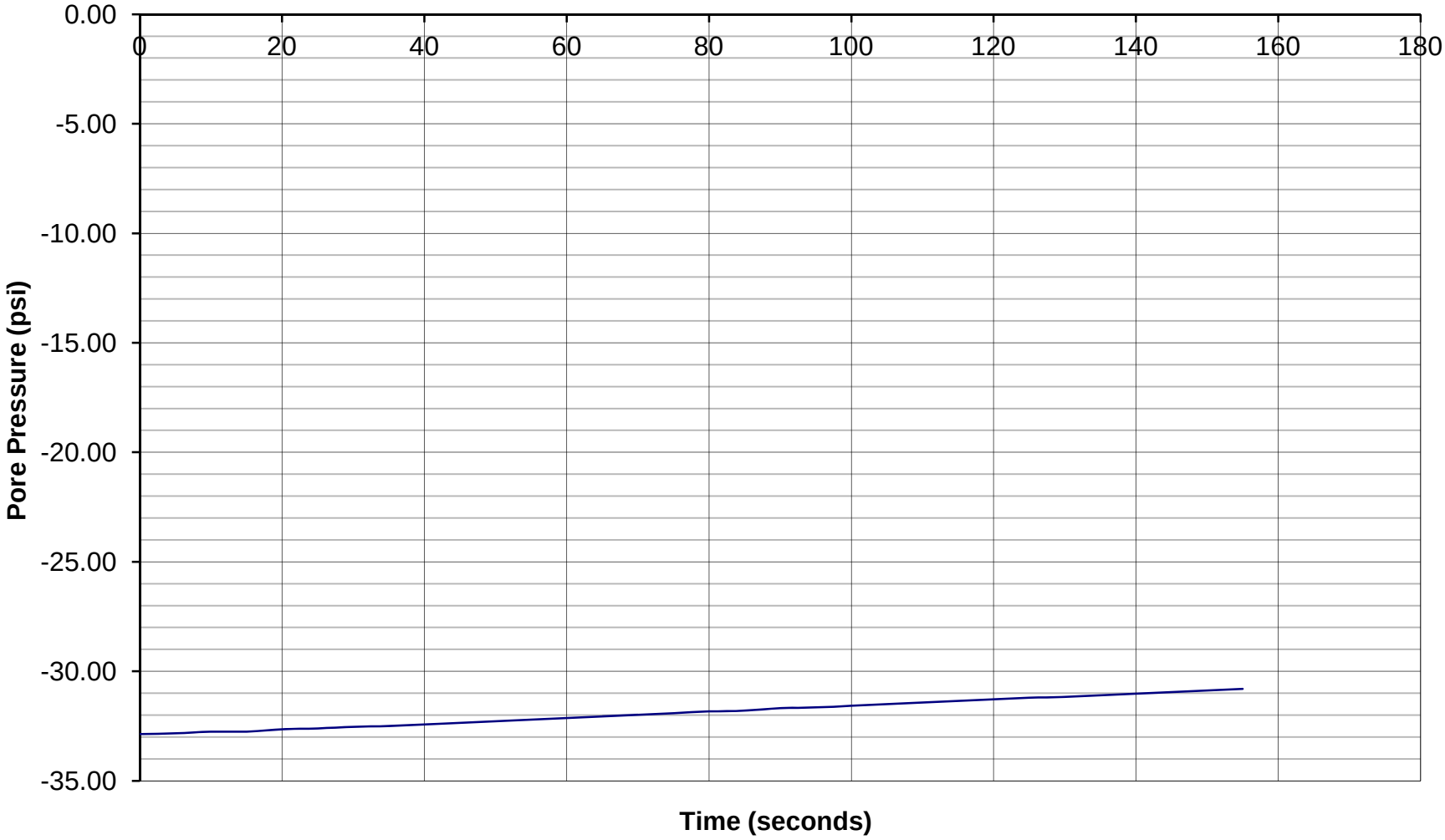
Sounding: S0006CPT
Depth: 80.05 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

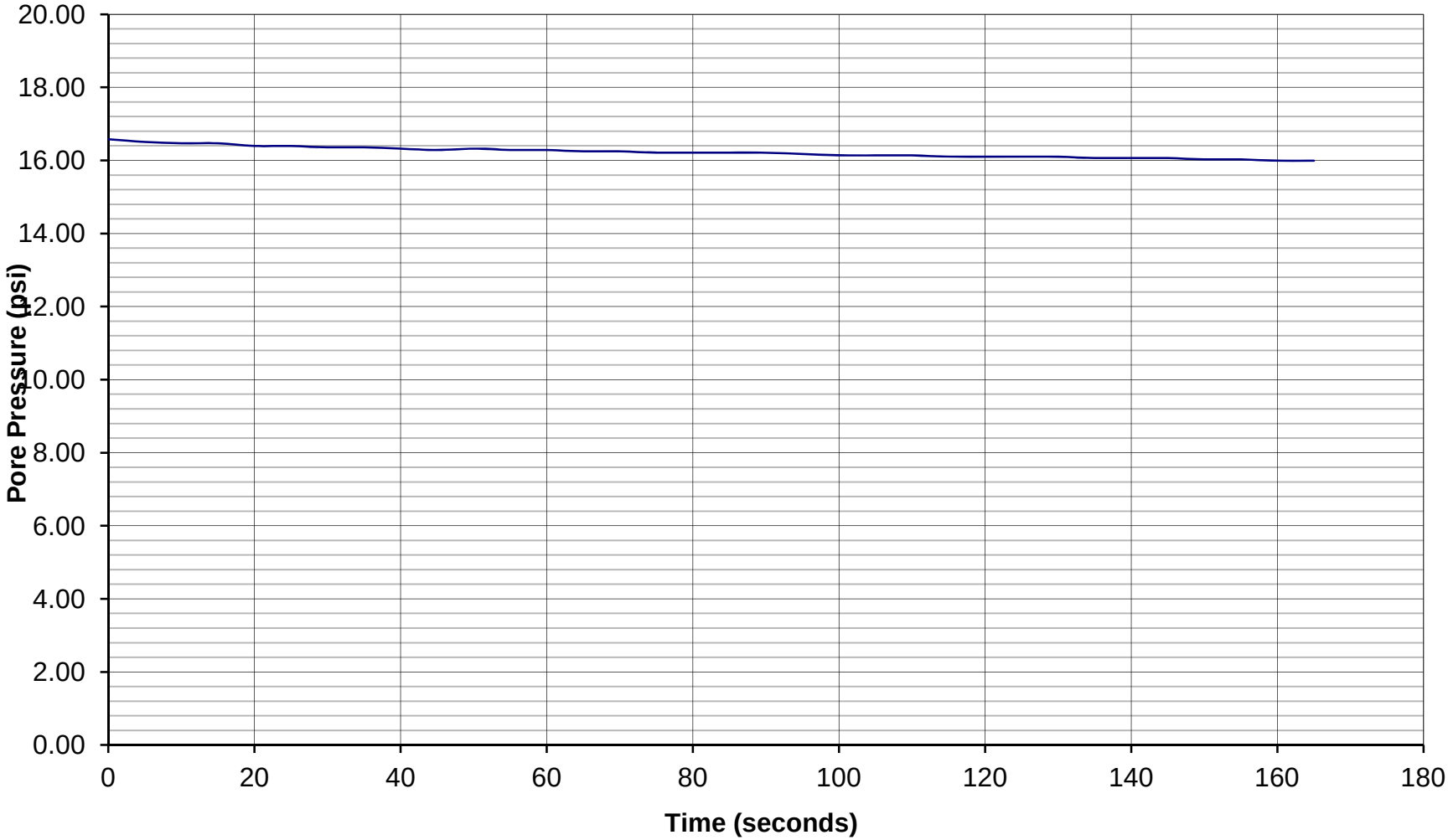
Sounding: S0008ACPT
Depth: 99.41 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

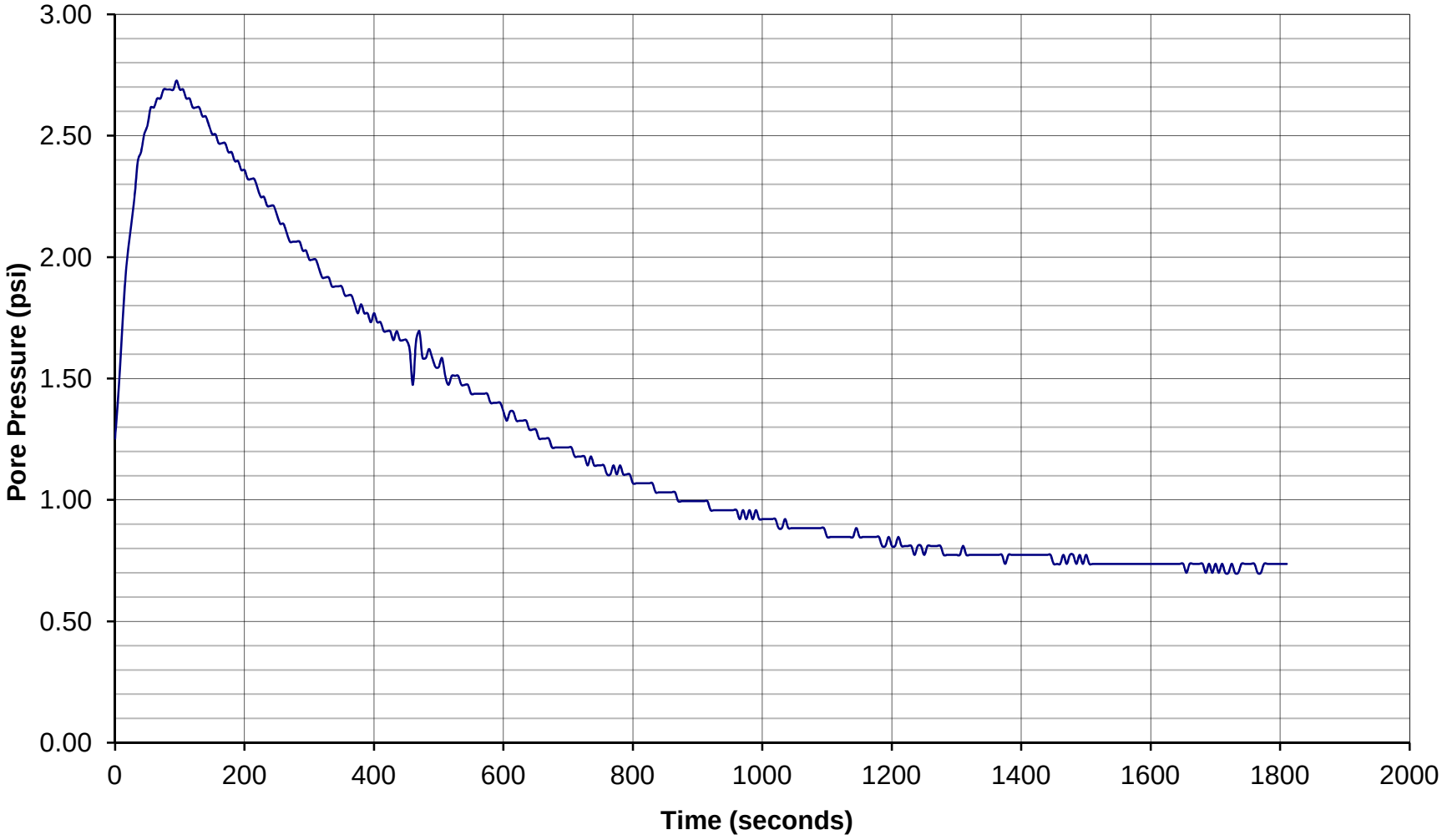
Sounding: S0009CPT
Depth: 104.99 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

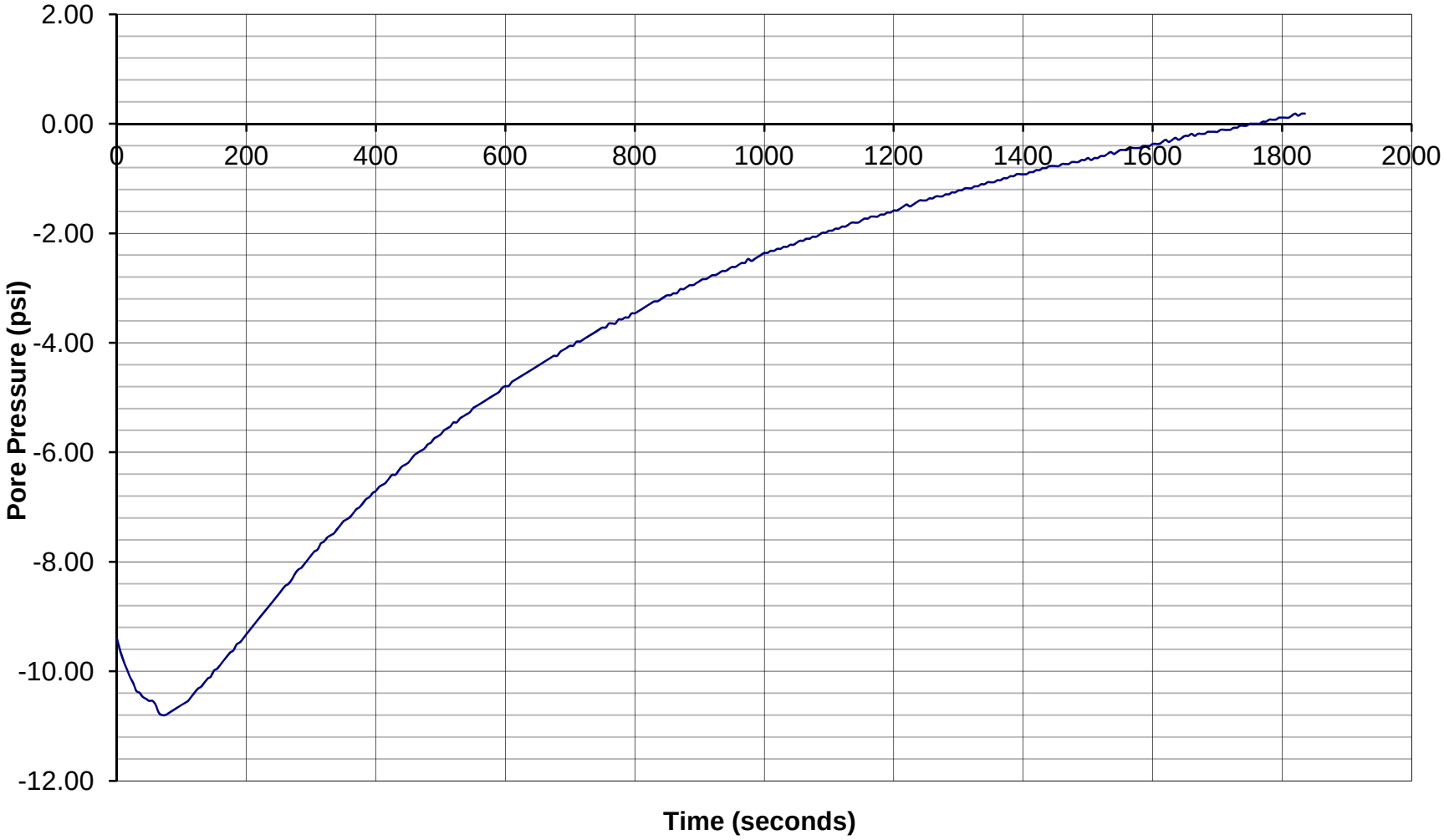
Sounding: S0009CPT
Depth: 105.81 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

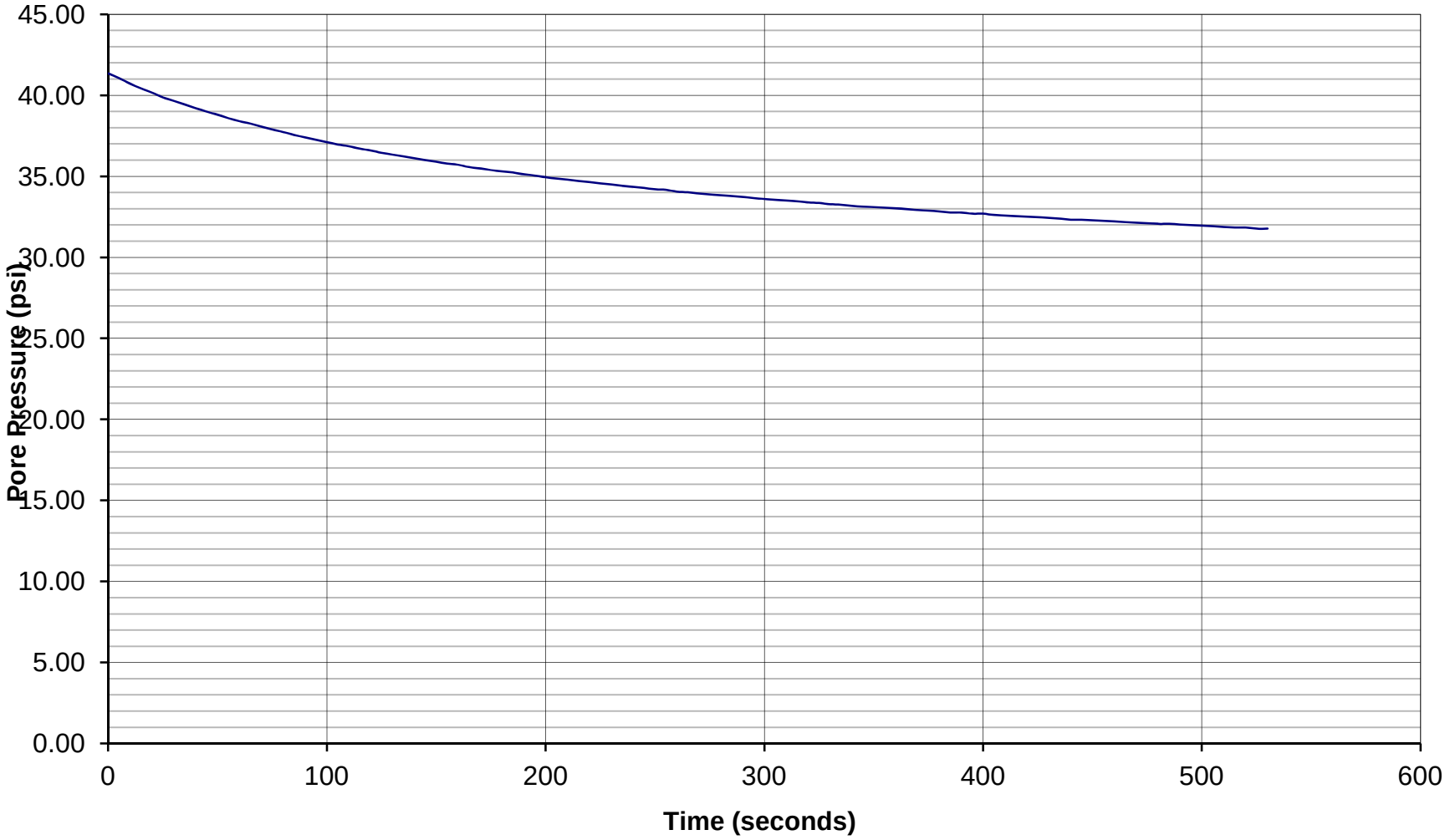
Sounding: S0012CPT
Depth: 102.2 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

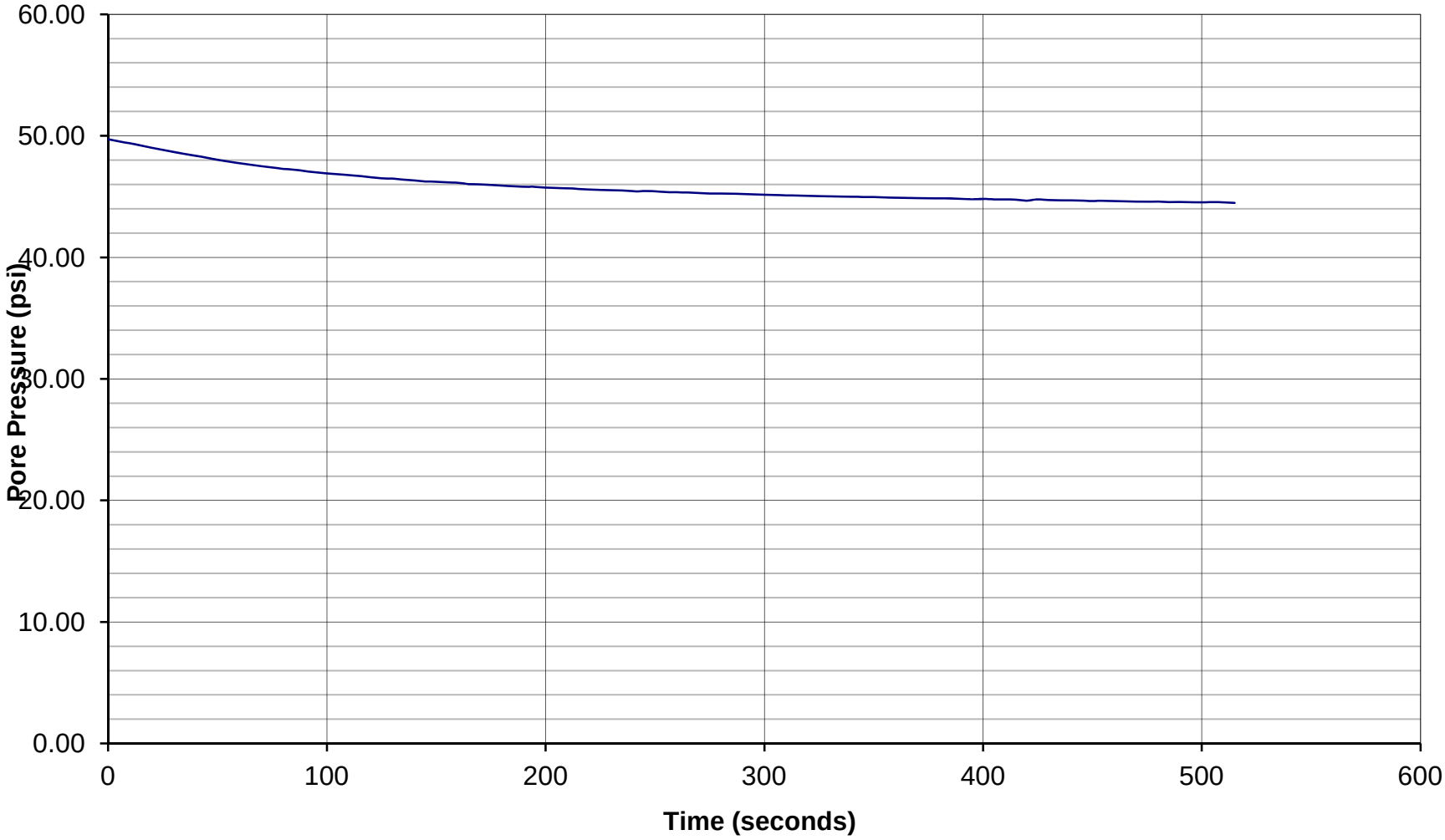
Sounding: S0016CPT
Depth: 50.36 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

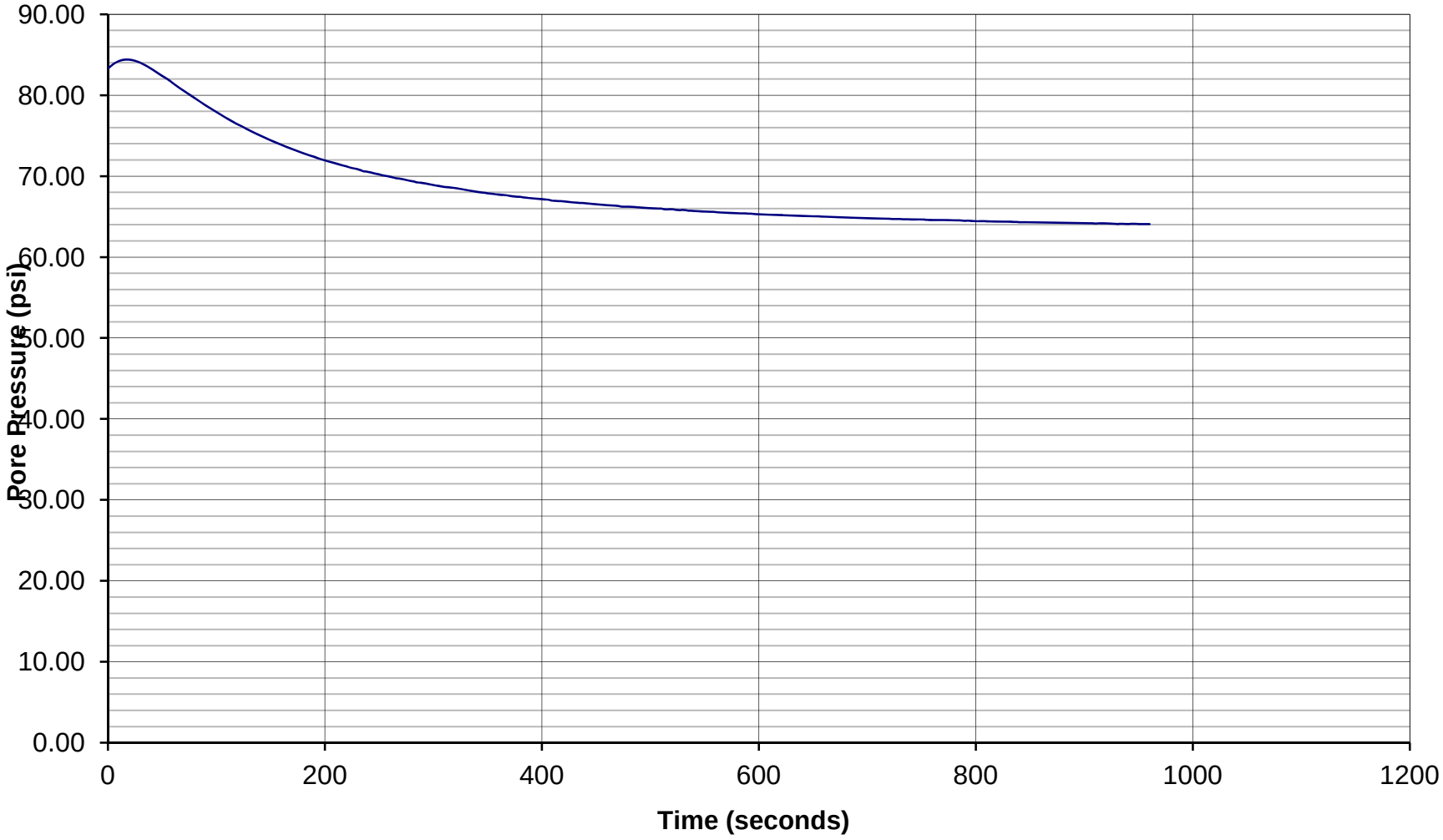
Sounding: S0022CPT
Depth: 80.05 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

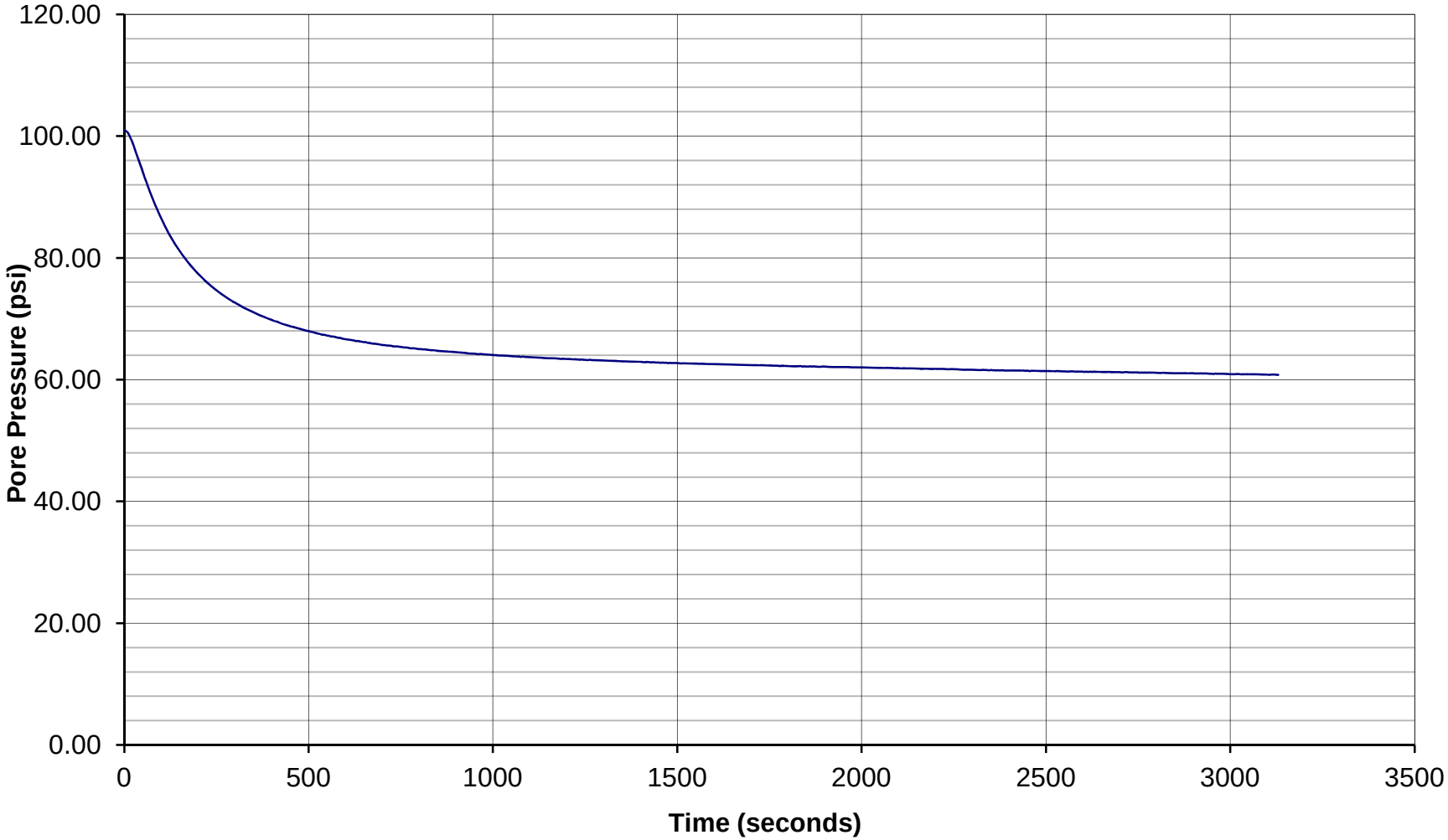
Sounding: S0023ACPT
Depth: 113.52 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

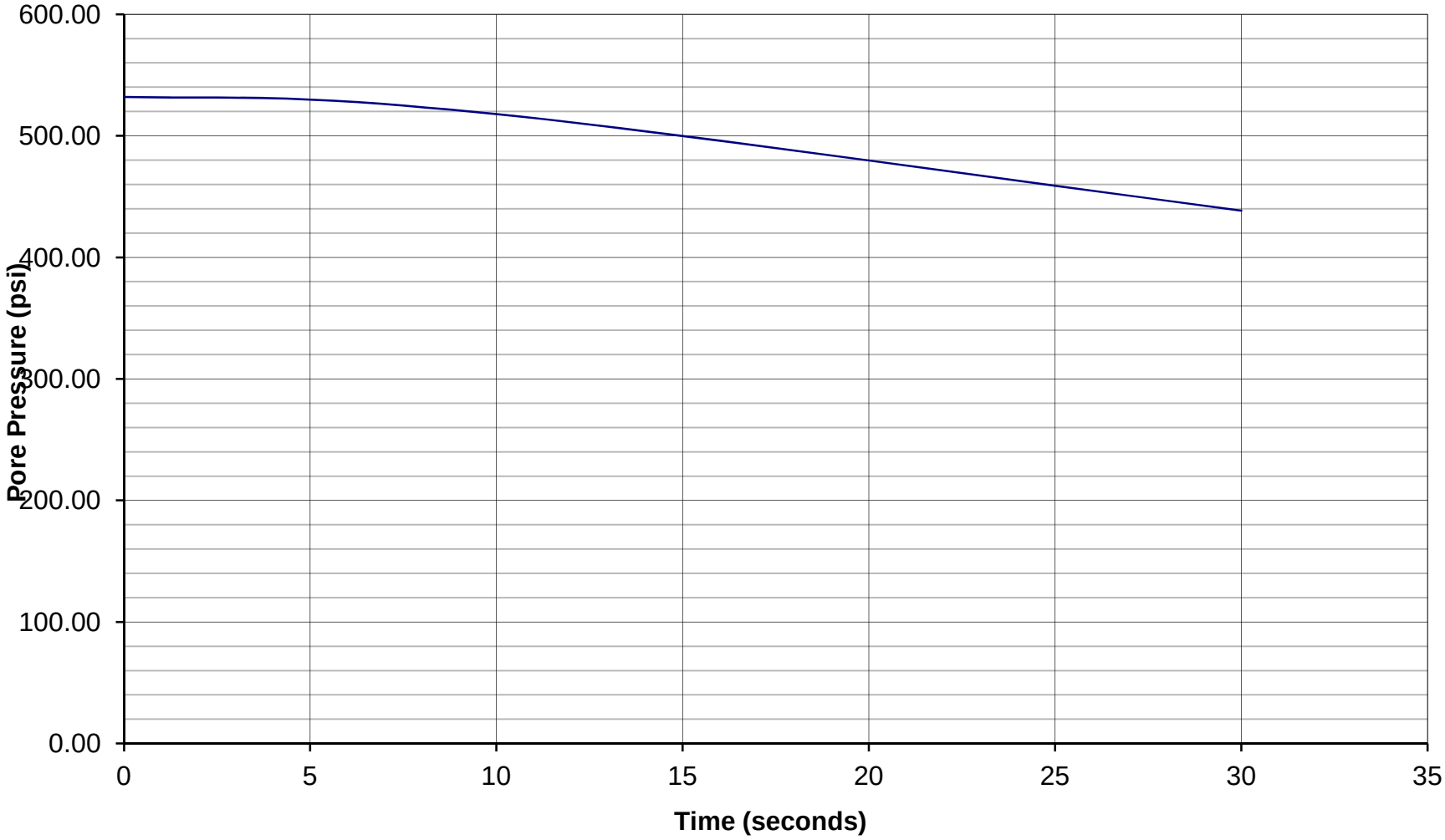
Sounding: S0023ACPT
Depth: 129.59 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

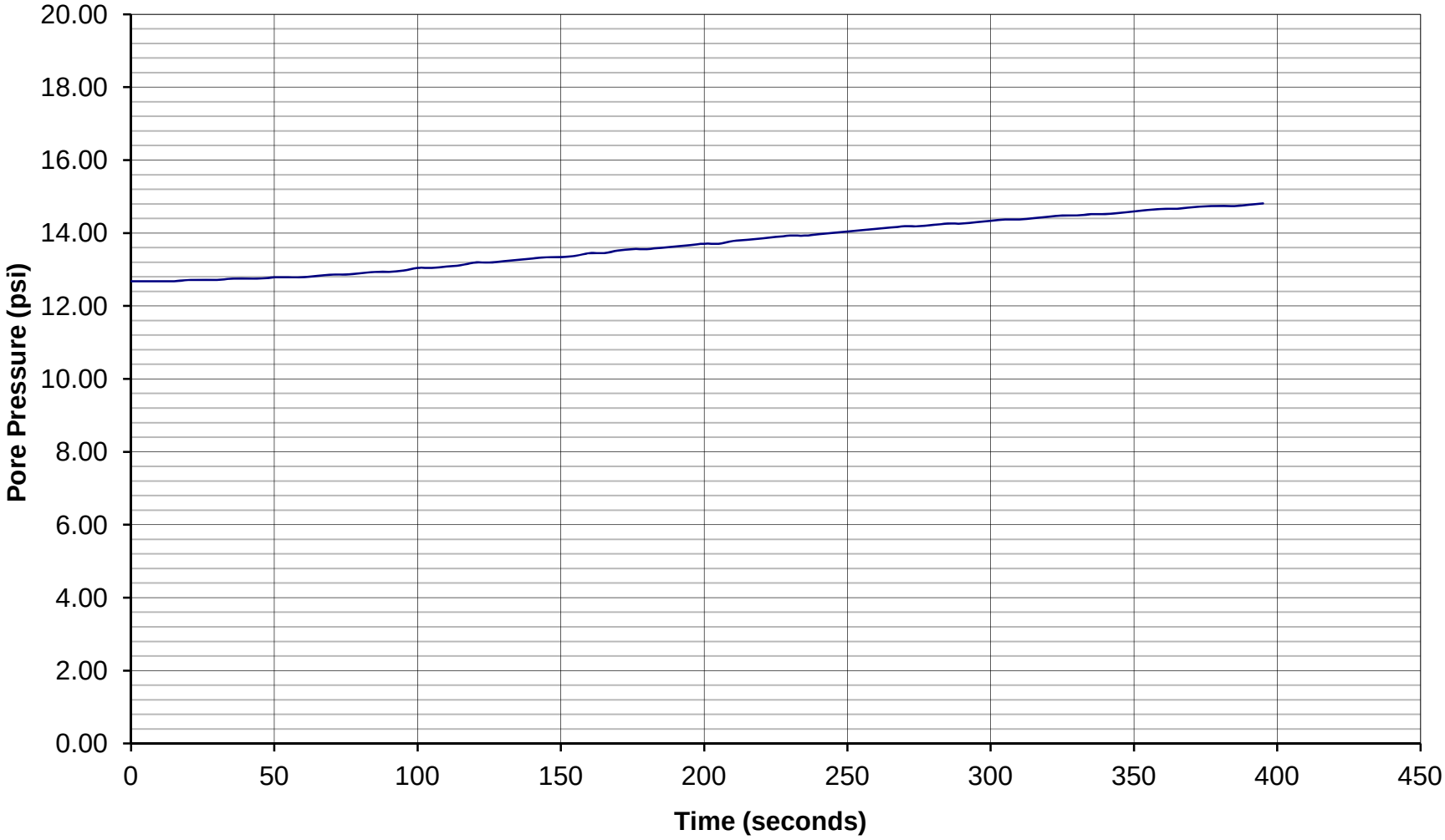
Sounding: S0023ACPT
Depth: 150.59 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

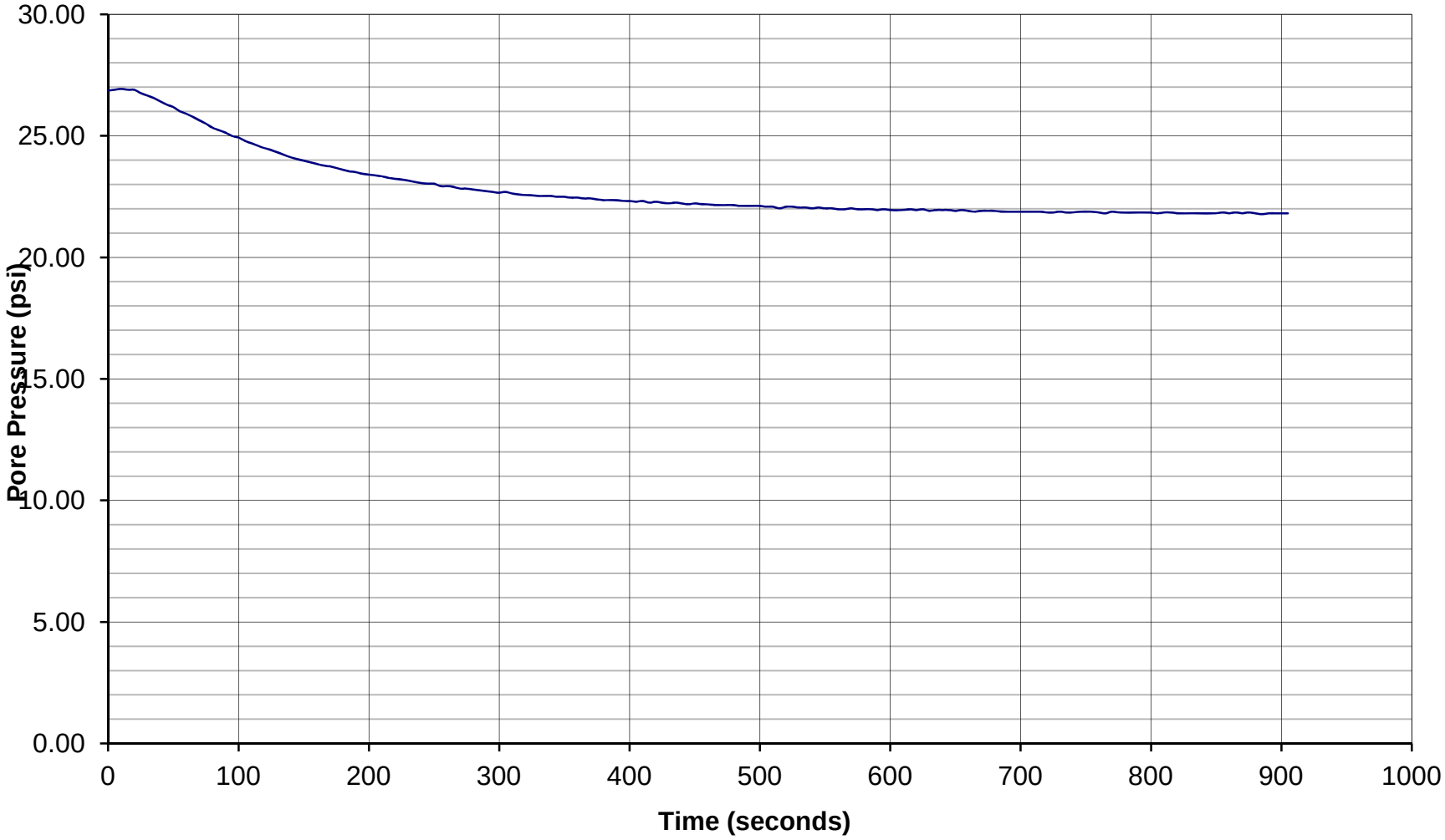
Sounding: S0024CPT
Depth: 80.05 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

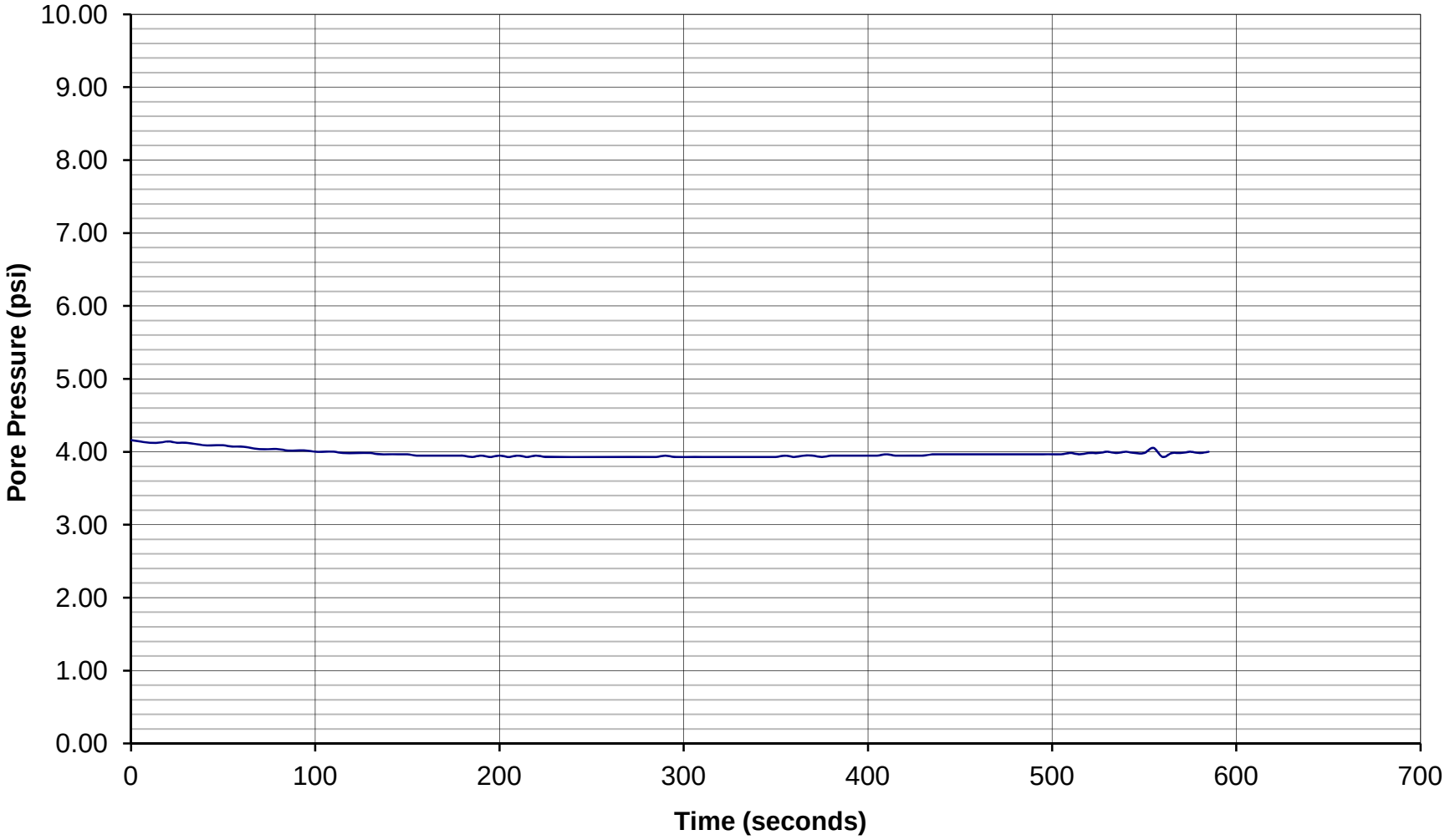
Sounding: S0025CPT
Depth: 118.44 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

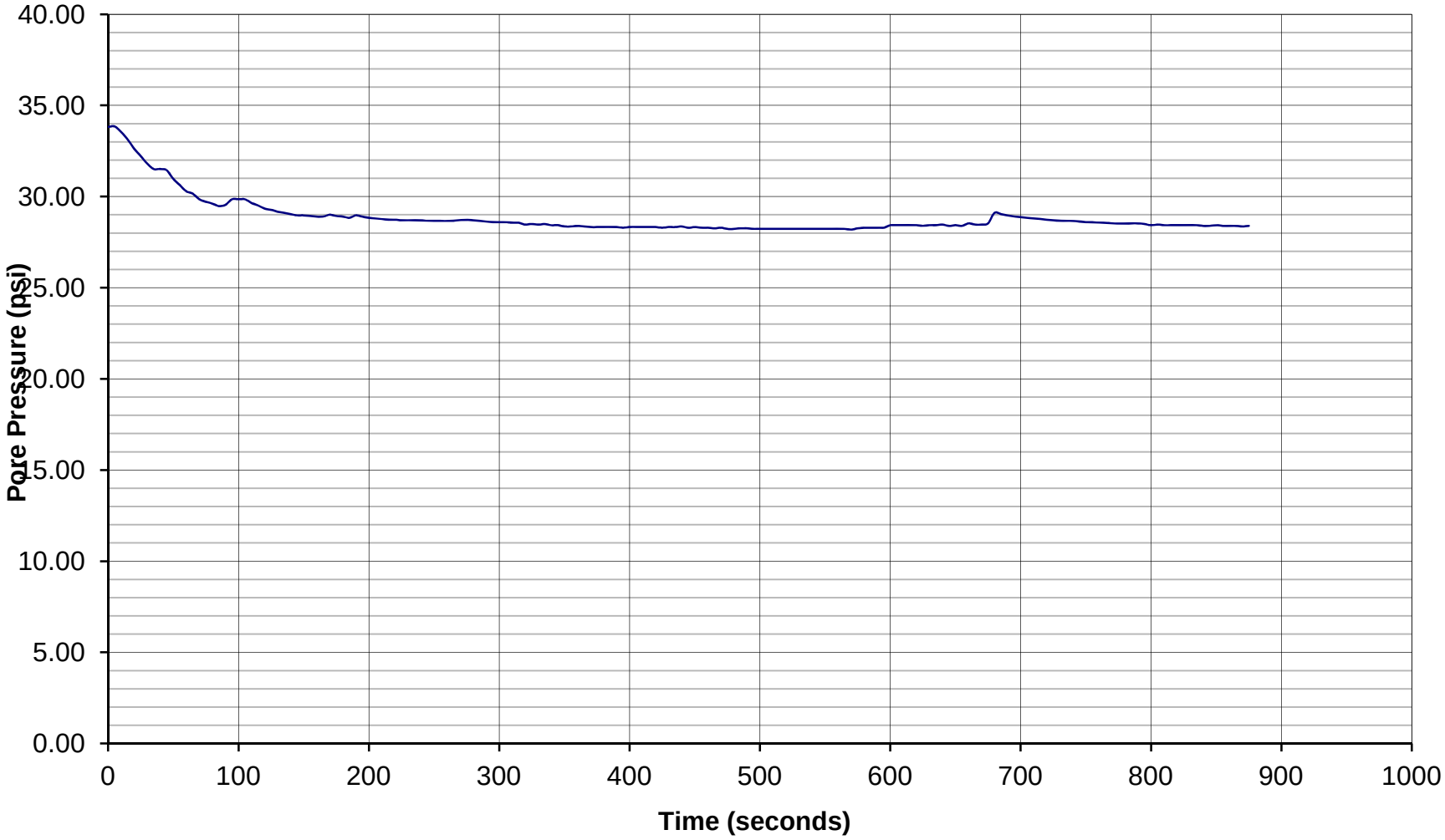
Sounding: S0029CPT
Depth: 80.05 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

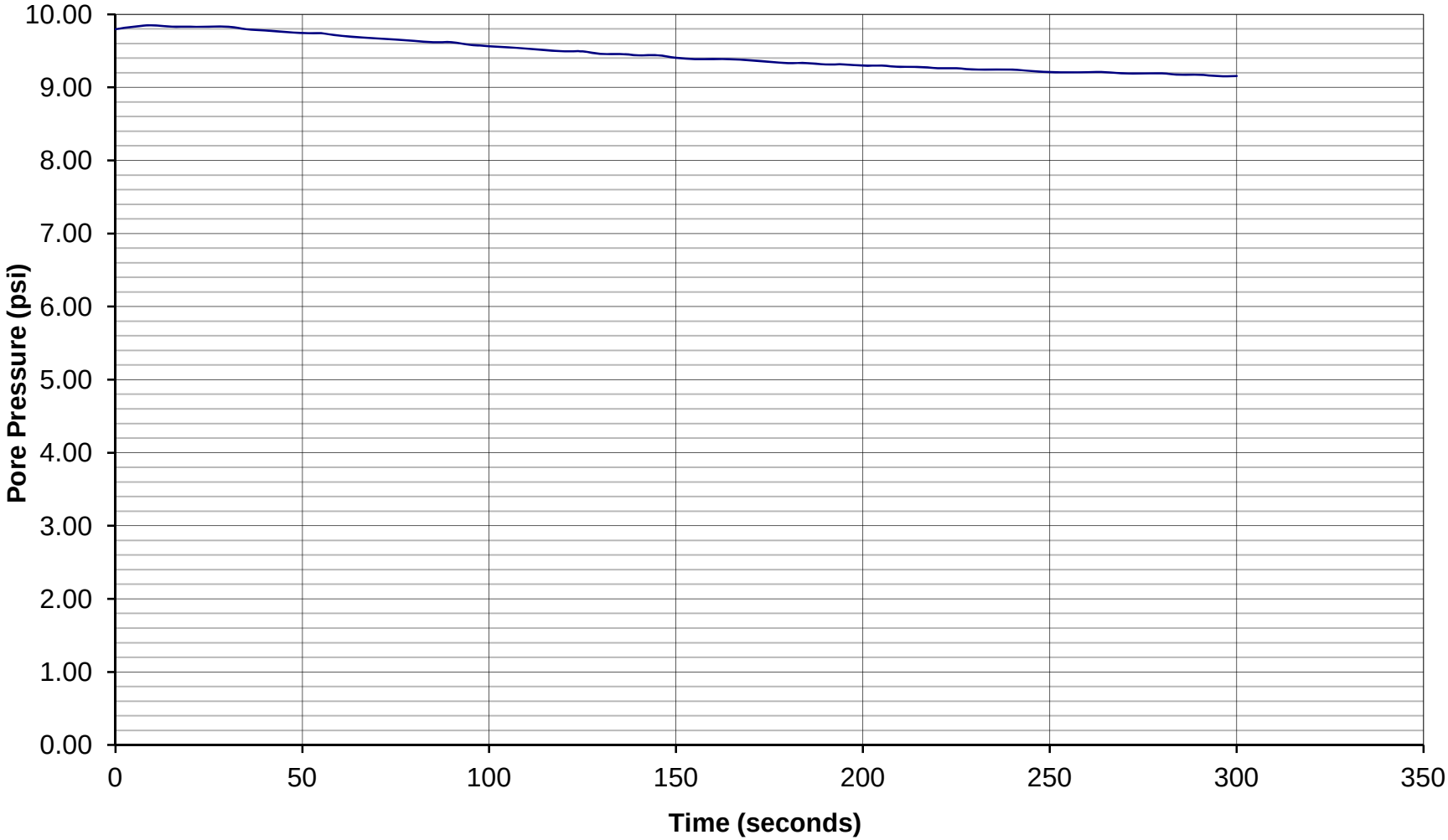
Sounding: S0031CPT
Depth: 150.43 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

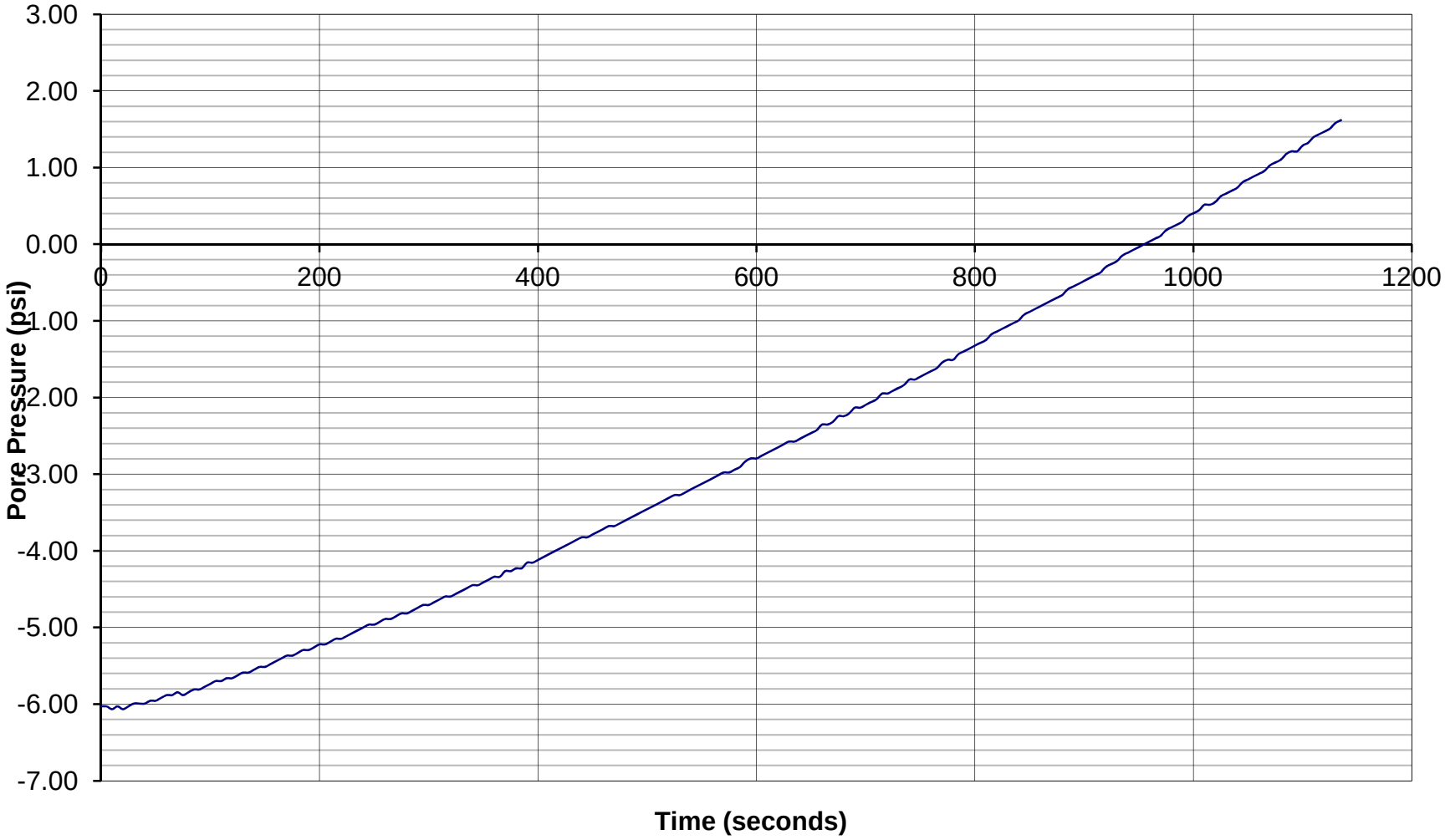
Sounding: S0032CPT
Depth: 90.22 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

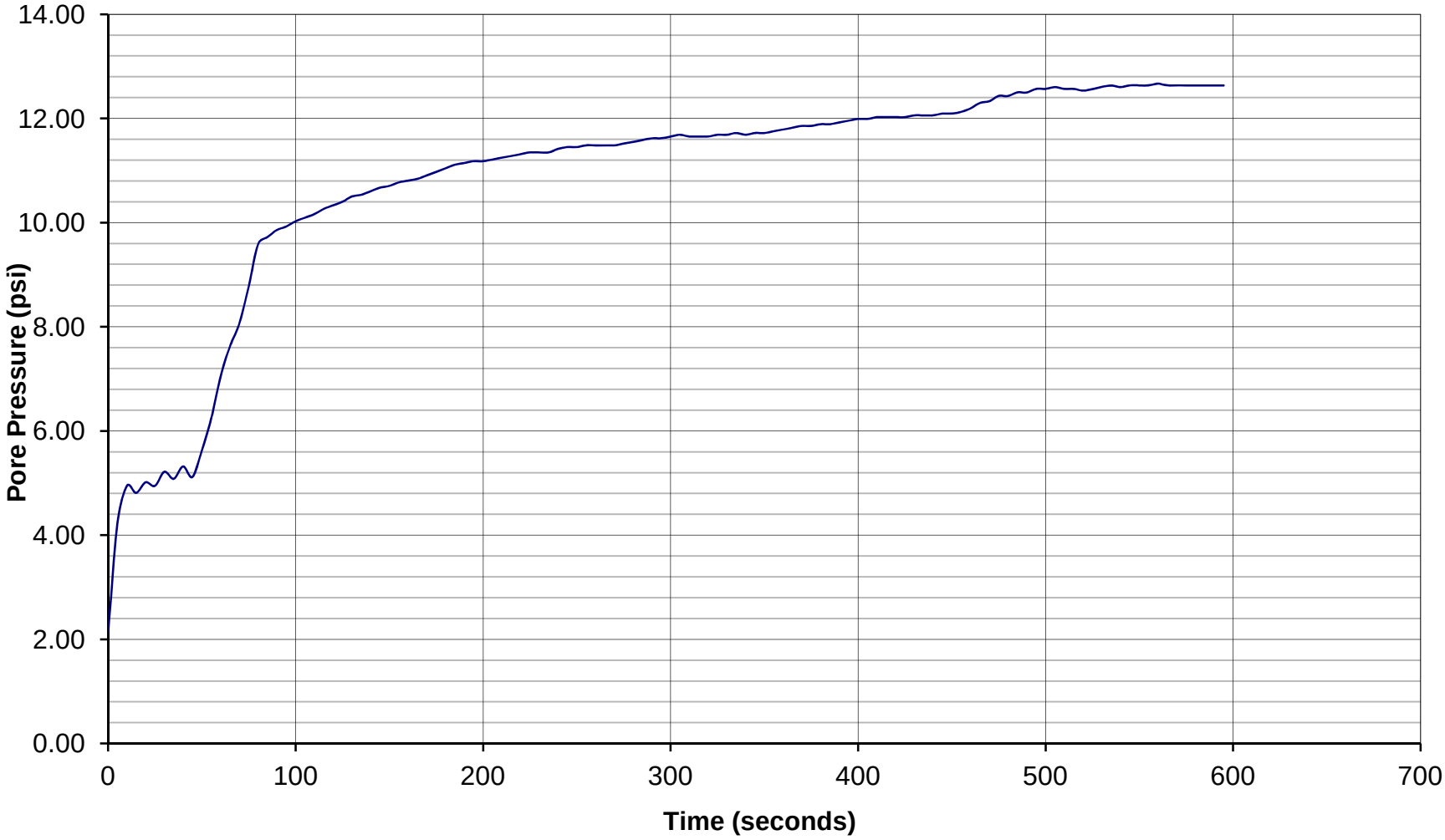
Sounding: S0034ACPT
Depth: 95.14 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

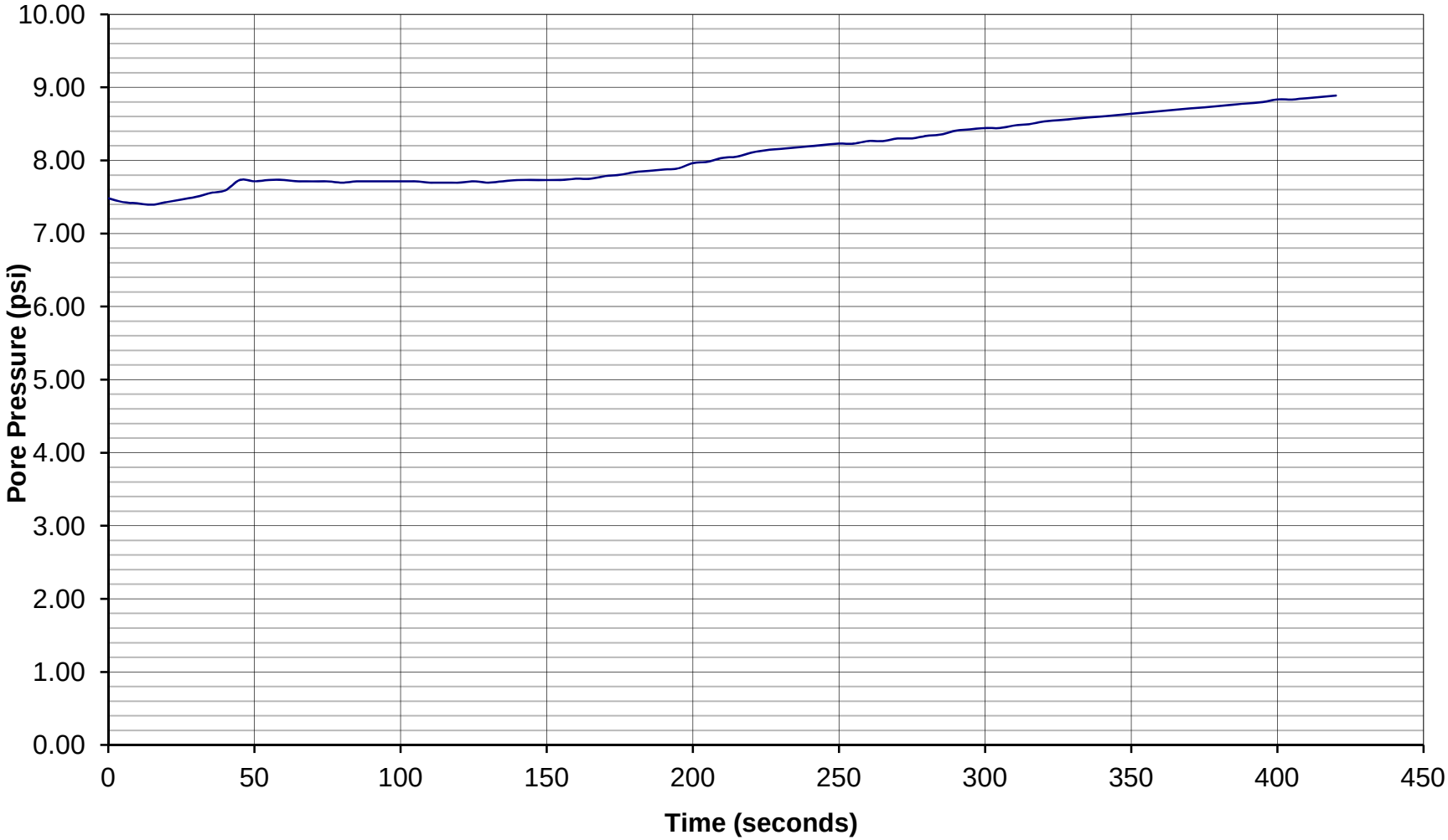
Sounding: S0035CPT
Depth: 94 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

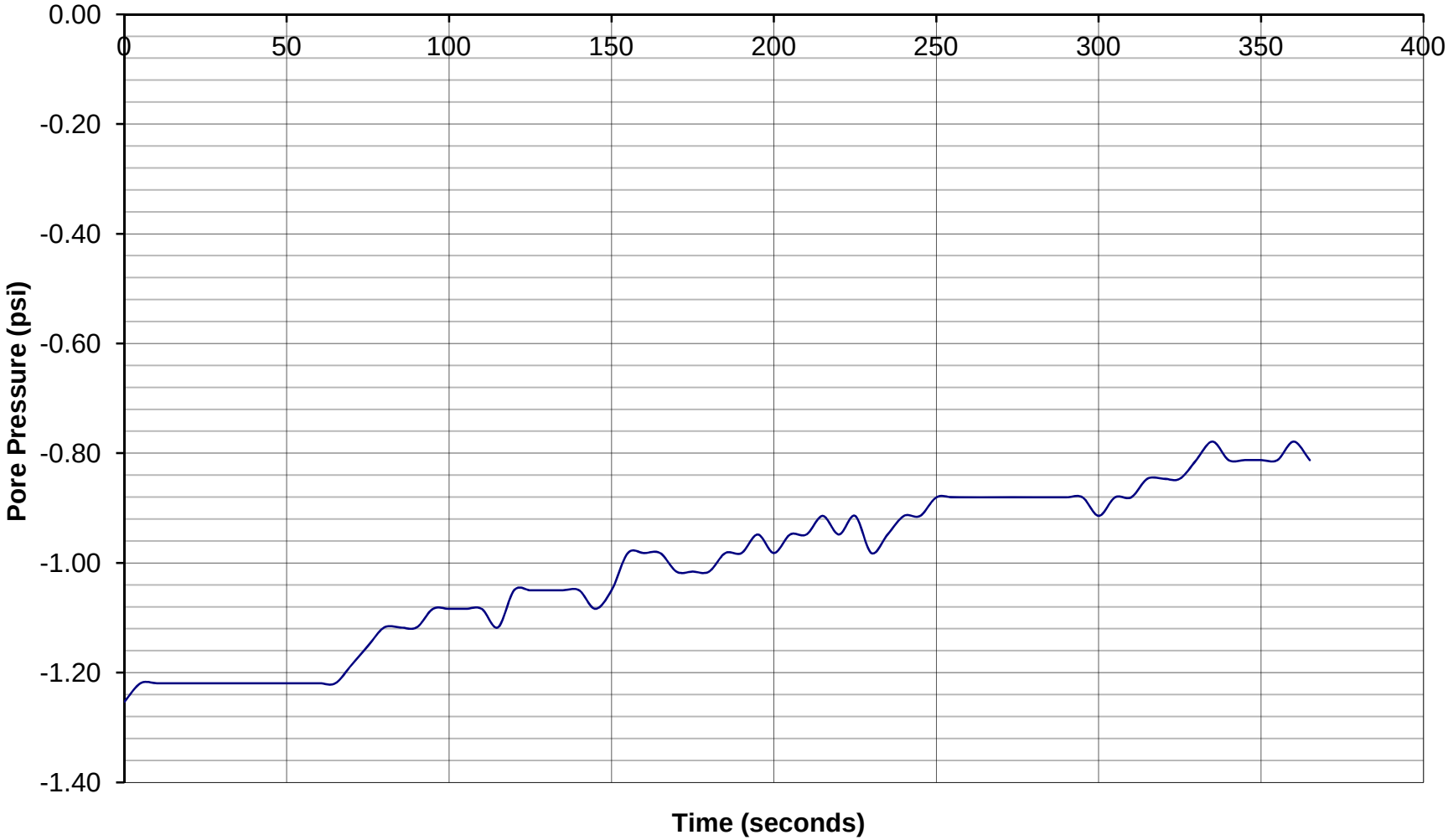
Sounding: S0036ACPT
Depth: 100.39 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

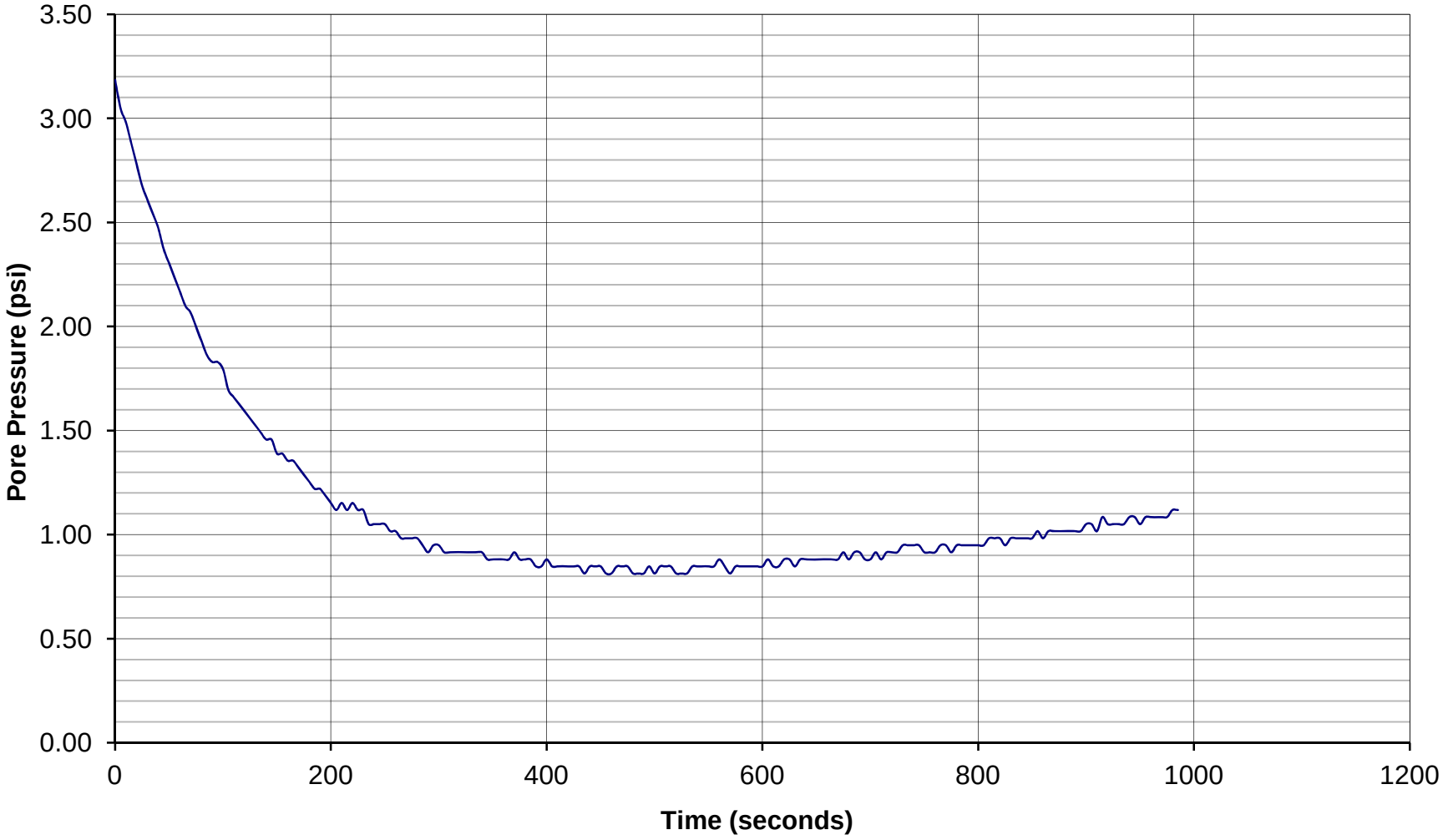
Sounding: S0037CPT
Depth: 24.11 feet
Site: Fresno
Engineer: B. Kluzniak



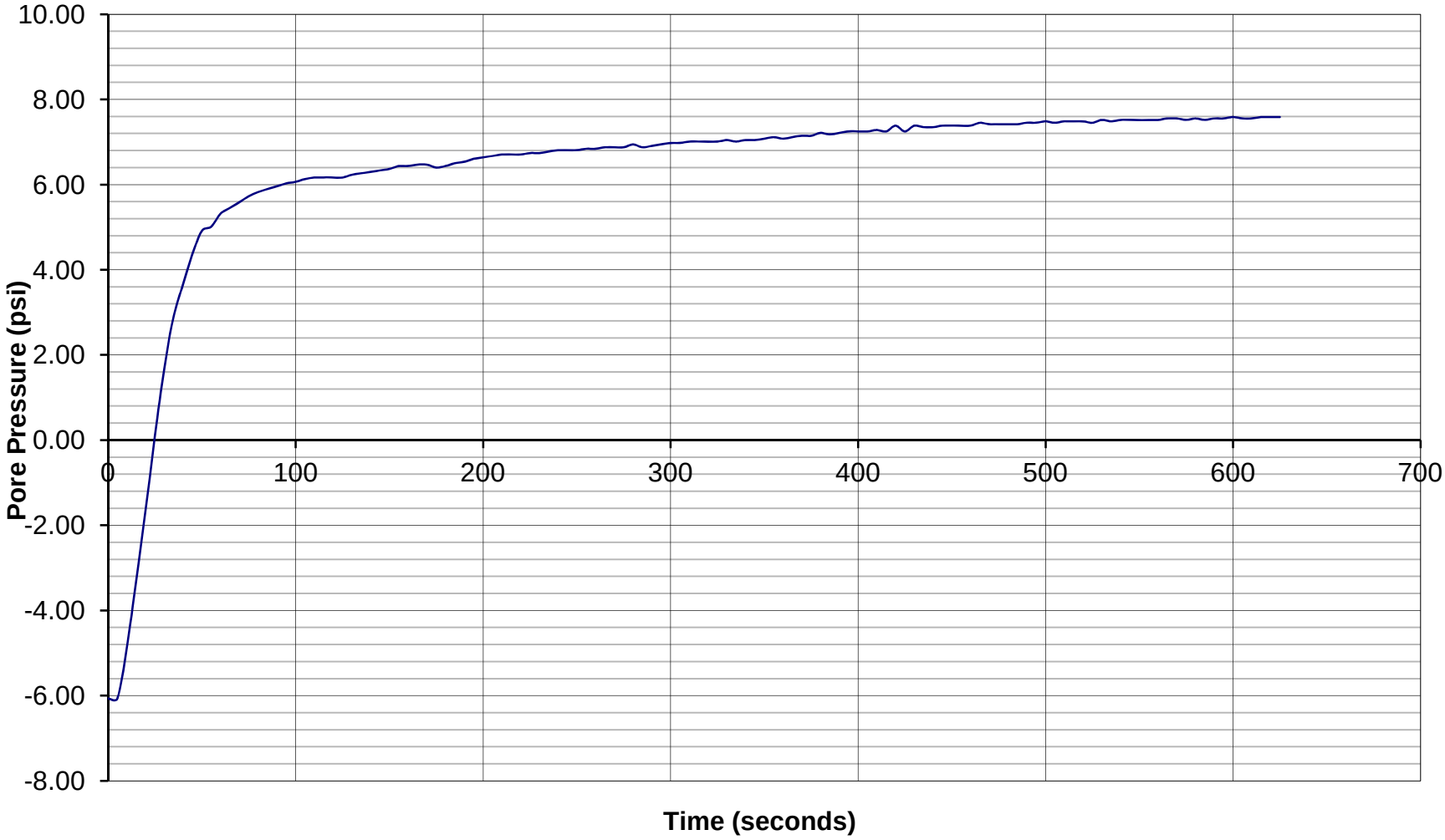
GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

Sounding: S0037CPT
Depth: 80.05 feet
Site: Fresno
Engineer: B. Kluzniak



GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

Sounding: S0041CPT
Depth: 80.22 feet
Site: Fresno
Engineer: B. Kluzniak