STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SF-650053	1	6

REFERENCE: SF-650053

PROJECT: BP1.R017

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

STRUCTURE SUBSURFACE INVESTIGATION

COUNTY NORTHAMPTON

PROJECT DESCRIPTION BRIDGE NO. 53 ON -L- (SR 1312) OVER OCCONEECHEE CREEK AT STA. 14+62.5

REVISED

CONTENTS

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO PERFORM INDEPENDENT SUBSURFACE INVESTIGATIONS AND MAKE INTERPRETATIONS AS NECESSARY TO CONFIRM CONDITIONS ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
2. BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

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T.W. MILLER

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INVESTIGATED BY T.C. BOTTOMS

DRAWN BY T.W. MILLER

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE MARCH 2024

NORTH CAROLINA LICENSED SEAL 2240 GEOLOGIST TYLER C. BOTTOMS

DocuSigned by:
Tyler C. Bottoms
48A2D3BD08CF4A6...
SIGNATURE

04/11/2024
DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
SF-650053	2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION

SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE,

VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)							SILT-CLAY MATERIALS (> 35% PASSING #200)				ORGANIC MATERIALS		
GROUP CLASS.	A-1		A-3	A-2				A-4	A-5	A-6	A-7	A-1, A-2 A-3	A-4, A-5 A-6, A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6			
SYMBOL														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX		50 MX 25 MX	51 MN 10 MX	35 MX	35 MX	35 MX	35 MX	36 MN	36 MN	36 MN	36 MN	GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT
MATERIAL PASSING #40 LL PI	6 MX		—	—	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
GROUP INDEX	0		0		0		4 MX		8 MX	12 MX	16 MX	NO MX			
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND					SILTY SOILS		CLAYEY SOILS				
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD								FAIR TO POOR				FAIR TO POOR	POOR	UNSUITABLE

PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30

CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTENCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH ($TONS/FT^2$)
GENERALLY GRANULAR MATERIAL (NON-COHESIVE)	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	< 4 4 TO 10 10 TO 30 30 TO 50 > 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	< 2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 > 30	< 0.25 0.25 TO 0.5 0.5 TO 1.0 1 TO 2 2 TO 4 > 4

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE	4	10	40	60	200	270
OPENING (MM)	4.76	2.00	0.42	0.25	0.075	0.053

BOULDER (BLDR.)	COBBLE (COB.)	GRAVEL (GR.)	COARSE SAND (CSE. SD.)	FINE SAND (F SD.)	SILT (SL.)	CLAY (CL.)

GRAIN SIZE	MM	305	75	2.0	0.25	0.05	0.005
	IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE SCALE (ATTERBERG LIMITS)	FIELD MOISTURE DESCRIPTION	GUIDE FOR FIELD MOISTURE DESCRIPTION
	- SATURATED - (SAT.)	USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE
LL — LIQUID LIMIT		
PLASTIC RANGE (PI)	- WET - (W)	SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
PL — PLASTIC LIMIT		
OM — OPTIMUM MOISTURE SL — SHRINKAGE LIMIT	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE

PLASTICITY

	PLASTICITY INDEX (PI)	DRY STRENGTH
NON PLASTIC	0-5	VERY LOW
SLIGHTLY PLASTIC	6-15	SLIGHT
MODERATELY PLASTIC	16-25	MEDIUM
HIGHLY PLASTIC	26 OR MORE	HIGH

COLOR

DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY), MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.

GRADATION

WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE.
UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE.
GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.

ANGULARITY OF GRAINS

THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.

MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.

COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE	LL < 31
MODERATELY COMPRESSIBLE	LL = 31 - 50
HIGHLY COMPRESSIBLE	LL > 50

PERCENTAGE OF MATERIAL

ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL	
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE	1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY	35% AND ABOVE

GROUND WATER

- WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
- STATIC WATER LEVEL AFTER 24 HOURS
- PW — PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA
- SPRING OR SEEP

MISCELLANEOUS SYMBOLS

- ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION
- SOIL SYMBOL
- ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT
- INFERRED SOIL BOUNDARY
- INFERRED ROCK LINE
- ALLUVIAL SOIL BOUNDARY
- 25/025 — DIP & DIP DIRECTION OF ROCK STRUCTURES
- SPT, DPT, DMT, VST PMT — TEST BORING
- AUGER BORING
- CORE BORING
- MW — MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

RECOMMENDATION SYMBOLS

- UNDERCUT
- SHALLOW UNDERCUT
- UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE
- UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK
- UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL

ABBREVIATIONS

AR - AUGER REFUSAL
BT - BORING TERMINATED
CL. - CLAY
CPT - CONE PENETRATION TEST
CSE. - COARSE
DMT - DILATOMETER TEST
DPT - DYNAMIC PENETRATION TEST
e - VOID RATIO
F - FINE
FOSS. - FOSSILIFEROUS
FRAC. - FRACTURED, FRACTURES
FRAGS. - FRAGMENTS
HI. - HIGHLY
MED. - MEDIUM
MICA. - MICACEOUS
MOD. - MODERATELY
NP - NON PLASTIC
ORG. - ORGANIC
PMT - PRESSUREMETER TEST
SAP. - SAPROLITIC
SD. - SAND, SANDY
SL. - SILT, SILTY
SLI. - SLIGHTLY
TCR - TRICONE REFUSAL
w - MOISTURE CONTENT
V - VERY
VST - VANE SHEAR TEST
WEA. - WEATHERED
γ - UNIT WEIGHT
γ_d - DRY UNIT WEIGHT

SAMPLE ABBREVIATIONS

S - BULK
SS - SPLIT SPOON
ST - SHELBY TUBE
RS - ROCK
RT - RECOMPACTED TRIAXIAL
CBR - CALIFORNIA BEARING RATIO

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- [X] CME-45C
- [ ] CME-55
- [ ] CME-550
- [ ] VANE SHEAR TEST
- [ ] PORTABLE HOIST
- [ ] _____
- [ ] _____

ADVANCING TOOLS:
- [ ] CLAY BITS
- [ ] 6" CONTINUOUS FLIGHT AUGER
- [ ] 8" HOLLOW AUGERS
- [ ] HARD FACED FINGER BITS
- [ ] TUNG.-CARBIDE INSERTS
- [X] CASING [ ] W/ ADVANCER
- [X] TRICONE 2 15/16" STEEL TEETH
- [ ] TRICONE _____" TUNG.-CARB.
- [ ] CORE BIT
- [ ] _____

HAMMER TYPE:
- [X] AUTOMATIC [ ] MANUAL

CORE SIZE:
- [ ] -B _____ [ ] -H _____
- [ ] -N _____

HAND TOOLS:
- [ ] POST HOLE DIGGER
- [ ] HAND AUGER
- [ ] SOUNDING ROD
- [ ] VANE SHEAR TEST
- [ ] _____

ROCK DESCRIPTION

HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK.
ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:

WEATHERED ROCK (WR)	NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
CRYSTALLINE ROCK (CR)	FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.
NON-CRYSTALLINE ROCK (NCR)	FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YEILD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.
COASTAL PLAIN SEDIMENTARY ROCK (CP)	COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

WEATHERING

FRESH	ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
VERY SLIGHT (V SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.
SLIGHT (SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
MODERATE (MOD.)	SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
MODERATELY SEVERE (MOD. SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. *IF TESTED, WOULD YIELD SPT REFUSAL*
SEVERE (SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF*
VERY SEVERE (V SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF*
COMPLETE	ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.

ROCK HARDNESS

VERY HARD	CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
HARD	CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.
MODERATELY HARD	CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.
MEDIUM HARD	CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.
SOFT	CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.
VERY SOFT	CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGERNAIL.

FRACTURE SPACING

TERM	SPACING
VERY WIDE	MORE THAN 10 FEET
WIDE	3 TO 10 FEET
MODERATELY CLOSE	1 TO 3 FEET
CLOSE	0.16 TO 1 FOOT
VERY CLOSE	LESS THAN 0.16 FEET

BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY BEDDED	0.16 - 1.5 FEET
VERY THINLY BEDDED	0.03 - 0.16 FEET
THICKLY LAMINATED	0.008 - 0.03 FEET
THINLY LAMINATED	< 0.008 FEET

INDURATION

FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.

FRIABLE	RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.
MODERATELY INDURATED	GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.
INDURATED	GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.
EXTREMELY INDURATED	SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.

TERMS AND DEFINITIONS

ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.

AQUIFER - A WATER BEARING FORMATION OR STRATA.

ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.

ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.

ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.

CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.

COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.

CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.

DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.

DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.

FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.

FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.

FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL.

FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.

FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.

JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.

LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.

LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.

MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.

PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.

RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.

ROCK QUALITY DESIGNATION (RQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.

SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.

SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.

STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.

STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.

STRATA ROCK QUALITY DESIGNATION (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.

TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

BENCH MARK: BL-3
N 972662.2280
E 2441287.2330 ELEVATION: 79.44 FEET

NOTES:

DATE: 8-15-14

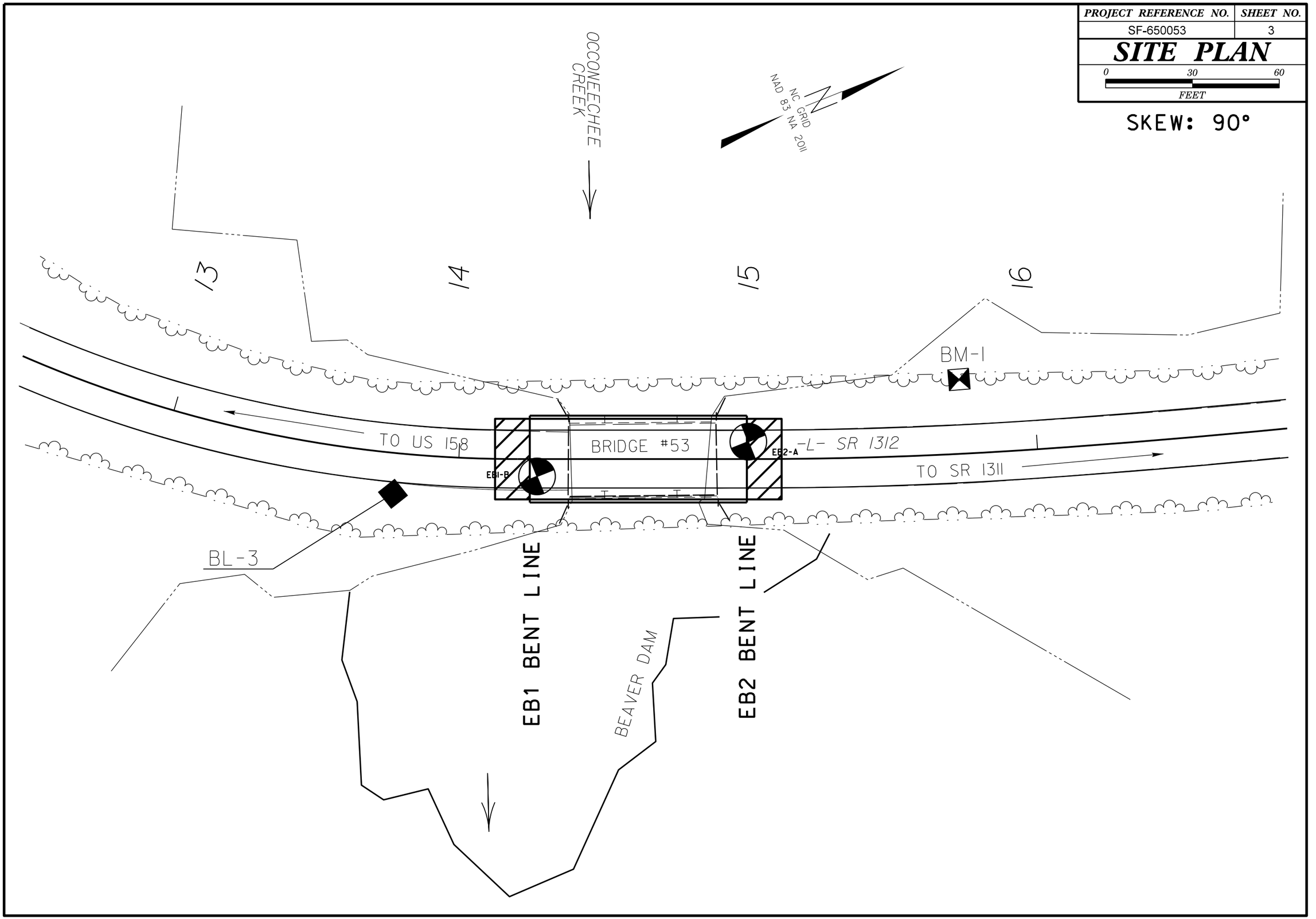
PROJECT REFERENCE NO.	SHEET NO.
SF-650053	3

SITE PLAN

0 30 60

FEET

SKEW: 90°



5/14/99

PROJECT REFERENCE NO.	SHEET NO.
SF-650053	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROFILE THROUGH BORINGS PROJECTED ALONG -L-

V.E. = 2

EB1-B
14+27
6' RT

EB2-A
15+00
6' LT

VERY SOFT TO SOFT GRAY SANDY CLAY WITH WOOD FRAGMENTS, MOIST TO WET (ALLUVIAL)

MEDIUM DENSE GRAY SAND WITH SHELL FRAGMENTS, SATURATED (ALLUVIAL)

SOFT TO MEDIUM STIFF GRAY SILTY CLAY WITH SHELL FRAGMENTS, WET (YORKTOWN FORMATION)

LOOSE TO MEDIUM DENSE GRAY SILTY SAND WITH SHELL FRAGMENTS, SATURATED (YORKTOWN FORMATION)

SOFT TO STIFF GRAY CLAYEY AND SANDY SILT, MOIST TO WET (ALLUVIAL)

GRAVEL, SATURATED (ALLUVIAL)

VERY STIFF TO HARD GRAY MICACEOUS CLAYEY AND SANDY SILT, WET (CAPE FEAR FORMATION)

VERY STIFF TO HARD MOTTLED PURPLE, GRAY, TAN, RED, AND BROWN SILTY CLAY, WET (CAPE FEAR FORMATION)

Ⓐ PAVEMENT

Ⓑ MEDIUM DENSE TAN AND ORANGE SILTY SAND, MOIST (ROADWAY EMBANKMENT)

NOTE: PROFILE ALONG GROUNDLINE -L- TAKEN FROM BRIDGE SURVEY AND HYDRAULIC REPORT DATED 3/28/2023

NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ONTO THE PROFILE

04-MAR-2024 10:25
S:\PROJECTS\Investigation\TIP\SF650053_GEO_BRDG00053_REV1\CADD_GEOTECH\PlanProf\650053_GEO_BRDG_PFL.dgn
$$$$USERNAME$$$$

GEOTECHNICAL BORING REPORT
BORE LOG

WBS BP1.R017.1	**TIP** SF-650053	**COUNTY** NORTHAMPTON	**GEOLOGIST** Miller, T. W.	
SITE DESCRIPTION BRIDGE NO. 53 ON -L- (SR 1312) OVER OCCONEECHEE CREEK				**GROUND WTR (ft)**
BORING NO. EB1-B	**STATION** 14+27	**OFFSET** 6 ft RT	**ALIGNMENT** -L-	**0 HR.** N/A
COLLAR ELEV. 79.9 ft	**TOTAL DEPTH** 104.4 ft	**NORTHING** 972,711	**EASTING** 2,441,300	**24 HR.** 4.8
DRILL RIG/HAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		**DRILL METHOD** Mud Rotary	**HAMMER TYPE** Automatic	
DRILLER Walker, C. M.	**START DATE** 06/29/22	**COMP. DATE** 06/29/22	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft) — DEPTH (ft)
80										
	79.9	0.0	8	9	6	15				79.9 — GROUND SURFACE — 0.0
										78.9 — PAVEMENT — 1.0
75	75.9	4.0	6	2	1	3				76.9 — **ROADWAY EMBANKMENT** TAN AND ORANGE SILTY SAND WITH GRAVEL, MOIST — 3.0 **ALLUVIAL** GRAY SANDY CLAY WITH WOOD FRAGMENTS, MOIST TO WET
	72.0	7.9	WOH	WOH	WOH	0				
70										
	67.0	12.9	4	6	6	12				68.9 — GRAY SAND WITH GRAVEL, SATURATED — 11.0
65										
	62.0	17.9	1	1	2	3				63.9 — **COASTAL PLAIN** BLUE-GRAY SILTY CLAY WITH SHELL FRAGMENTS, WET (YORKTOWN FORMATION) — 16.0
60										
	57.0	22.9	2	2	4	6				
55										
	52.0	27.9	6	5	5	10				53.9 — GRAY SILTY SAND WITH SHELL FRAGMENTS, SATURATED (YORKTOWN FORMATION) — 26.0
50										
	47.0	32.9	4	5	3	8				
45										
	42.0	37.9	2	2	2	4				
40										38.9 — GRAY MICACEOUS CLAYEY AND SANDY SILT, WET (CAPE FEAR FORMATION) — 41.0
	37.0	42.9	4	6	10	16				
35										
	32.0	47.9	7	8	10	18				
30										
	27.0	52.9	7	8	12	20				
25										
	22.0	57.9	6	10	15	25				
20										
	17.0	62.9	11	14	21	35				
15										
	12.0	67.9	8	10	17	27				
10										
	7.0	72.9	8	12	16	28				
5										
	2.0	77.9	9	12	16	28				
0										

WBS BP1.R017.1	**TIP** SF-650053	**COUNTY** NORTHAMPTON	**GEOLOGIST** Miller, T. W.	
SITE DESCRIPTION BRIDGE NO. 53 ON -L- (SR 1312) OVER OCCONEECHEE CREEK				**GROUND WTR (ft)**
BORING NO. EB1-B	**STATION** 14+27	**OFFSET** 6 ft RT	**ALIGNMENT** -L-	**0 HR.** N/A
COLLAR ELEV. 79.9 ft	**TOTAL DEPTH** 104.4 ft	**NORTHING** 972,711	**EASTING** 2,441,300	**24 HR.** 4.8
DRILL RIG/HAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		**DRILL METHOD** Mud Rotary	**HAMMER TYPE** Automatic	
DRILLER Walker, C. M.	**START DATE** 06/29/22	**COMP. DATE** 06/29/22	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
0						Match Line				GRAY MICACEOUS CLAYEY AND SANDY SILT, WET (CAPE FEAR FORMATION) *(continued)*
	-3.0	82.9	9	8	14	22				-6.1 — 86.0
-5										PURPLE, GRAY, TAN, AND BROWN MOTTLED MICACEOUS SILTY CLAY, WET (CAPE FEAR FORMATION)
	-8.0	87.9	12	16	19	35				
-10										
	-13.0	92.9	13	14	17	31				
-15										
	-18.0	97.9	7	9	12	21				
-20										
	-23.0	102.9	8	10	10	20				-24.5 — 104.4
										Boring Terminated at Elevation -24.5 ft IN VERY STIFF SILTY CLAY
										SHELBY TUBE ST-1 COLLECTED AT -L- STA. 14+24, 6' RT. PUSHED FROM DEPTH 7.9' TO 9.4'.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS BP1.R017.1	**TIP** SF-650053	**COUNTY** NORTHAMPTON	**GEOLOGIST** Miller, T. W.	
SITE DESCRIPTION BRIDGE NO. 53 ON -L- (SR 1312) OVER OCCONEECHEE CREEK				**GROUND WTR (ft)**
BORING NO. EB2-A	**STATION** 15+00	**OFFSET** 6 ft LT	**ALIGNMENT** -L-	**0 HR.** N/A
COLLAR ELEV. 79.8 ft	**TOTAL DEPTH** 99.5 ft	**NORTHING** 972,783	**EASTING** 2,441,316	**24 HR.** 3.3
DRILL RIG/HAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		**DRILL METHOD** Mud Rotary	**HAMMER TYPE** Automatic	
DRILLER Walker, C. M.	**START DATE** 06/29/22	**COMP. DATE** 06/30/22	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
80											
	79.0	0.8	6	5	9	14				79.8 GROUND SURFACE	0.0
75	75.7	4.1	1	1	1	2				79.0 PAVEMENT	0.8
	71.8	8.0	2	4	7	11				76.8 **ROADWAY EMBANKMENT** TAN AND ORANGE SILTY SAND WITH GRAVEL, MOIST **ALLUVIAL** GRAY CLAYEY AND SANDY SILT, MOIST TO WET	3.0
70	66.8	13.0	9	8	5	13				68.8 GRAY SAND WITH GRAVEL, SATURATED	11.0
65	61.8	18.0	1	2	2	4				63.8 **COASTAL PLAIN** BLUE-GRAY SILTY CLAY WITH SHELL FRAGMENTS, WET (YORKTOWN FORMATION)	16.0
60	56.8	23.0	2	3	3	6				53.8 GRAY SILTY SAND WITH SHELL FRAGMENTS, SATURATED (YORKTOWN FORMATION)	26.0
55	51.8	28.0	4	5	6	11					
50	46.8	33.0	4	2	3	5					
45	41.8	38.0	3	2	3	5				38.8 GRAY MICACEOUS CLAYEY SILT, WET (CAPE FEAR FORMATION)	41.0
40	36.8	43.0	5	5	10	15					
35	31.8	48.0	6	6	10	16					
30	26.8	53.0	6	9	12	21					
25	21.8	58.0	7	11	20	31					
20	16.8	63.0	9	12	17	29					
15	11.8	68.0	8	11	18	29					
10	6.8	73.0	9	13	18	31					
5	1.8	78.0	9	12	20	32					
0											

WBS BP1.R017.1	**TIP** SF-650053	**COUNTY** NORTHAMPTON	**GEOLOGIST** Miller, T. W.	
SITE DESCRIPTION BRIDGE NO. 53 ON -L- (SR 1312) OVER OCCONEECHEE CREEK				**GROUND WTR (ft)**
BORING NO. EB2-A	**STATION** 15+00	**OFFSET** 6 ft LT	**ALIGNMENT** -L-	**0 HR.** N/A
COLLAR ELEV. 79.8 ft	**TOTAL DEPTH** 99.5 ft	**NORTHING** 972,783	**EASTING** 2,441,316	**24 HR.** 3.3
DRILL RIG/HAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		**DRILL METHOD** Mud Rotary	**HAMMER TYPE** Automatic	
DRILLER Walker, C. M.	**START DATE** 06/29/22	**COMP. DATE** 06/30/22	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
0						Match Line				
-5	-3.2	83.0	7	11	17	28				
-10	-8.2	88.0	11	17	22	39				
-15	-13.2	93.0	9	12	18	30				
	-18.2	98.0	9	13	17	30				

-1.2 (81.0) PURPLE, GRAY, RED, AND BROWN MOTTLED SILTY CLAY, WET (CAPE FEAR FORMATION)

-19.7 (99.5) Boring Terminated at Elevation -19.7 ft IN VERY STIFF SILTY CLAY

SHELBY TUBE ST-2 COLLECTED AT -L- STA. 15+03, 6' LT. PUSHED FROM DEPTH 4.8' TO 6.3'.

APPENDIX 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY
MATERIALS & TESTS UNIT
SOILS LABORATORY

T. I. P. No. SF-650053

REPORT ON SAMPLES OF SOILS FOR QUALITY

Project BP1.R017.1 **County** NORTHAMPTON **Owner**

Date: Sampled 7/1/23 **Received** 1/18/24 **Reported** 1/29/24

Sampled from ROADWAY **By** T C BOTTOMS

Submitted by SURIYATI B S 2012 **Standard Specifications**

819167 TO 819168
3/4/24

TEST RESULTS

Proj. Sample No.		ST-1	ST-2				
Lab. Sample No.		819167	819168				
Retained #4 Sieve	%	-	-				
Passing #10 Sieve	%	99	99				
Passing #40 Sieve	%	96	97				
Passing #200 Sieve	%	65	68				

MINUS NO. 10 FRACTION

SOIL MORTAR - 100%							
Coarse Sand Ret - #60	%	8.9	6.7				
Fine Sand Ret - #270	%	32.1	32.3				
Silt 0.05 - 0.005 mm	%	22.6	28.7				
Clay < 0.005 mm	%	36.4	32.3				
T-#		6221	6222				
Sample		CON 3	CON 6				

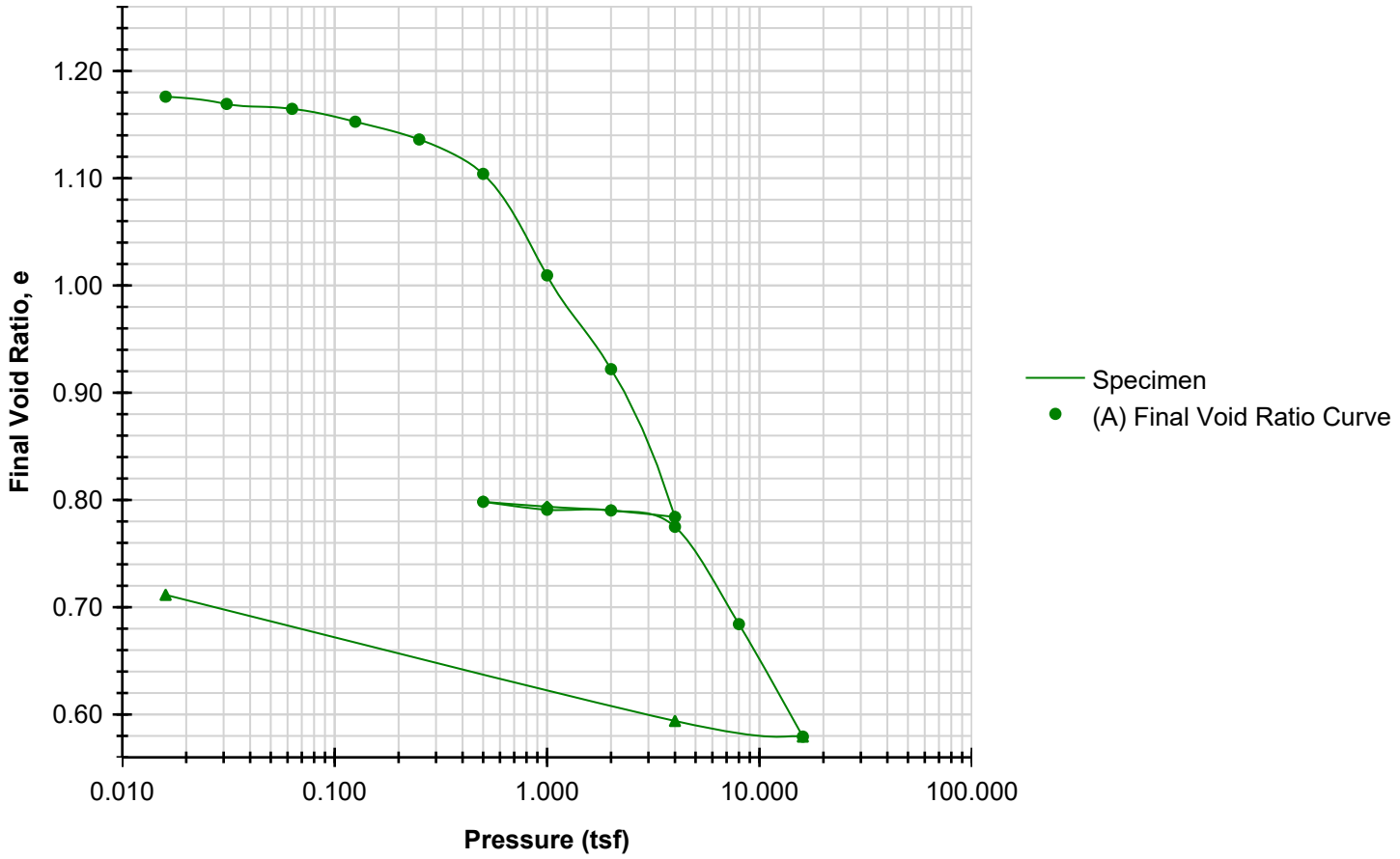
L. L.		34	26				
P. I.		14	9				
AASHTO Classification		A-6(7)	A-4(4)				
Station		14+24	15+03				
Offset		6' RT	6' LT				
Alignment		L	L				
Location							
Depth (Ft)		7.90	4.90				
	to	9.40	6.40				

cc: T C BOTTOMS
J PARK

Soils Engineer

Final Voids [Log]

ASTM D2435



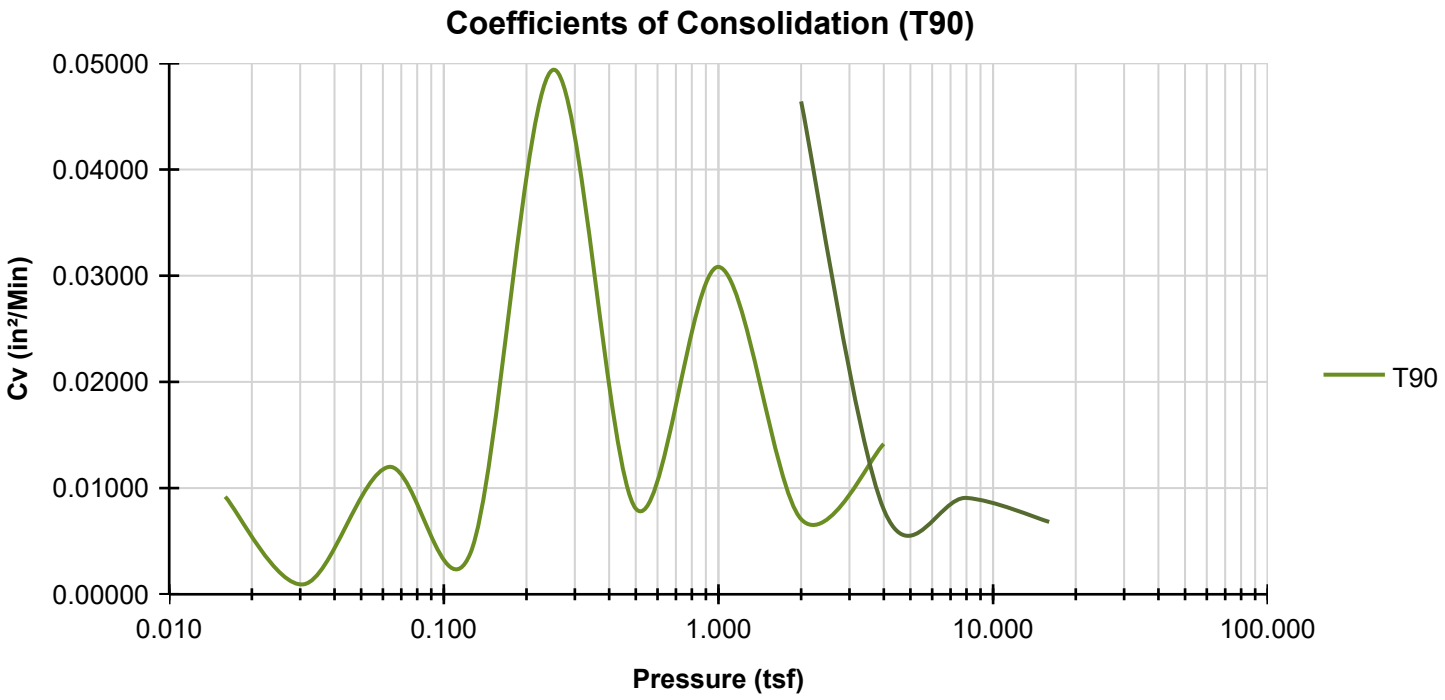
Preconsolidation Stress (tsf)	0.000	**Cc**	0.000	**Cr**	0.000

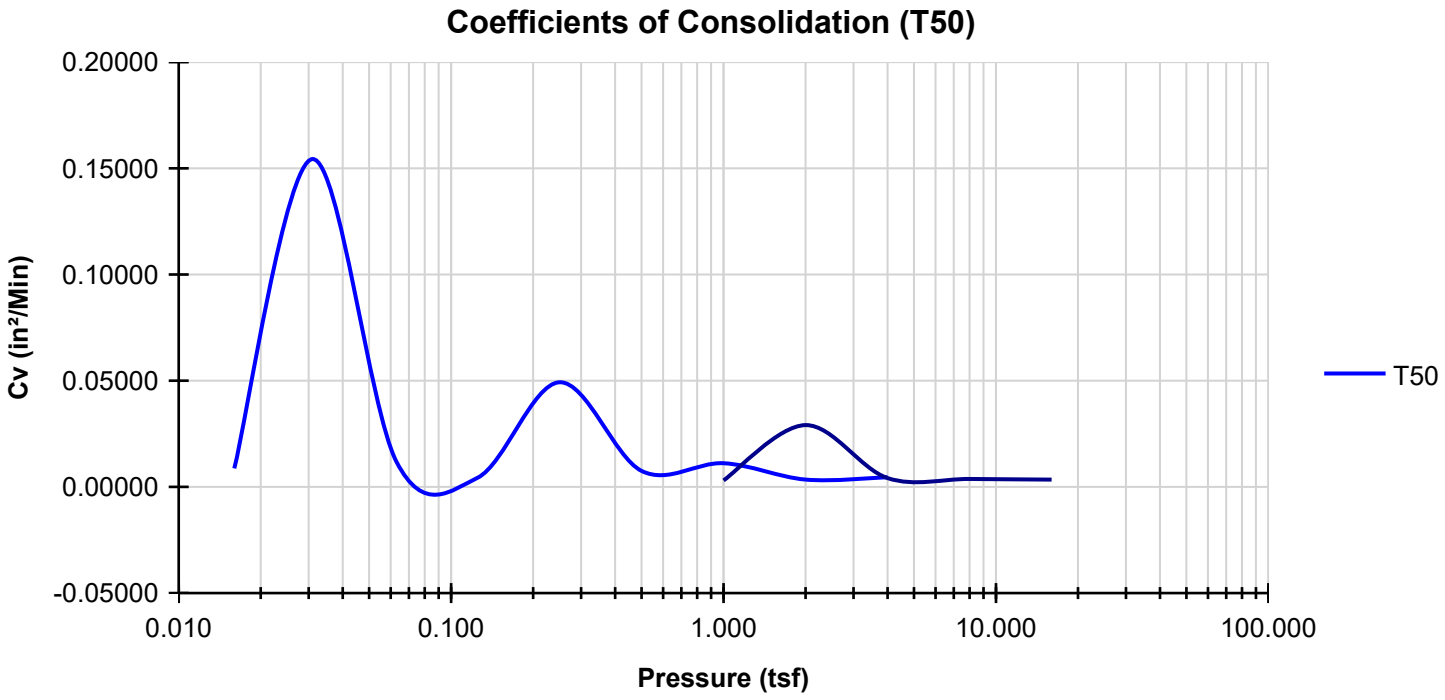
	BEFORE	AFTER			
			Liquid Limits	0	**Test Date** 1/16/2024
Moisture (%)	42.4	27.9	**Plastic Limits**	0	
Dry Density (pcf)	74.3	94.7			
Saturation (%)	93.1	101.4			
Void Ratio	1.18	0.71	**Specific Gravity**	2.6	MEASURED

Sample Description	Soft grey colored silty clay.			
Project Number	BP1.R017.1	**Depth (ft)**	7.9-9.4	**Remarks**
Sample Number	ST-1	**Boring Number**		
Project	T-6221			
Client	SF-650053			
Location	STA 14+24 (NORTHAMPTON COUNTY)			

Coefficients of Consolidation

ASTM D2435





Summary

ASTM D2435

Sample Description	Soft grey colored silty clay.			
Project Number	BP1.R017.1	**Depth (ft)**	7.9-9.4	**Remarks**
Sample Number	ST-1	**Boring Number**		
Project	T-6221			
Client	SF-650053			
Location	STA 14+24 (NORTHAMPTON COUNTY)			

Index	Loading Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Voids (in)	Vertical Strain (%)	Void Ratio	T90 Fitting Time (Hr)	T50 Fitting Time (Hr)	T90 Cv (in²/Min)	T50 Cv (in²/Min)	Sequence Status
0	0.000	0.0000	0.9997	0.0000	0.0	1.184	0.000	0.000	0.00000	0.00000	ENABLED
1	0.016	0.0019	0.9978	0.5392	0.2	1.176	0.383	0.094	0.00919	0.00871	ENABLED
2	0.031	0.0050	0.9947	0.5361	0.5	1.169	3.694	0.005	0.00095	0.15436	ENABLED
3	0.063	0.0071	0.9926	0.5340	0.7	1.165	0.290	0.068	0.01199	0.01182	ENABLED
4	0.125	0.0126	0.9871	0.5285	1.3	1.153	0.888	0.186	0.00388	0.00429	ENABLED
5	0.250	0.0202	0.9795	0.5209	2.0	1.136	0.069	0.016	0.04939	0.04926	ENABLED
6	0.500	0.0349	0.9648	0.5062	3.5	1.104	0.408	0.097	0.00807	0.00752	ENABLED
7	1.000	0.0783	0.9214	0.4628	7.8	1.009	0.097	0.063	0.03083	0.01114	ENABLED
8	2.000	0.1184	0.8813	0.4227	11.8	0.922	0.388	0.186	0.00707	0.00344	ENABLED
9	4.000	0.1816	0.8181	0.3595	18.2	0.784	0.167	0.120	0.01416	0.00456	ENABLED
10	2.000	0.1788	0.8209	0.3623	17.9	0.790	0.000	0.000	0.00000	0.00000	ENABLED
11	1.000	0.1772	0.8225	0.3639	17.7	0.794	0.000	0.000	0.00000	0.00000	ENABLED
12	0.500	0.1751	0.8246	0.3660	17.5	0.798	0.000	0.000	0.00000	0.00000	ENABLED
13	1.000	0.1785	0.8212	0.3626	17.9	0.791	0.327	0.181	0.00000	0.00305	ENABLED
14	2.000	0.1788	0.8209	0.3623	17.9	0.790	0.051	0.012	0.04641	0.02910	ENABLED
15	4.000	0.1858	0.8139	0.3553	18.6	0.775	0.294	0.131	0.00797	0.00414	ENABLED
16	8.000	0.2274	0.7723	0.3137	22.7	0.684	0.232	0.131	0.00907	0.00373	ENABLED

Summary

ASTM D2435

Index	Loading Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Voids (in)	Vertical Strain (%)	Void Ratio	T90 Fitting Time (Hr)	T50 Fitting Time (Hr)	T90 Cv (in²/Min)	T50 Cv (in²/Min)	Sequence Status
17	16.000	0.2755	0.7242	0.2656	27.6	0.579	0.272	0.126	0.00682	0.00342	ENABLED
18	4.000	0.2688	0.7309	0.2723	26.9	0.594	0.000	0.000	0.00000	0.00000	ENABLED
19	0.016	0.2149	0.7848	0.3262	21.5	0.712	0.000	0.000	0.00000	0.00000	ENABLED

Consolidated Test Results

ASTM D2435

Project:	T-6221
Project Number:	BP1.R017.1
Job Number:	T-6221
Test Date:	1/16/2024

Sampling Date:	1/16/2024
Sample Number:	ST-1
Depth (ft)	7.9-9.4
Boring Number:	
Location:	STA 14+24 (NORTHAMPTON COUNTY)
Client Name:	SF-650053
Remarks:	

Specific Gravity:	2.6	Plastic Limit:	0	Liquid Limit:	0
Specific Gravity Method:	MEASURED			Weight of Ring (g)	109.8
Sampling Method:		Soil Classification:			
Specimen Description:	Soft grey colored silty clay.				

Parameters	Initial	Final
Height (in)	0.9997	0.7848
Height Source	NA	TEST RESULTS
Diameter (in)	2.4997	NA
Area (in²)	4.907	NA
Volume (in³)	4.9058	3.8512
Weight of Container (g)	0.0	0.0
Weight of Wet Soil + Container (g)	136.3	122.4
Weight of Dry Soil + Container (g)	95.7	95.7
Moisture Content (%)	42.4	27.9
Moist Weight + Ring Weight (g)	246.0	232.1
Dry Density (pcf)	74.3	94.7
Wet Density (pcf)	105.8	121.1
Saturation (%)	93.1	101.4
Void Ratio	1.2	0.7

Consolidation Test Results

ASTM D2435

Specimen 1			
Test Description:			
Other Associated Tests:			
Device Details:			
Test Specification:			
Test Time:	1/16/2024 12:00:00 AM		
Technician:		Sampling Method:	
Specimen Code:		Specimen Lab #:	T-6221
Specimen Description:	Soft grey colored silty clay.		
Specimen Preparation:	Cutting Shoe		
Large Particle:			
Moisture Content:	Inundated		
Test Condition:			
Test Procedure:			
Seating Pressure Used:	NO	Seating Pressure (tsf):	0.000
Preconsolidation Stress:			
Percent Strain [LOG] Graph (tsf):	NA	Final Voids Graph (tsf):	0.000

Tabulated Data - Load Sequence 1 - 0.016 tsf

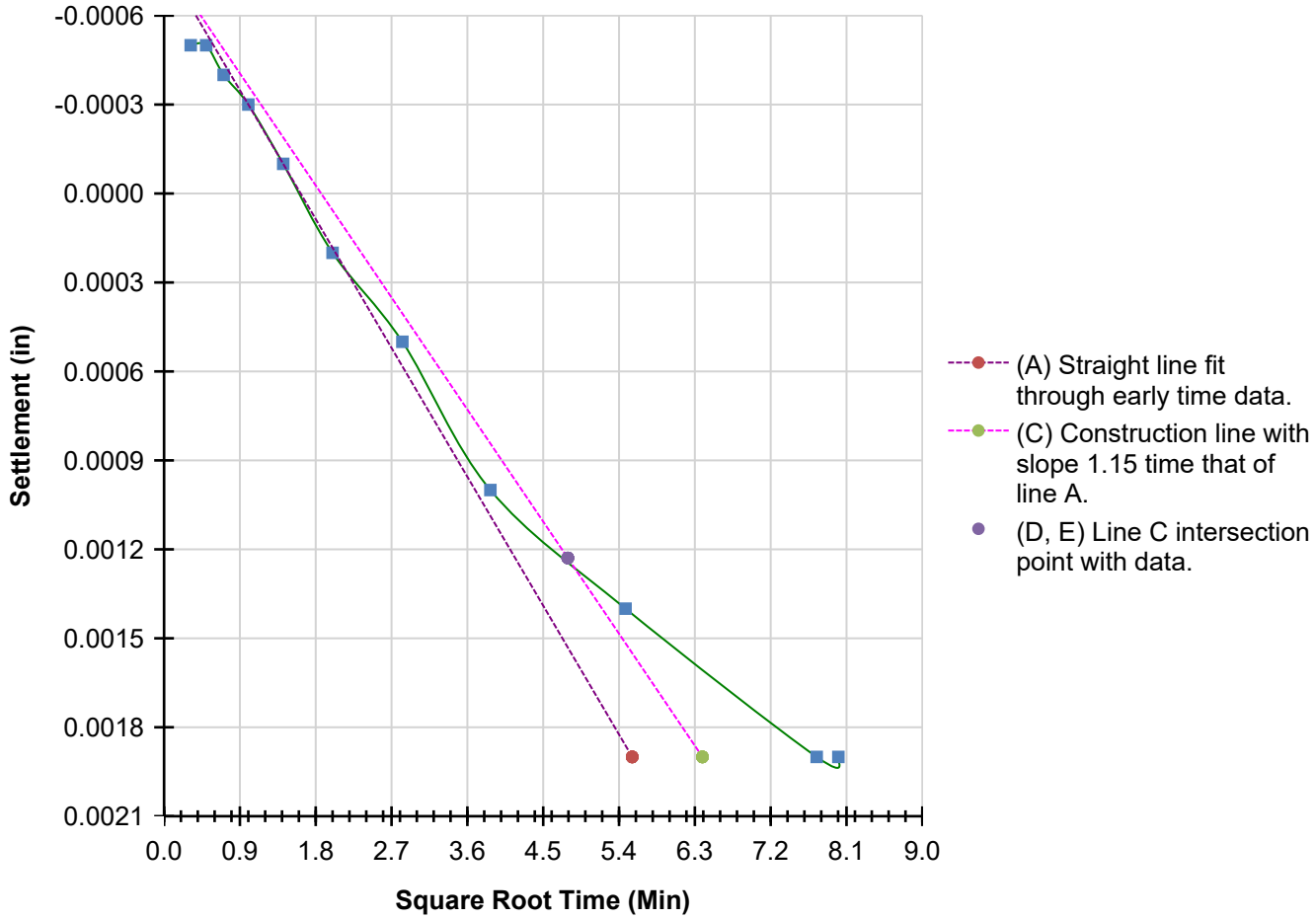
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0004	0.0000	0.0	1.184
1	00:00:06	0.0	0.0006	-0.0005	-0.1	1.181
2	00:00:15	0.0	0.0006	-0.0005	-0.1	1.181
3	00:00:30	0.0	0.0007	-0.0004	0.0	1.181
4	00:01:00	0.0	0.0008	-0.0003	0.0	1.181
5	00:02:00	0.0	0.0010	-0.0001	0.0	1.180
6	00:04:00	0.0	0.0013	0.0002	0.0	1.180
7	00:08:00	0.0	0.0016	0.0005	0.1	1.179
8	00:15:00	0.0	0.0021	0.0010	0.1	1.178
9	00:30:00	0.0	0.0025	0.0014	0.1	1.177
10	01:00:00	0.0	0.0030	0.0019	0.2	1.176
11	01:04:03	0.0	0.0030	0.0019	0.2	1.176

Square Root Time [1] 0.016 tsf

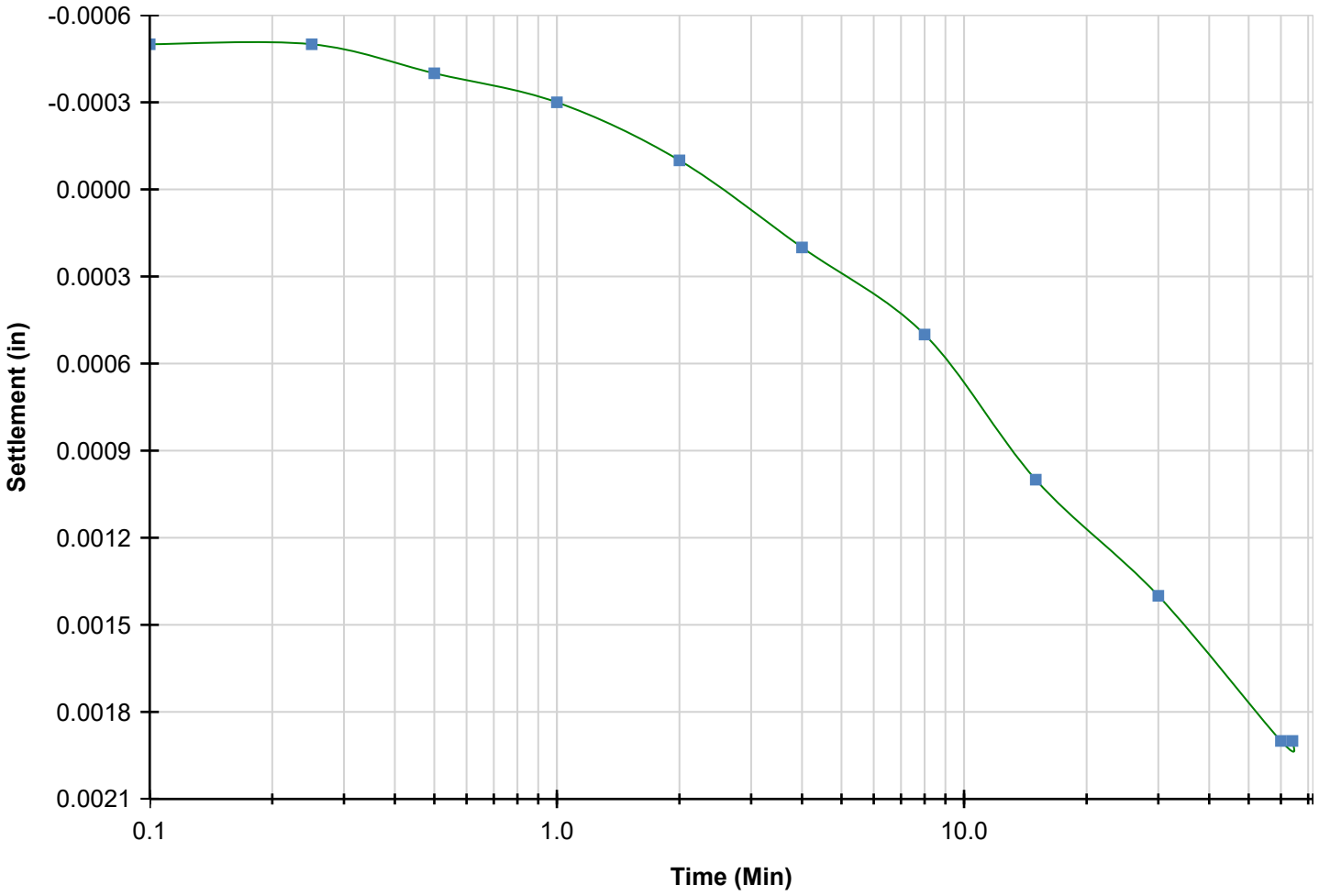
ASTM D2435



Tangent Construction Results	
T90 (Min)	22.964
T50 (Min)	5.628
Cv (in²/Min)	0.0092

Logarithmic Time [1] 0.016 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 2 - 0.031 tsf

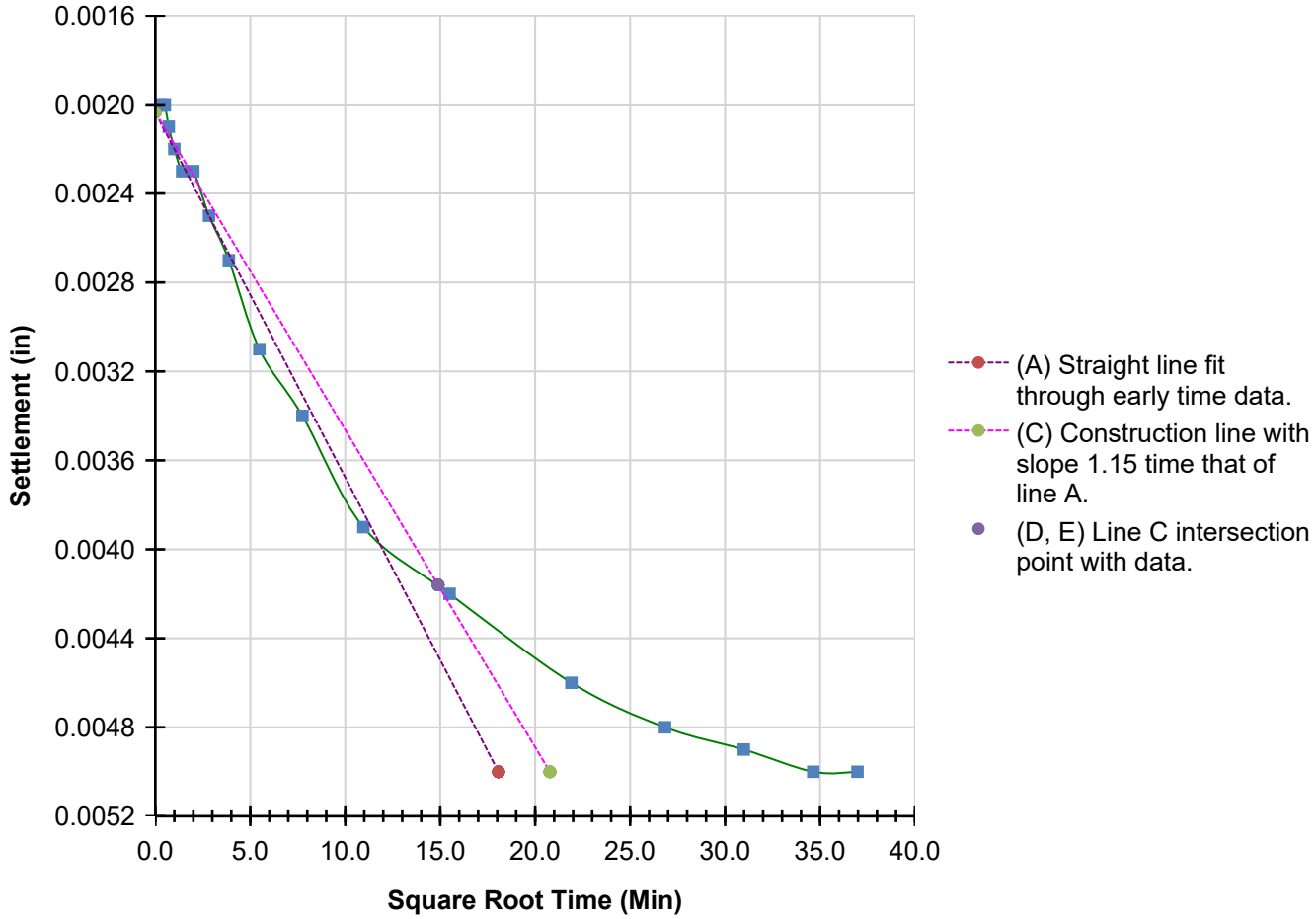
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0030	0.0019	0.2	1.176
1	00:00:06	0.0	0.0034	0.0020	0.2	1.176
2	00:00:15	0.0	0.0034	0.0020	0.2	1.176
3	00:00:30	0.0	0.0035	0.0021	0.2	1.176
4	00:01:00	0.0	0.0036	0.0022	0.2	1.175
5	00:02:00	0.0	0.0037	0.0023	0.2	1.175
6	00:04:00	0.0	0.0037	0.0023	0.2	1.175
7	00:08:00	0.0	0.0039	0.0025	0.3	1.175
8	00:15:00	0.0	0.0041	0.0027	0.3	1.174
9	00:30:00	0.0	0.0045	0.0031	0.3	1.173
10	01:00:00	0.0	0.0048	0.0034	0.3	1.173
11	02:00:00	0.0	0.0053	0.0039	0.4	1.172
12	04:00:00	0.0	0.0056	0.0042	0.4	1.171
13	08:00:00	0.0	0.0060	0.0046	0.5	1.170
14	12:00:00	0.0	0.0062	0.0048	0.5	1.170
15	16:00:00	0.0	0.0063	0.0049	0.5	1.170
16	20:00:00	0.0	0.0064	0.0050	0.5	1.169
17	22:46:43	0.0	0.0064	0.0050	0.5	1.169

Square Root Time [2] 0.031 tsf

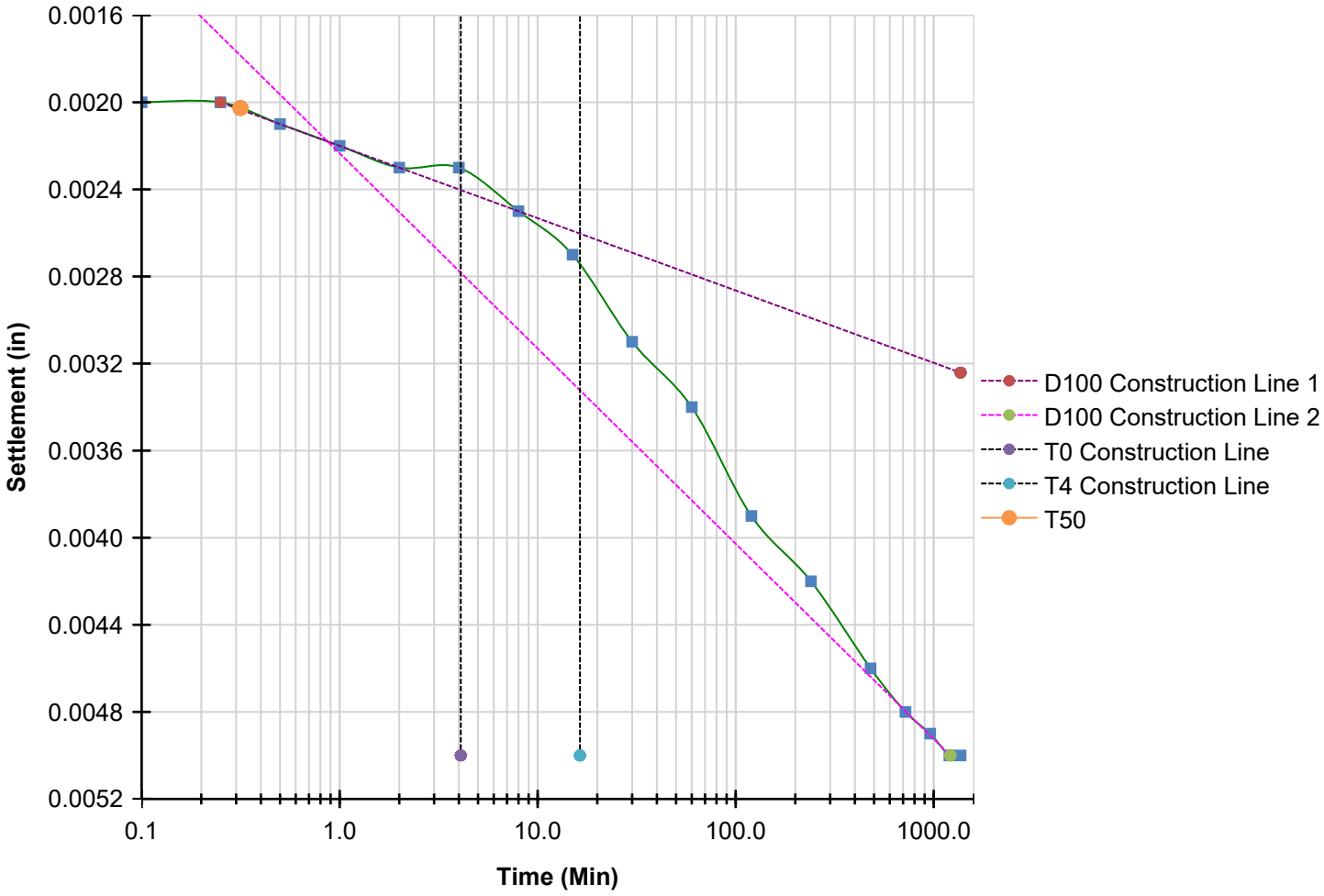
ASTM D2435



Tangent Construction Results	
T90 (Min)	221.661
T50 (Min)	40.371
Cv (in²/Min)	0.0009

Logarithmic Time [2] 0.031 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	0.316
Cv (in²/Min)	0.1544

Tabulated Data - Load Sequence 3 - 0.063 tsf

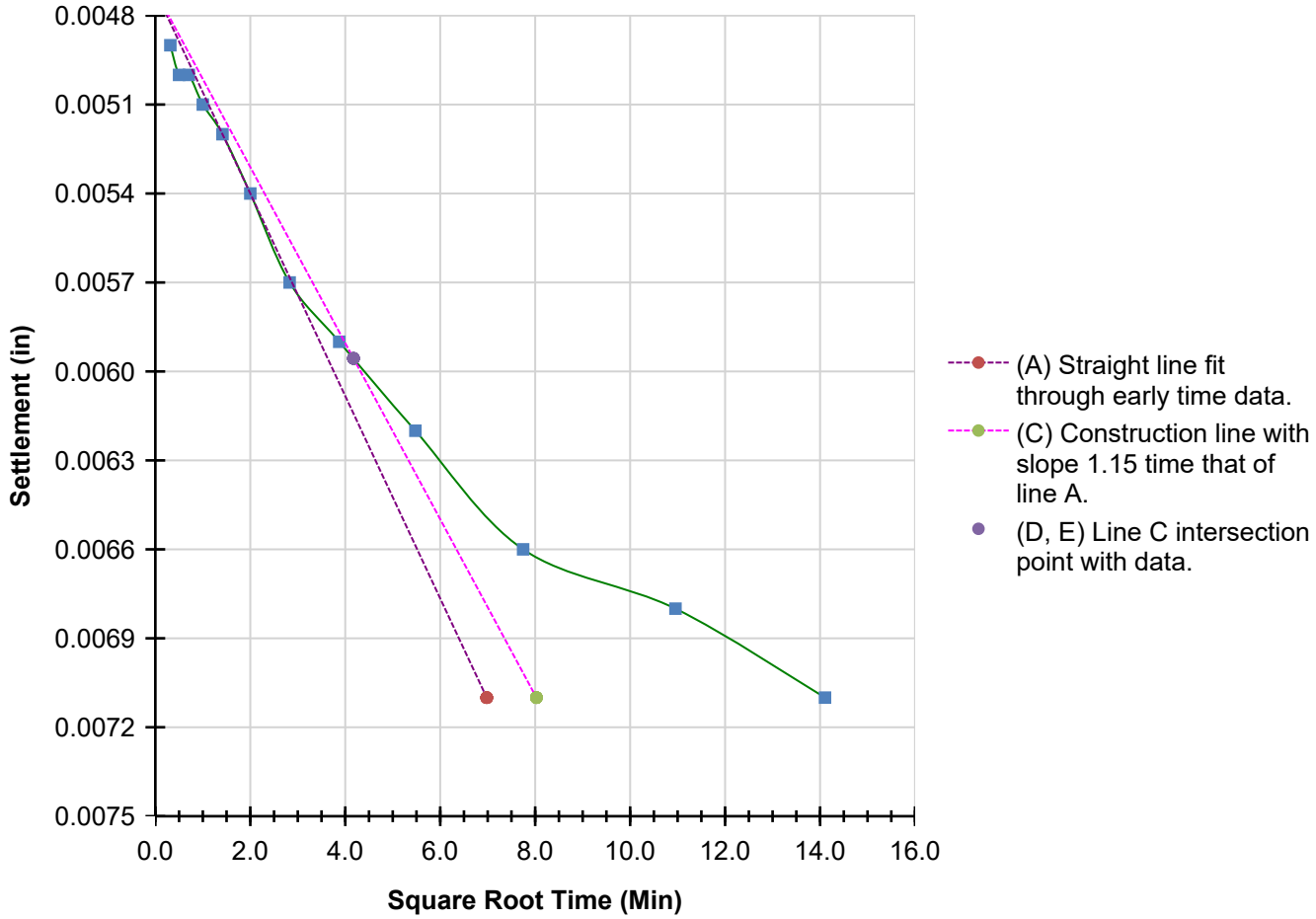
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0064	0.0050	0.5	1.169
1	00:00:06	0.0	0.0069	0.0049	0.5	1.170
2	00:00:15	0.0	0.0070	0.0050	0.5	1.169
3	00:00:30	0.0	0.0070	0.0050	0.5	1.169
4	00:01:00	0.0	0.0071	0.0051	0.5	1.169
5	00:02:00	0.0	0.0072	0.0052	0.5	1.169
6	00:04:00	0.0	0.0074	0.0054	0.5	1.168
7	00:08:00	0.0	0.0077	0.0057	0.6	1.168
8	00:15:00	0.0	0.0079	0.0059	0.6	1.167
9	00:30:00	0.0	0.0082	0.0062	0.6	1.167
10	01:00:00	0.0	0.0086	0.0066	0.7	1.166
11	02:00:00	0.0	0.0088	0.0068	0.7	1.165
12	03:18:55	0.0	0.0091	0.0071	0.7	1.165

Square Root Time [3] 0.063 tsf

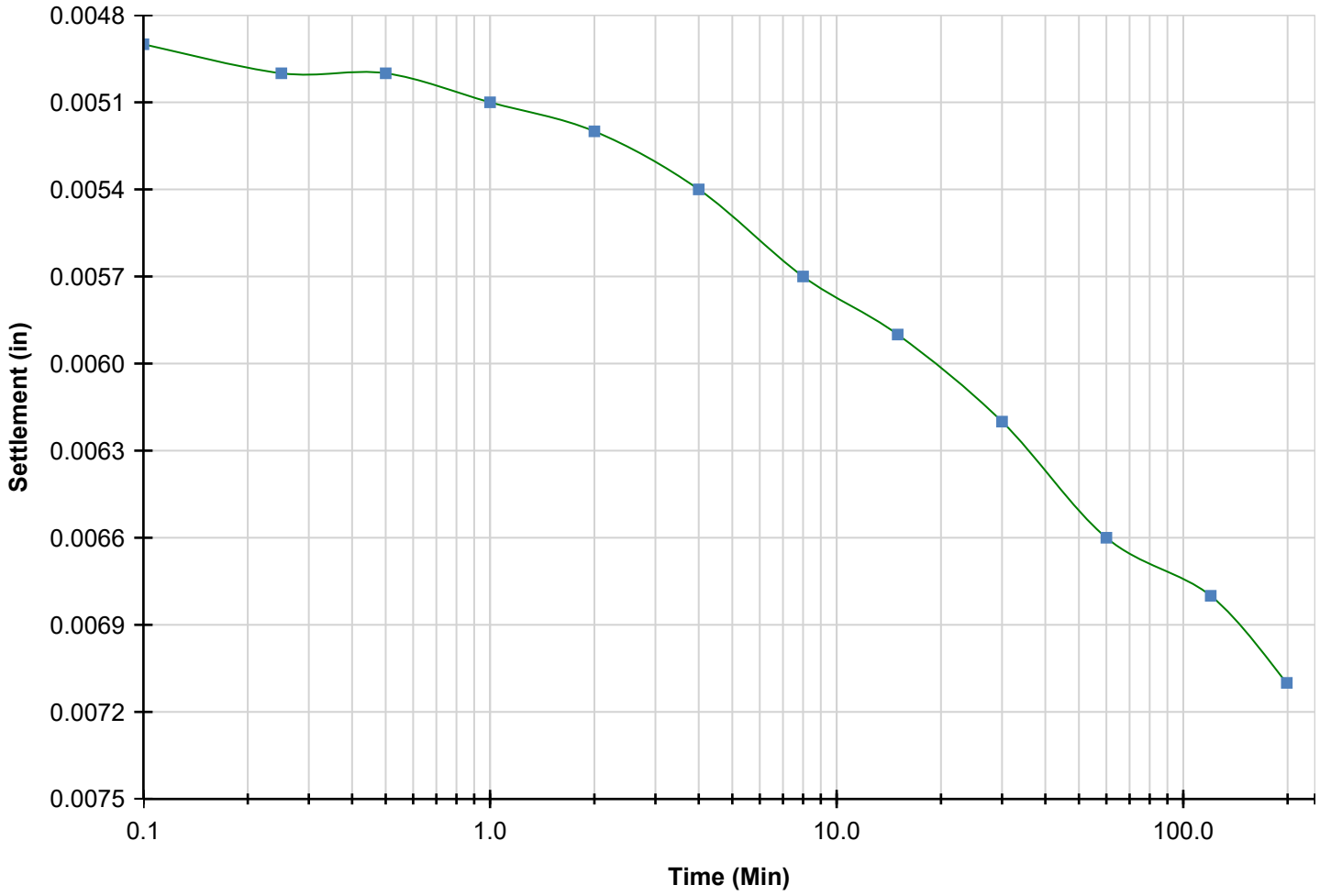
ASTM D2435



Tangent Construction Results	
T90 (Min)	17.417
T50 (Min)	4.059
Cv (in²/Min)	0.0120

Logarithmic Time [3] 0.063 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 4 - 0.125 tsf

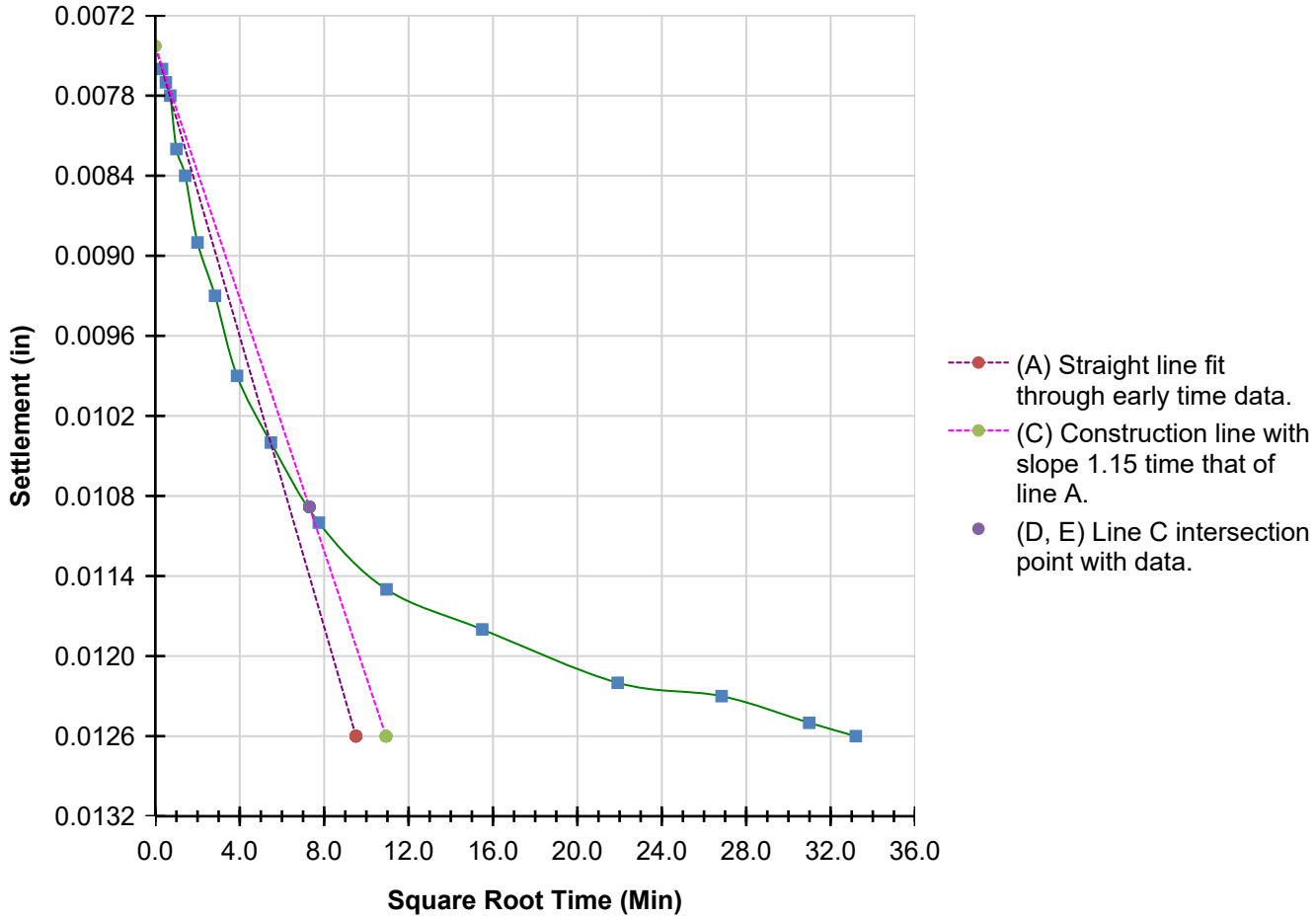
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0091	0.0071	0.7	1.165
1	00:00:06	0.0	0.0102	0.0076	0.8	1.164
2	00:00:15	0.0	0.0103	0.0077	0.8	1.163
3	00:00:30	0.0	0.0104	0.0078	0.8	1.163
4	00:01:00	0.0	0.0108	0.0082	0.8	1.162
5	00:02:00	0.0	0.0110	0.0084	0.8	1.162
6	00:04:00	0.0	0.0115	0.0089	0.9	1.161
7	00:08:00	0.0	0.0119	0.0093	0.9	1.160
8	00:15:00	0.0	0.0125	0.0099	1.0	1.159
9	00:30:00	0.0	0.0130	0.0104	1.0	1.158
10	01:00:00	0.0	0.0136	0.0110	1.1	1.156
11	02:00:00	0.0	0.0141	0.0115	1.2	1.155
12	04:00:00	0.0	0.0144	0.0118	1.2	1.154
13	08:00:00	0.0	0.0148	0.0122	1.2	1.154
14	12:00:00	0.0	0.0149	0.0123	1.2	1.153
15	16:00:00	0.0	0.0151	0.0125	1.3	1.153
16	18:21:48	0.0	0.0152	0.0126	1.3	1.153

Square Root Time [4] 0.125 tsf

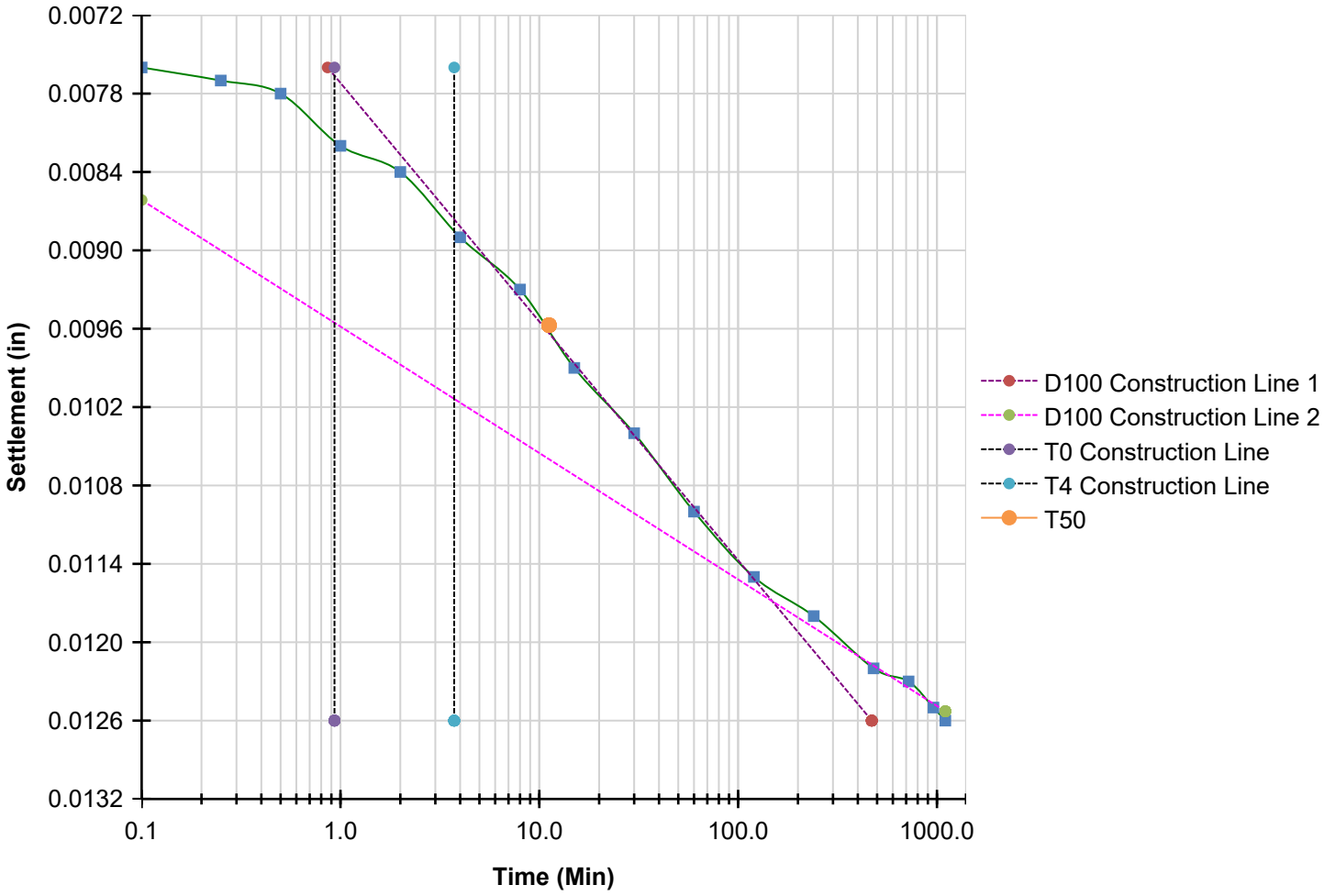
ASTM D2435



Tangent Construction Results	
T90 (Min)	53.286
T50 (Min)	8.478
Cv (in²/Min)	0.0039

Logarithmic Time [4] 0.125 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	11.186
Cv (in²/Min)	0.0043

Tabulated Data - Load Sequence 5 - 0.250 tsf

ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0152	0.0126	1.3	1.153
1	00:00:06	0.0	0.0169	0.0131	1.3	1.152
2	00:00:15	0.0	0.0171	0.0133	1.3	1.151
3	00:00:30	0.0	0.0173	0.0135	1.4	1.151
4	00:01:00	0.0	0.0176	0.0138	1.4	1.150
5	00:02:00	0.0	0.0180	0.0142	1.4	1.149
6	00:04:00	0.0	0.0183	0.0145	1.5	1.149
7	00:08:00	0.0	0.0189	0.0151	1.5	1.147
8	00:15:00	0.0	0.0194	0.0156	1.6	1.146
9	00:30:00	0.0	0.0199	0.0161	1.6	1.145
10	01:00:00	0.0	0.0206	0.0168	1.7	1.144
11	02:00:00	0.0	0.0211	0.0173	1.7	1.142
12	04:00:00	0.0	0.0215	0.0177	1.8	1.142
13	08:00:00	0.0	0.0220	0.0182	1.8	1.140
14	12:00:00	0.0	0.0223	0.0185	1.9	1.140
15	16:00:00	0.0	0.0225	0.0187	1.9	1.139
16	20:00:00	0.0	0.0227	0.0189	1.9	1.139
17	24:00:00	0.0	0.0229	0.0191	1.9	1.139
18	28:00:00	0.0	0.0230	0.0192	1.9	1.138
19	32:00:00	0.0	0.0231	0.0193	1.9	1.138
20	36:00:00	0.0	0.0232	0.0194	1.9	1.138
21	40:00:00	0.0	0.0233	0.0195	2.0	1.138
22	44:00:00	0.0	0.0234	0.0196	2.0	1.137
23	48:00:00	0.0	0.0235	0.0197	2.0	1.137
24	52:00:00	0.0	0.0235	0.0197	2.0	1.137
25	56:00:00	0.0	0.0236	0.0198	2.0	1.137
26	60:00:00	0.0	0.0236	0.0198	2.0	1.137
27	64:00:00	0.0	0.0237	0.0199	2.0	1.137
28	68:00:00	0.0	0.0237	0.0199	2.0	1.137
29	72:00:00	0.0	0.0237	0.0199	2.0	1.137
30	76:00:00	0.0	0.0238	0.0200	2.0	1.137
31	80:00:00	0.0	0.0238	0.0200	2.0	1.137
32	84:00:00	0.0	0.0238	0.0200	2.0	1.137

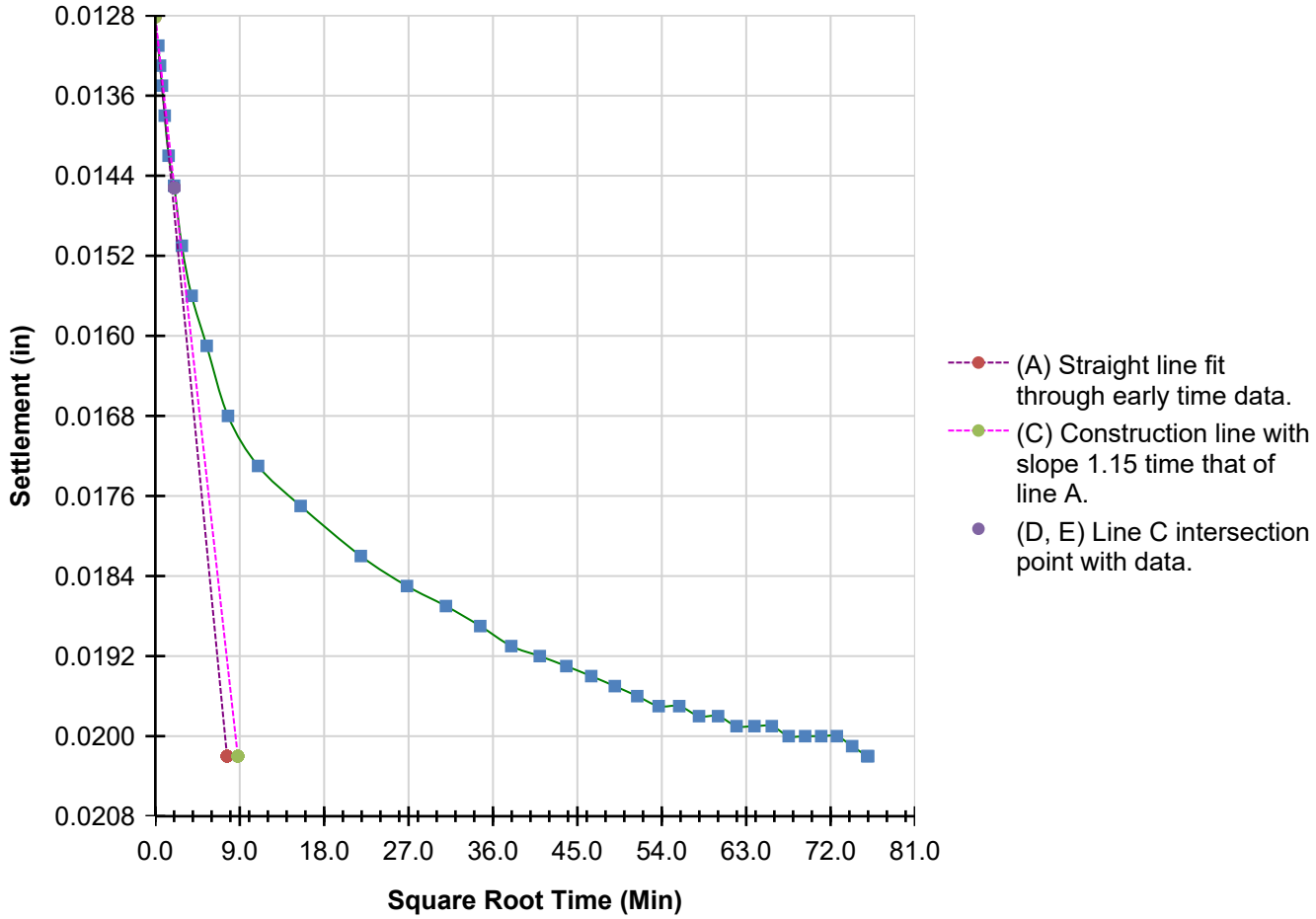
Tabulated Data - Load Sequence 5 - 0.250 tsf

ASTM D2435

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
33	88:00:00	0.0	0.0238	0.0200	2.0	1.137
34	92:00:00	0.0	0.0239	0.0201	2.0	1.136
35	96:00:00	0.0	0.0240	0.0202	2.0	1.136
36	96:17:05	0.0	0.0240	0.0202	2.0	1.136

Square Root Time [5] 0.250 tsf

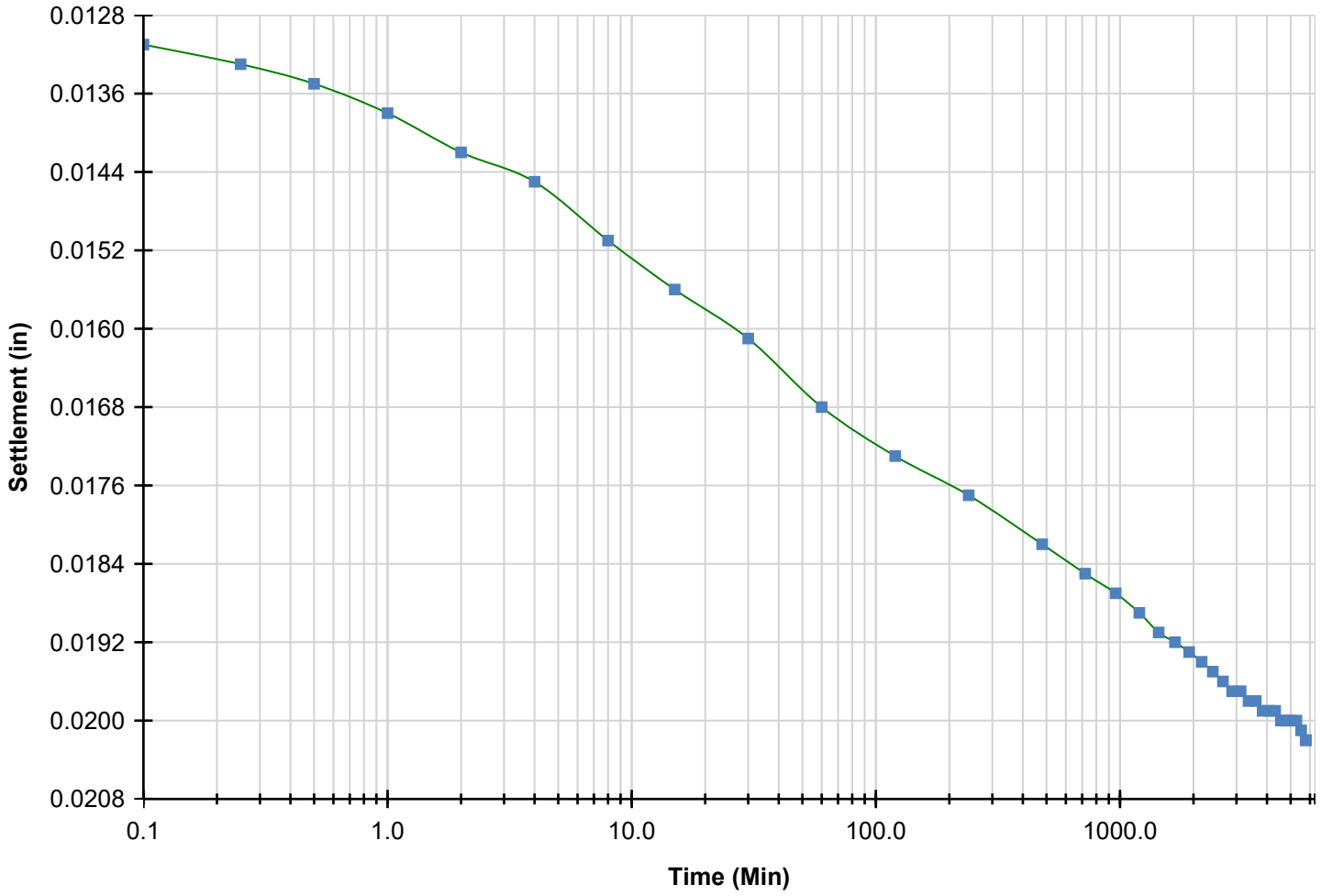
ASTM D2435



Tangent Construction Results	
T90 (Min)	4.118
T50 (Min)	0.932
Cv (in²/Min)	0.0494

Logarithmic Time [5] 0.250 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 6 - 0.500 tsf

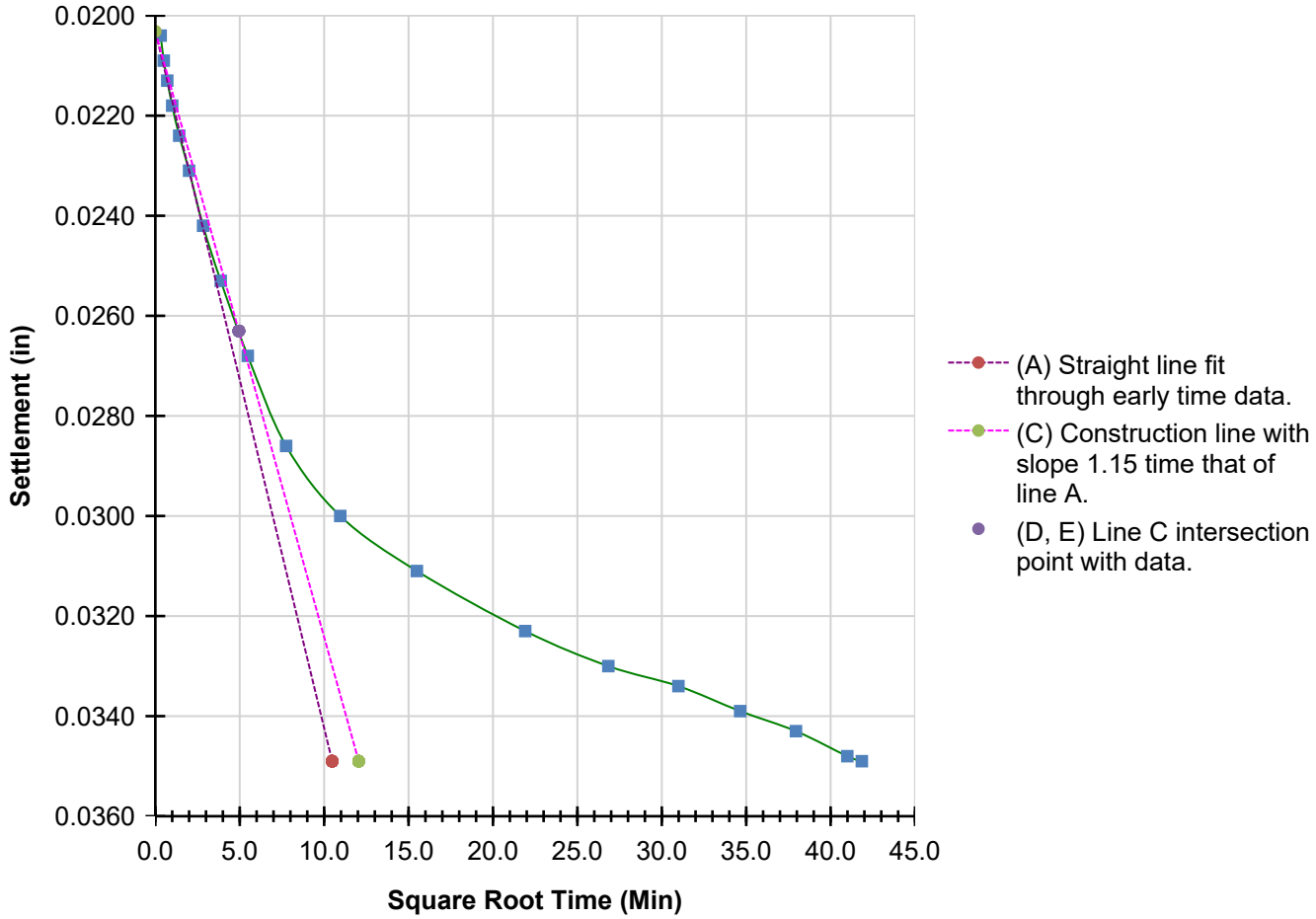
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0240	0.0202	2.0	1.136
1	00:00:06	0.0	0.0262	0.0204	2.0	1.136
2	00:00:15	0.0	0.0267	0.0209	2.1	1.135
3	00:00:30	0.0	0.0271	0.0213	2.1	1.134
4	00:01:00	0.0	0.0276	0.0218	2.2	1.133
5	00:02:00	0.0	0.0282	0.0224	2.2	1.131
6	00:04:00	0.0	0.0289	0.0231	2.3	1.130
7	00:08:00	0.0	0.0300	0.0242	2.4	1.127
8	00:15:00	0.0	0.0311	0.0253	2.5	1.125
9	00:30:00	0.0	0.0326	0.0268	2.7	1.122
10	01:00:00	0.0	0.0344	0.0286	2.9	1.118
11	02:00:00	0.0	0.0358	0.0300	3.0	1.115
12	04:00:00	0.0	0.0369	0.0311	3.1	1.112
13	08:00:00	0.0	0.0381	0.0323	3.2	1.110
14	12:00:00	0.0	0.0388	0.0330	3.3	1.108
15	16:00:00	0.0	0.0392	0.0334	3.3	1.107
16	20:00:00	0.0	0.0397	0.0339	3.4	1.106
17	24:00:00	0.0	0.0401	0.0343	3.4	1.105
18	28:00:00	0.0	0.0406	0.0348	3.5	1.104
19	29:11:25	0.0	0.0407	0.0349	3.5	1.104

Square Root Time [6] 0.500 tsf

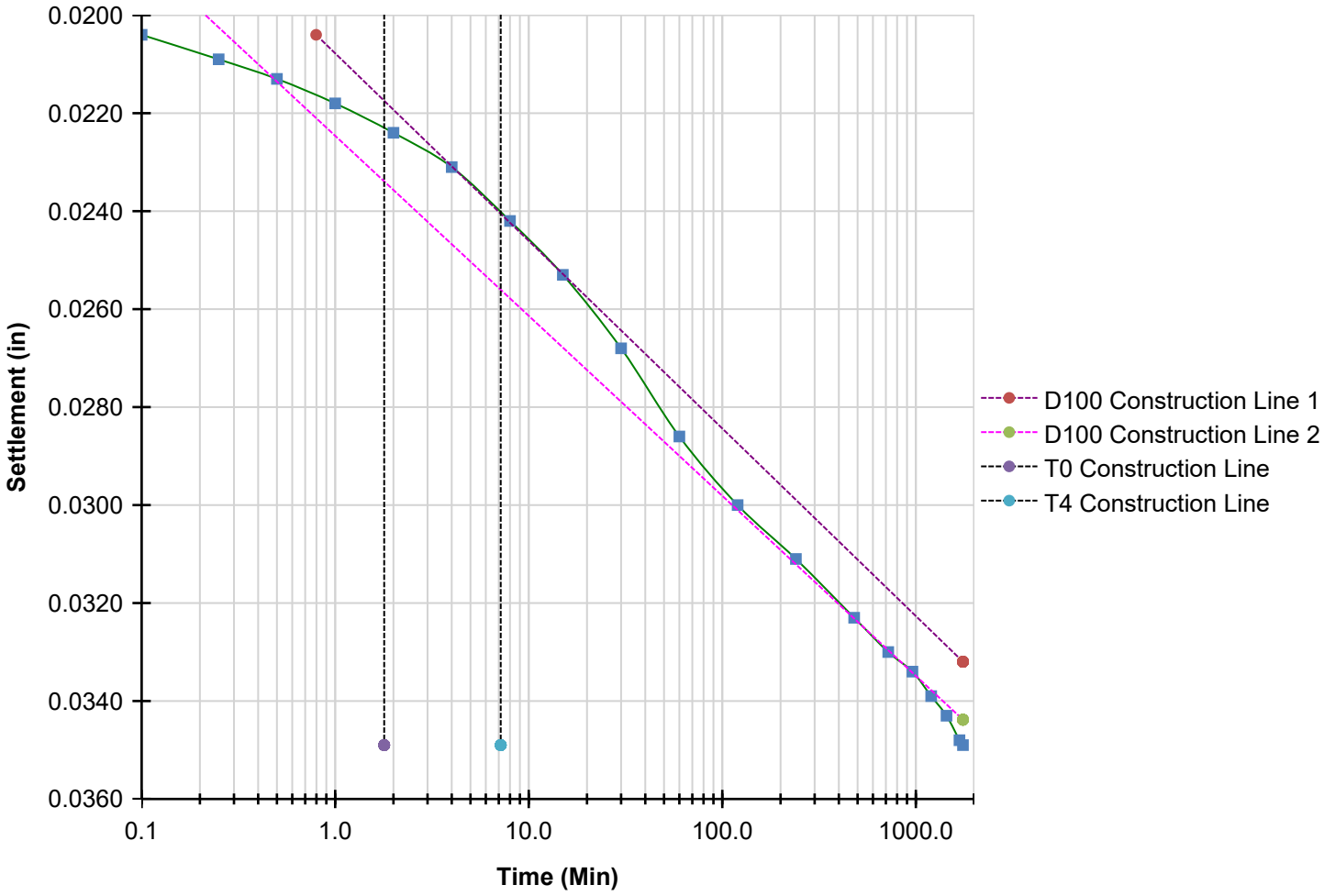
ASTM D2435



Tangent Construction Results	
T90 (Min)	24.462
T50 (Min)	5.799
Cv (in²/Min)	0.0081

Logarithmic Time [6] 0.500 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 7 - 1.000 tsf

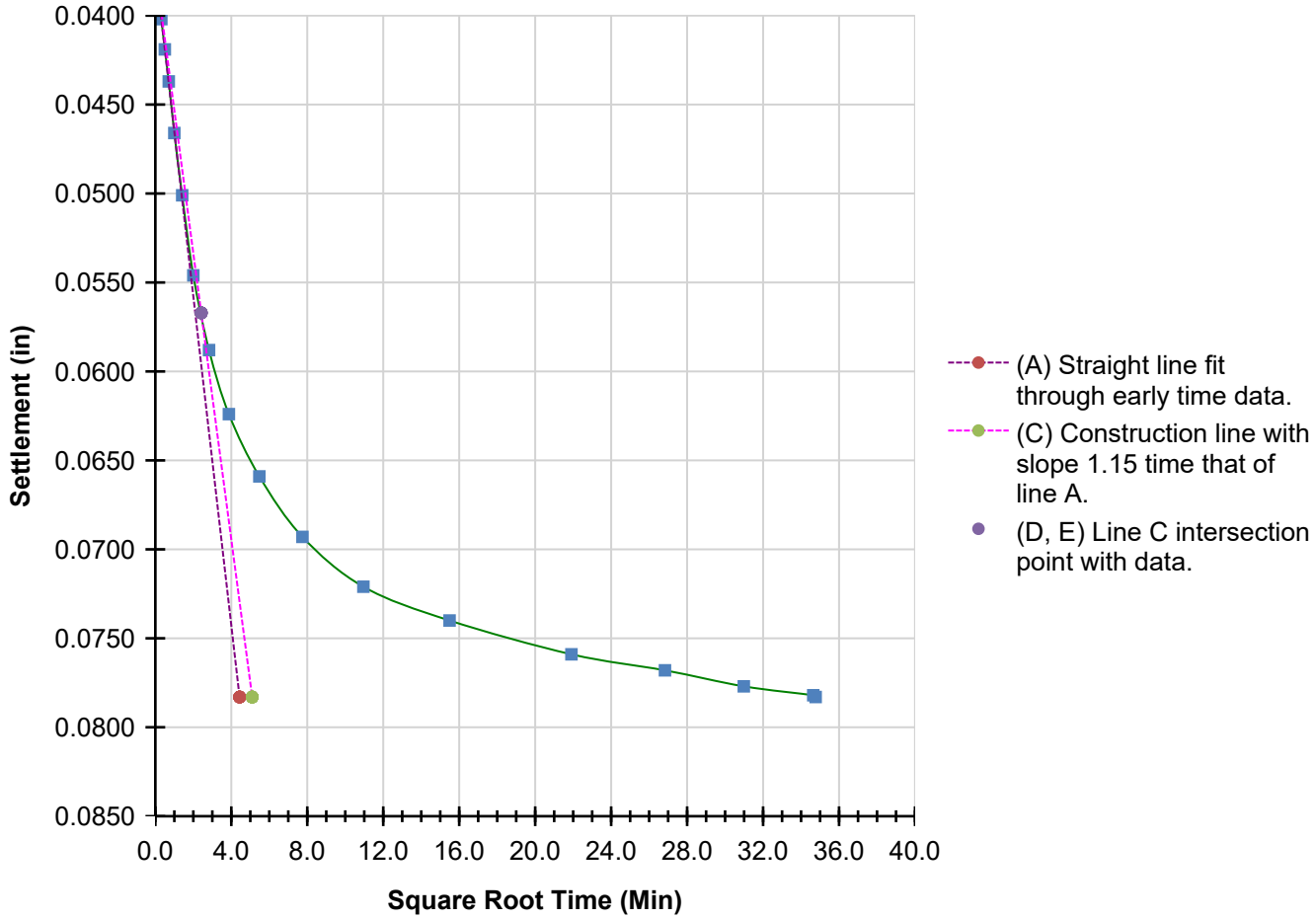
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0407	0.0349	3.5	1.104
1	00:00:06	0.0	0.0478	0.0402	4.0	1.093
2	00:00:15	0.0	0.0495	0.0419	4.2	1.089
3	00:00:30	0.0	0.0513	0.0437	4.4	1.085
4	00:01:00	0.0	0.0542	0.0466	4.7	1.079
5	00:02:00	0.0	0.0577	0.0501	5.0	1.071
6	00:04:00	0.0	0.0622	0.0546	5.5	1.061
7	00:08:00	0.0	0.0664	0.0588	5.9	1.052
8	00:15:00	0.0	0.0700	0.0624	6.2	1.044
9	00:30:00	0.0	0.0735	0.0659	6.6	1.036
10	01:00:00	0.0	0.0769	0.0693	6.9	1.029
11	02:00:00	0.0	0.0797	0.0721	7.2	1.023
12	04:00:00	0.0	0.0816	0.0740	7.4	1.019
13	08:00:00	0.0	0.0835	0.0759	7.6	1.015
14	12:00:00	0.0	0.0844	0.0768	7.7	1.013
15	16:00:00	0.0	0.0853	0.0777	7.8	1.011
16	20:00:00	0.0	0.0858	0.0782	7.8	1.010
17	20:08:43	0.0	0.0859	0.0783	7.8	1.009

Square Root Time [7] 1.000 tsf

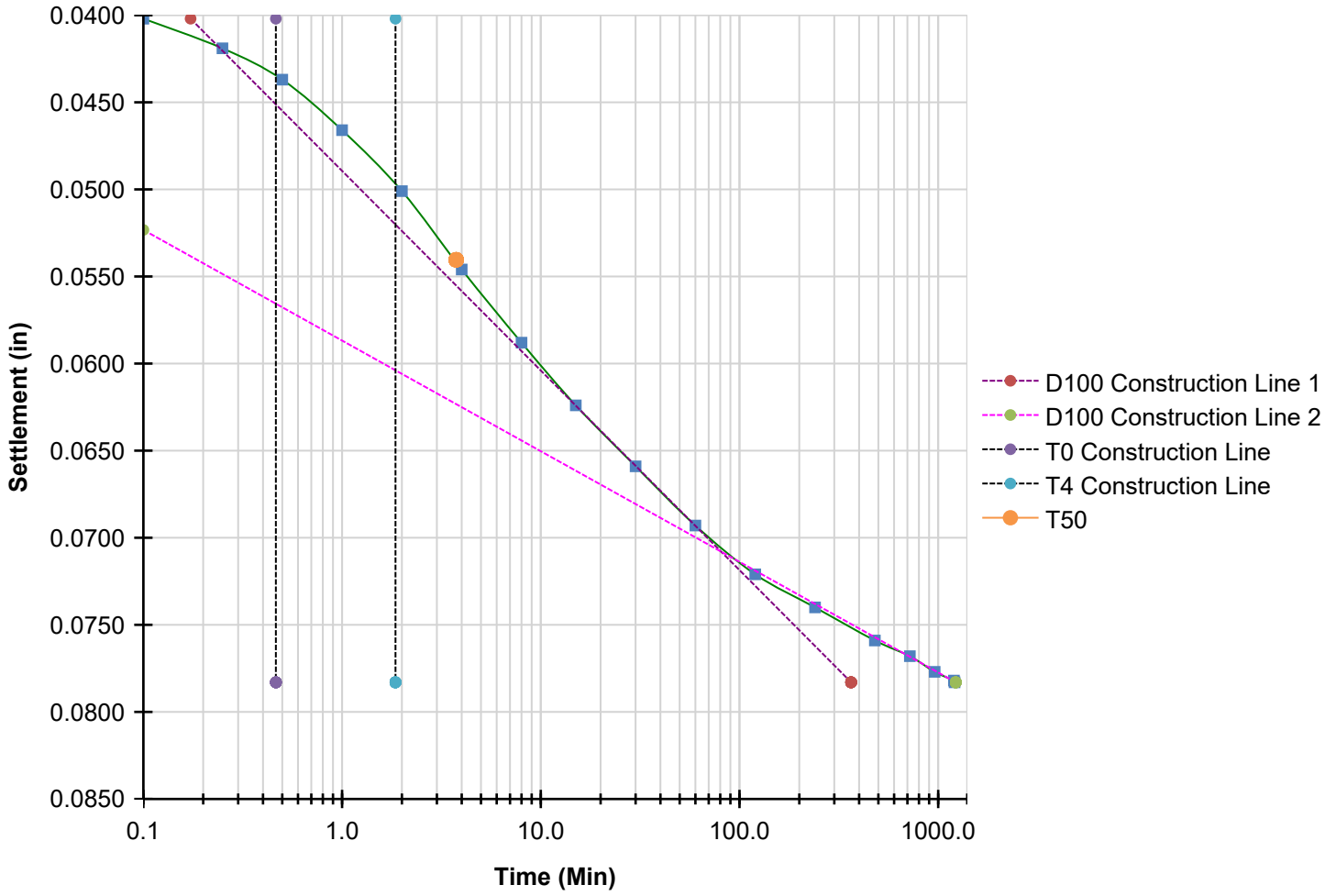
ASTM D2435



Tangent Construction Results	
T90 (Min)	5.837
T50 (Min)	1.379
Cv (in²/Min)	0.0308

Logarithmic Time [7] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	3.752
Cv (in²/Min)	0.0111

Tabulated Data - Load Sequence 8 - 2.000 tsf

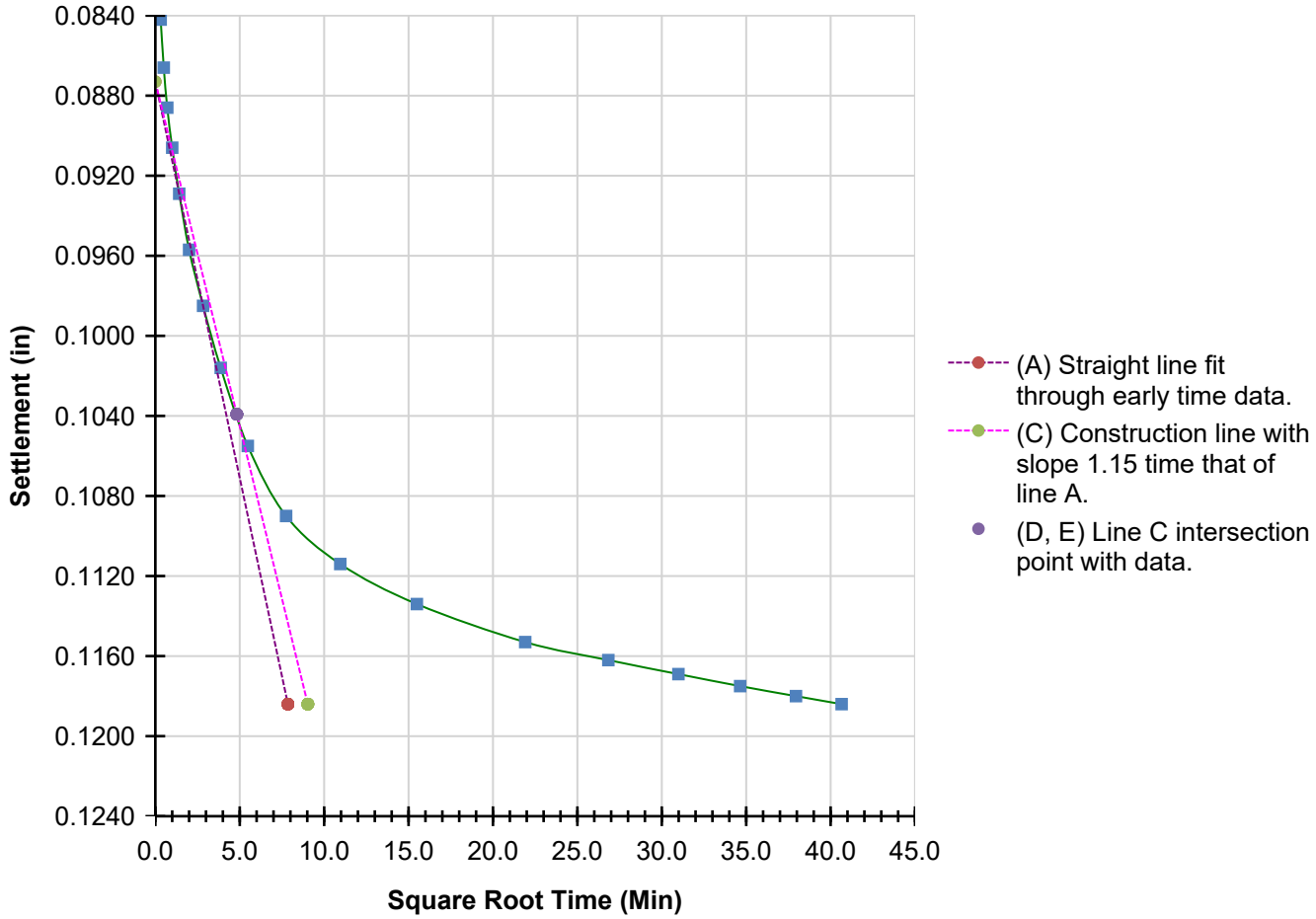
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0859	0.0783	7.8	1.009
1	00:00:06	0.0	0.0945	0.0842	8.4	0.997
2	00:00:15	0.0	0.0969	0.0866	8.7	0.991
3	00:00:30	0.0	0.0989	0.0886	8.9	0.987
4	00:01:00	0.0	0.1009	0.0906	9.1	0.983
5	00:02:00	0.0	0.1032	0.0929	9.3	0.978
6	00:04:00	0.0	0.1060	0.0957	9.6	0.971
7	00:08:00	0.0	0.1088	0.0985	9.9	0.965
8	00:15:00	0.0	0.1119	0.1016	10.2	0.959
9	00:30:00	0.0	0.1158	0.1055	10.6	0.950
10	01:00:00	0.0	0.1193	0.1090	10.9	0.942
11	02:00:00	0.0	0.1217	0.1114	11.1	0.937
12	04:00:00	0.0	0.1237	0.1134	11.3	0.933
13	08:00:00	0.0	0.1256	0.1153	11.5	0.929
14	12:00:00	0.0	0.1265	0.1162	11.6	0.927
15	16:00:00	0.0	0.1272	0.1169	11.7	0.925
16	20:00:00	0.0	0.1278	0.1175	11.8	0.924
17	24:00:00	0.0	0.1283	0.1180	11.8	0.923
18	27:32:34	0.0	0.1287	0.1184	11.8	0.922

Square Root Time [8] 2.000 tsf

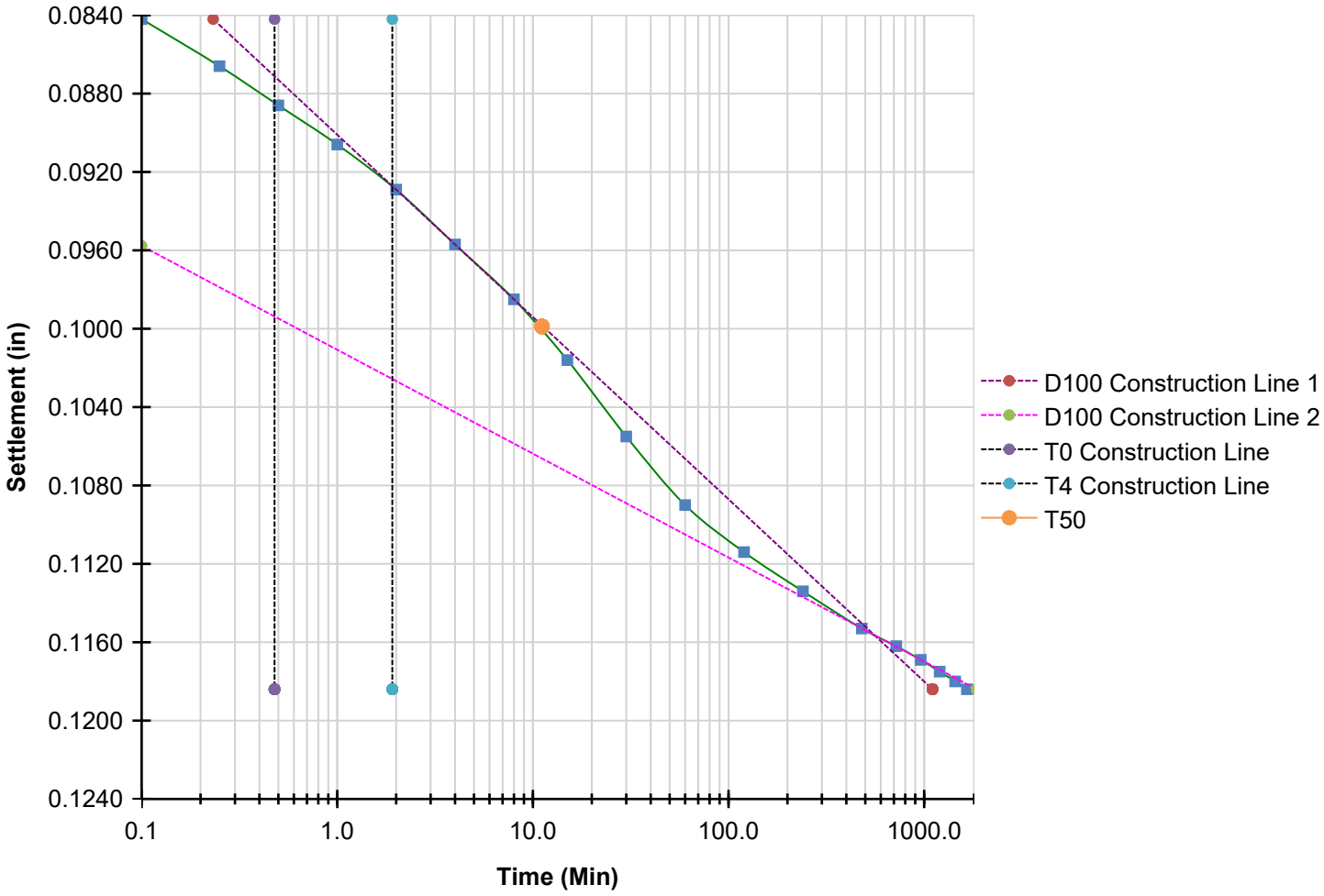
ASTM D2435



Tangent Construction Results	
T90 (Min)	23.286
T50 (Min)	5.049
Cv (in²/Min)	0.0071

Logarithmic Time [8] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	11.130
Cv (in²/Min)	0.0034

Tabulated Data - Load Sequence 9 - 4.000 tsf

ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1287	0.1184	11.8	0.922
1	00:00:06	0.0	0.1403	0.1282	12.8	0.901
2	00:00:15	0.0	0.1430	0.1309	13.1	0.895
3	00:00:30	0.0	0.1453	0.1332	13.3	0.890
4	00:01:00	0.0	0.1482	0.1361	13.6	0.883
5	00:02:00	0.0	0.1518	0.1397	14.0	0.876
6	00:04:00	0.0	0.1565	0.1444	14.4	0.865
7	00:08:00	0.0	0.1622	0.1501	15.0	0.853
8	00:15:00	0.0	0.1681	0.1560	15.6	0.840
9	00:30:00	0.0	0.1746	0.1625	16.3	0.826
10	01:00:00	0.0	0.1800	0.1679	16.8	0.814
11	02:00:00	0.0	0.1837	0.1716	17.2	0.806
12	04:00:00	0.0	0.1861	0.1740	17.4	0.801
13	08:00:00	0.0	0.1879	0.1758	17.6	0.797
14	12:00:00	0.0	0.1889	0.1768	17.7	0.795
15	16:00:00	0.0	0.1897	0.1776	17.8	0.793
16	20:00:00	0.0	0.1904	0.1783	17.8	0.791
17	24:00:00	0.0	0.1909	0.1788	17.9	0.790
18	28:00:00	0.0	0.1912	0.1791	17.9	0.790
19	32:00:00	0.0	0.1915	0.1794	17.9	0.789
20	36:00:00	0.0	0.1917	0.1796	18.0	0.788
21	40:00:00	0.0	0.1919	0.1798	18.0	0.788
22	44:00:00	0.0	0.1920	0.1799	18.0	0.788
23	48:00:00	0.0	0.1922	0.1801	18.0	0.787
24	52:00:00	0.0	0.1925	0.1804	18.0	0.787
25	56:00:00	0.0	0.1926	0.1805	18.1	0.787
26	60:00:00	0.0	0.1927	0.1806	18.1	0.786
27	64:00:00	0.0	0.1928	0.1807	18.1	0.786
28	68:00:00	0.0	0.1930	0.1809	18.1	0.786
29	72:00:00	0.0	0.1932	0.1811	18.1	0.785
30	76:00:00	0.0	0.1933	0.1812	18.1	0.785
31	80:00:00	0.0	0.1934	0.1813	18.1	0.785
32	84:00:00	0.0	0.1935	0.1814	18.1	0.785

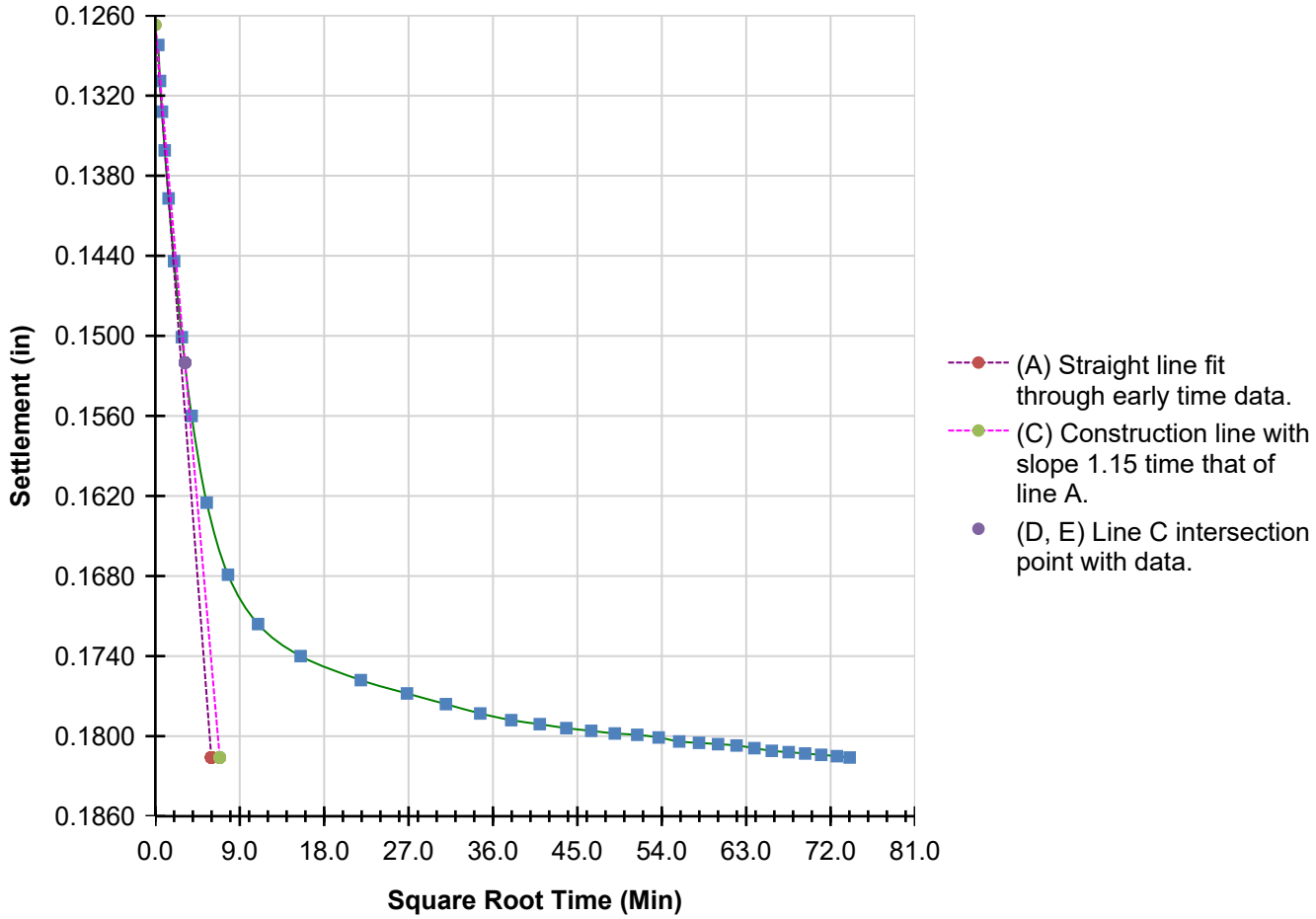
Tabulated Data - Load Sequence 9 - 4.000 tsf

ASTM D2435

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
33	88:00:00	0.0	0.1936	0.1815	18.2	0.784
34	91:20:22	0.0	0.1937	0.1816	18.2	0.784

Square Root Time [9] 4.000 tsf

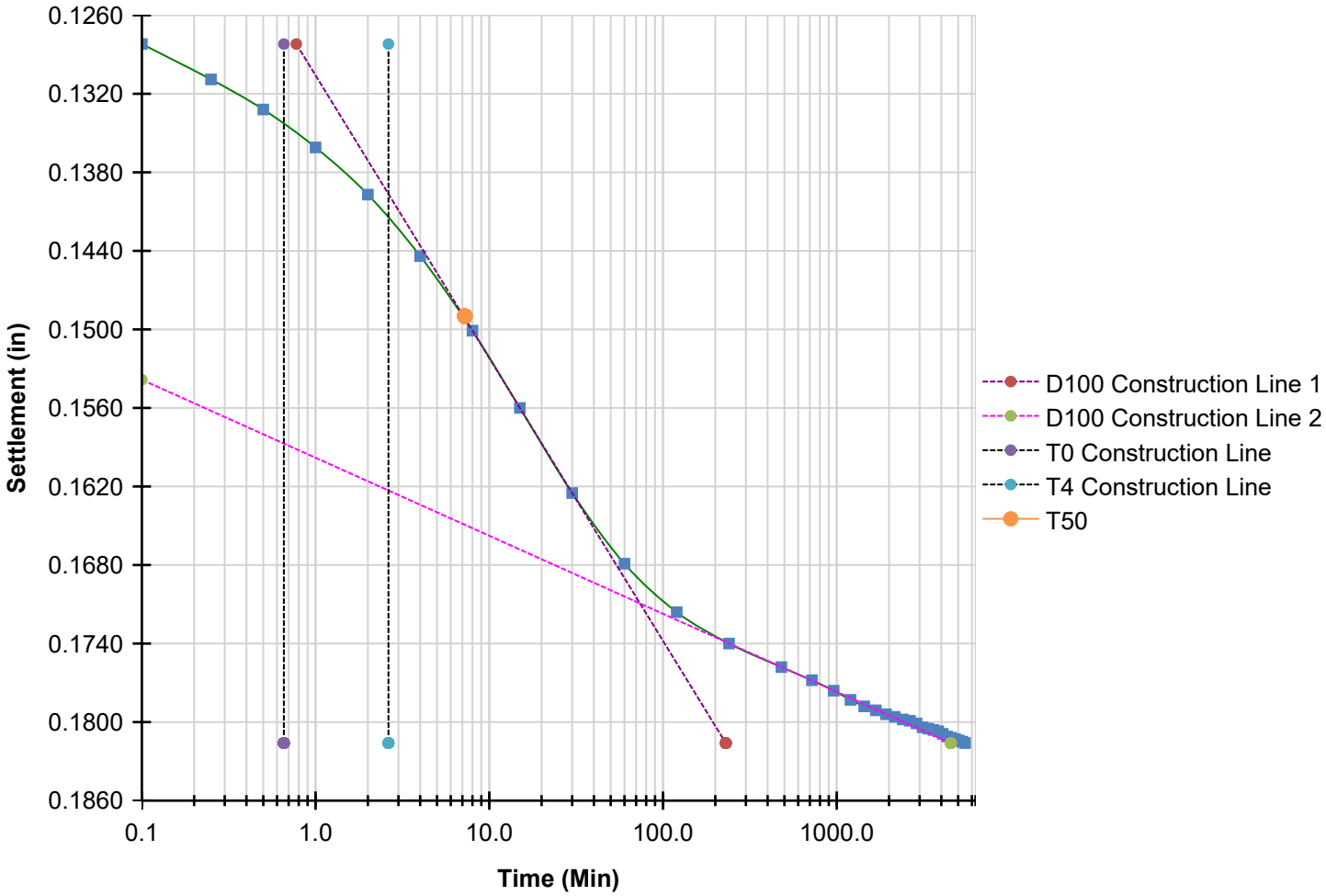
ASTM D2435



Tangent Construction Results	
T90 (Min)	10.023
T50 (Min)	2.392
Cv (in²/Min)	0.0142

Logarithmic Time [9] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	7.222
Cv (in²/Min)	0.0046

Tabulated Data - Load Sequence 10 - 2.000 tsf

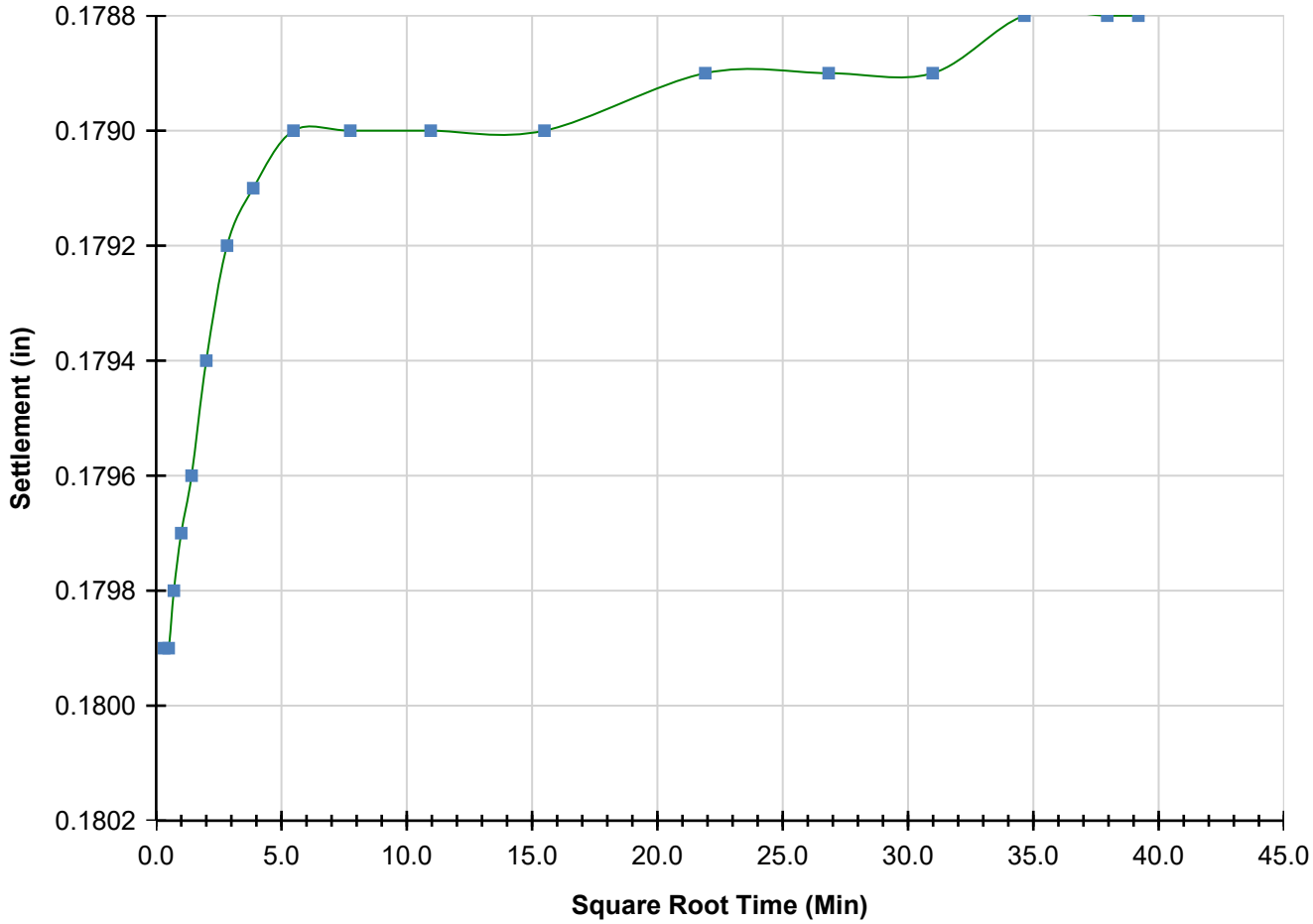
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1937	0.1816	18.2	0.784
1	00:00:06	0.0	0.1927	0.1799	18.0	0.788
2	00:00:15	0.0	0.1927	0.1799	18.0	0.788
3	00:00:30	0.0	0.1926	0.1798	18.0	0.788
4	00:01:00	0.0	0.1925	0.1797	18.0	0.788
5	00:02:00	0.0	0.1924	0.1796	18.0	0.788
6	00:04:00	0.0	0.1922	0.1794	17.9	0.789
7	00:08:00	0.0	0.1920	0.1792	17.9	0.789
8	00:15:00	0.0	0.1919	0.1791	17.9	0.790
9	00:30:00	0.0	0.1918	0.1790	17.9	0.790
10	01:00:00	0.0	0.1918	0.1790	17.9	0.790
11	02:00:00	0.0	0.1918	0.1790	17.9	0.790
12	04:00:00	0.0	0.1918	0.1790	17.9	0.790
13	08:00:00	0.0	0.1917	0.1789	17.9	0.790
14	12:00:00	0.0	0.1917	0.1789	17.9	0.790
15	16:00:00	0.0	0.1917	0.1789	17.9	0.790
16	20:00:00	0.0	0.1916	0.1788	17.9	0.790
17	24:00:00	0.0	0.1916	0.1788	17.9	0.790
18	25:35:45	0.0	0.1916	0.1788	17.9	0.790

Square Root Time [10] 2.000 tsf

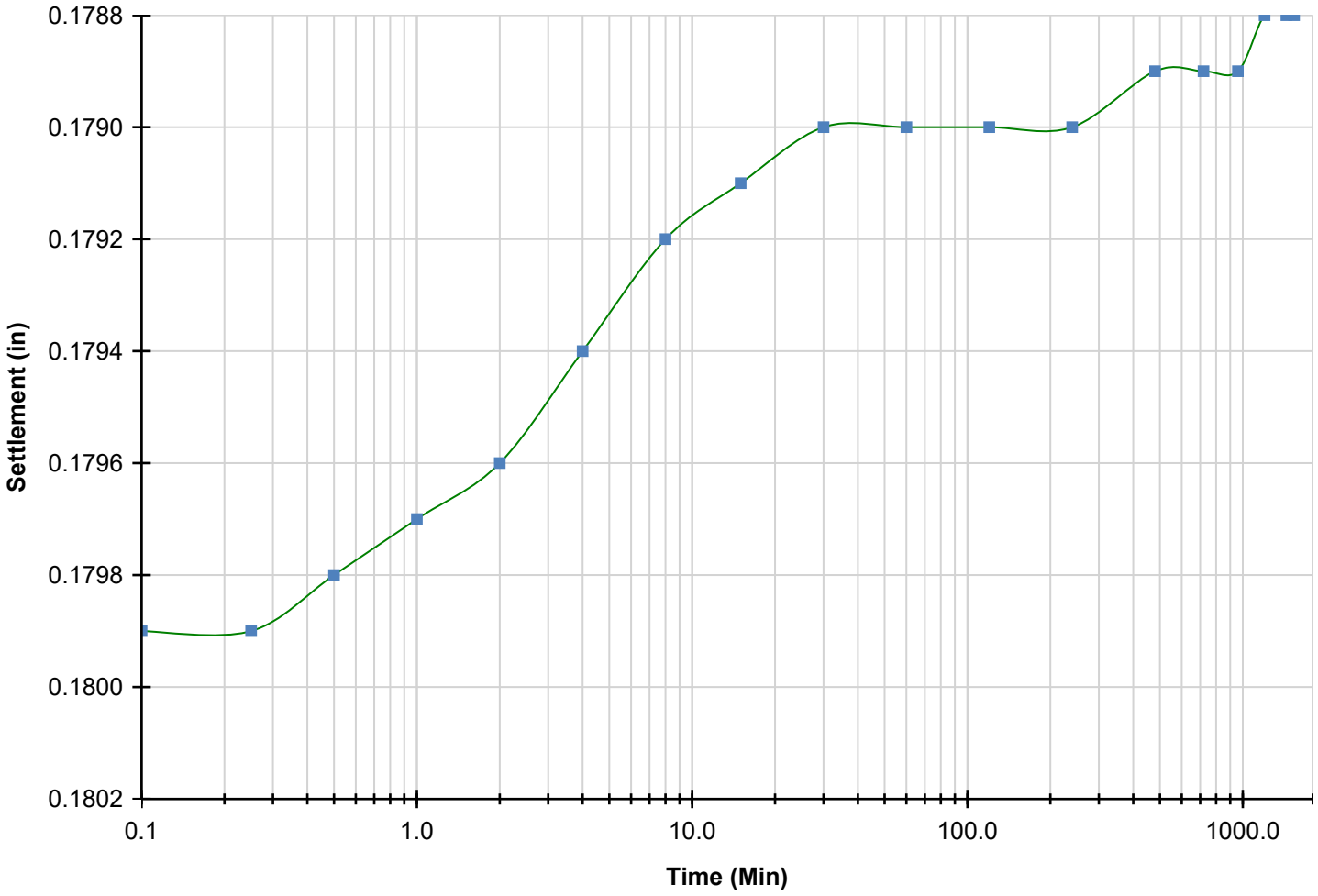
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [10] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 11 - 1.000 tsf

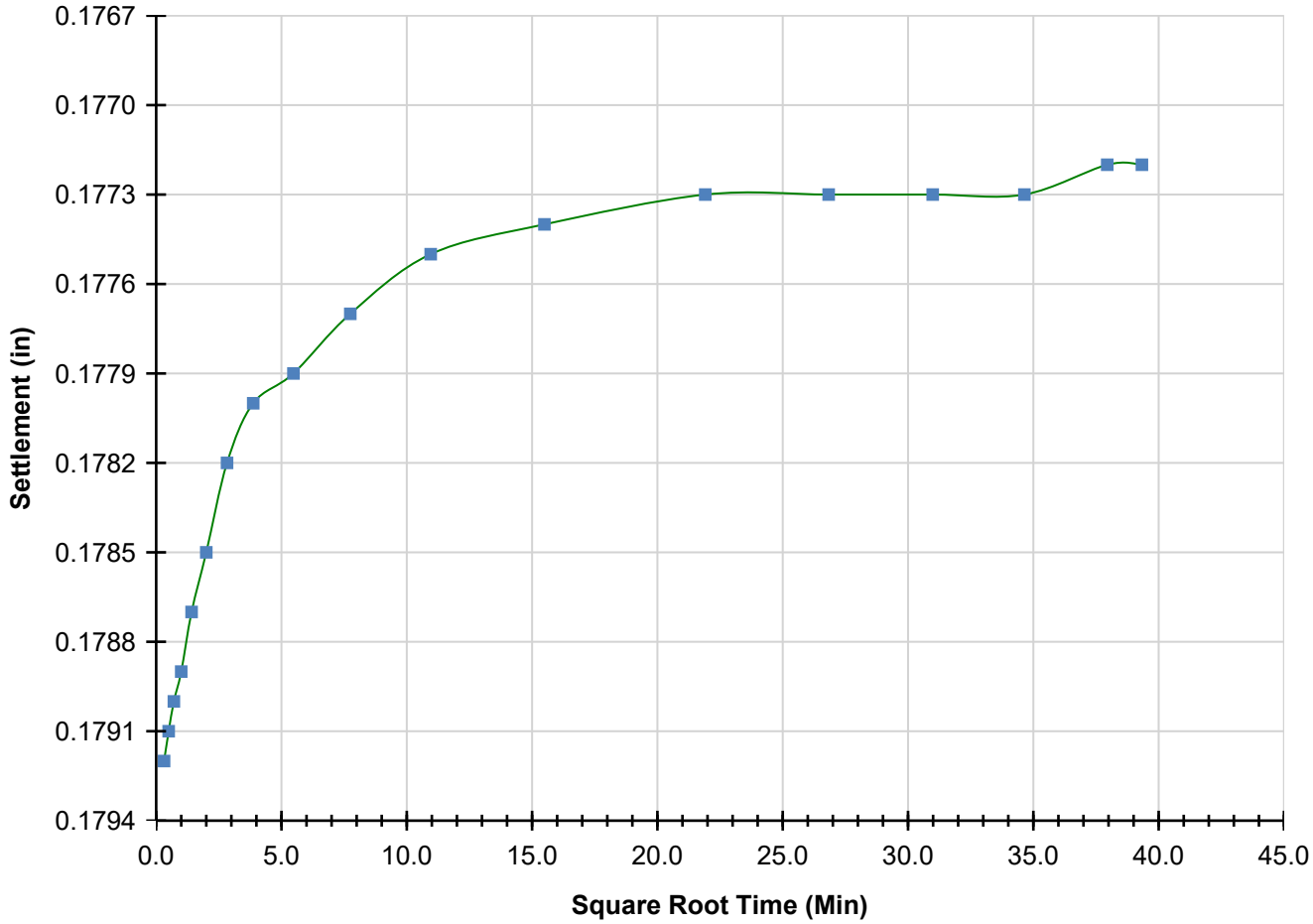
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1916	0.1788	17.9	0.790
1	00:00:06	0.0	0.1906	0.1792	17.9	0.789
2	00:00:15	0.0	0.1905	0.1791	17.9	0.790
3	00:00:30	0.0	0.1904	0.1790	17.9	0.790
4	00:01:00	0.0	0.1903	0.1789	17.9	0.790
5	00:02:00	0.0	0.1901	0.1787	17.9	0.790
6	00:04:00	0.0	0.1899	0.1785	17.9	0.791
7	00:08:00	0.0	0.1896	0.1782	17.8	0.792
8	00:15:00	0.0	0.1894	0.1780	17.8	0.792
9	00:30:00	0.0	0.1893	0.1779	17.8	0.792
10	01:00:00	0.0	0.1891	0.1777	17.8	0.793
11	02:00:00	0.0	0.1889	0.1775	17.8	0.793
12	04:00:00	0.0	0.1888	0.1774	17.7	0.793
13	08:00:00	0.0	0.1887	0.1773	17.7	0.794
14	12:00:00	0.0	0.1887	0.1773	17.7	0.794
15	16:00:00	0.0	0.1887	0.1773	17.7	0.794
16	20:00:00	0.0	0.1887	0.1773	17.7	0.794
17	24:00:00	0.0	0.1886	0.1772	17.7	0.794
18	25:46:55	0.0	0.1886	0.1772	17.7	0.794

Square Root Time [11] 1.000 tsf

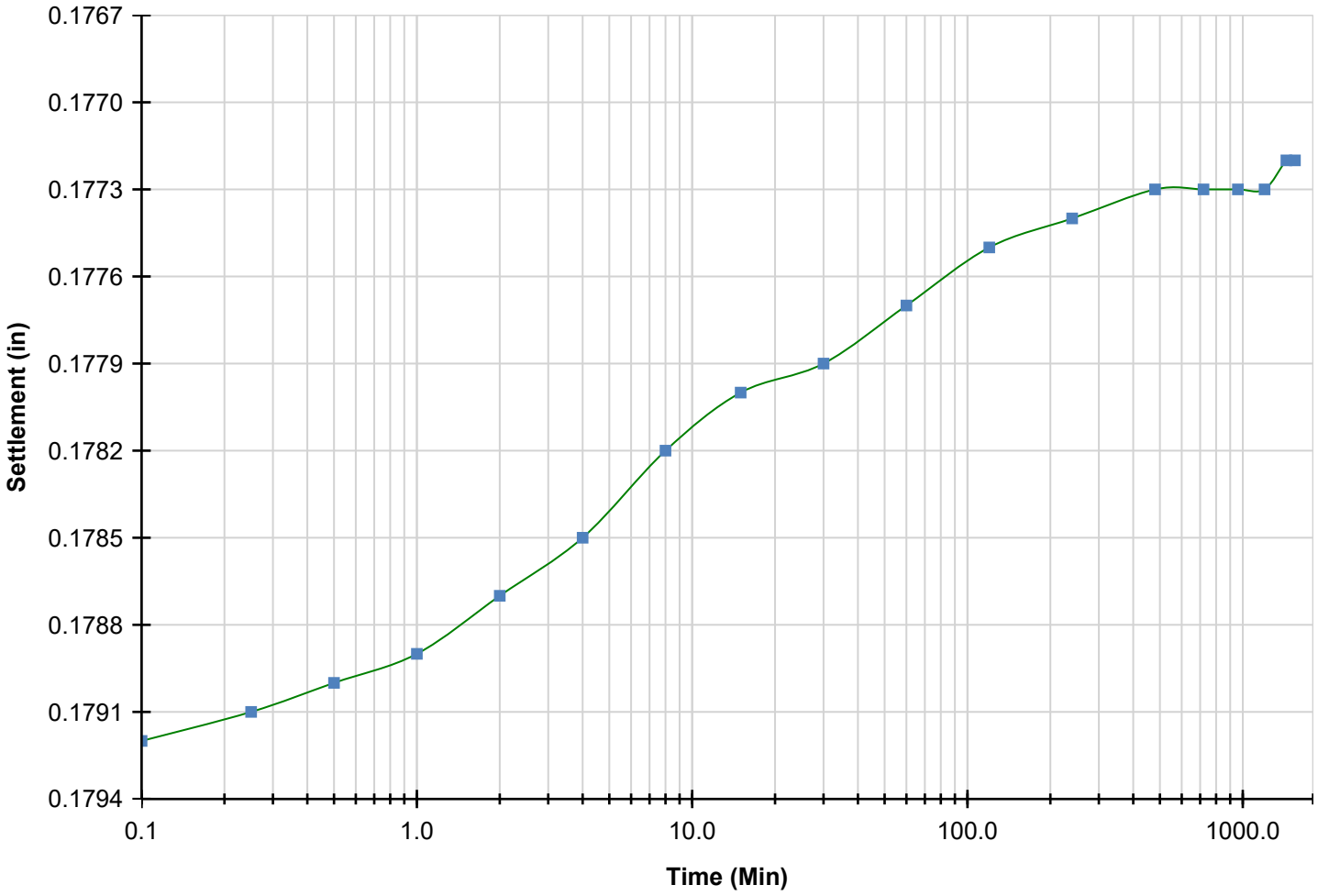
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [11] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 12 - 0.500 tsf

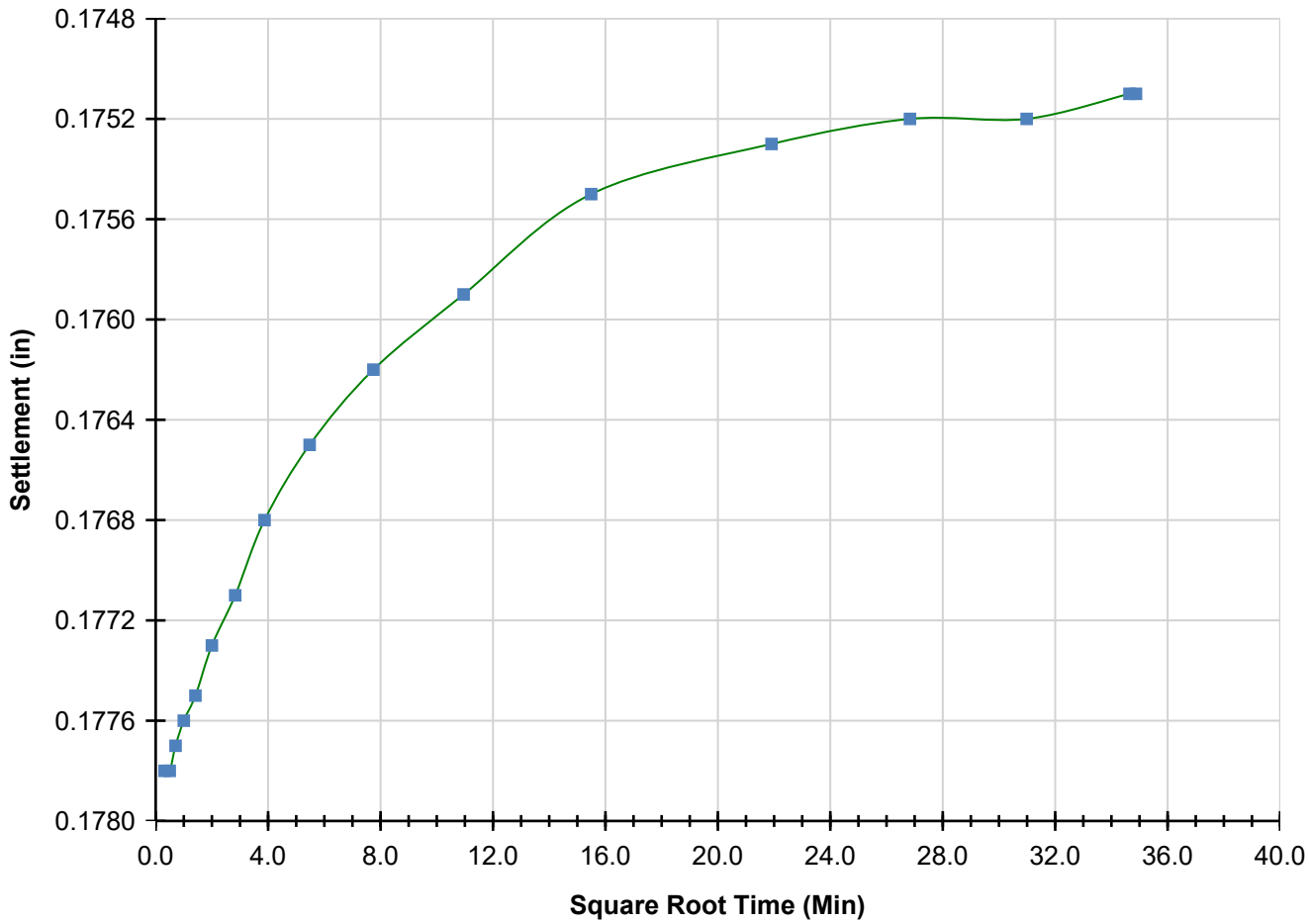
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1886	0.1772	17.7	0.794
1	00:00:06	0.0	0.1879	0.1778	17.8	0.792
2	00:00:15	0.0	0.1879	0.1778	17.8	0.792
3	00:00:30	0.0	0.1878	0.1777	17.8	0.793
4	00:01:00	0.0	0.1877	0.1776	17.8	0.793
5	00:02:00	0.0	0.1876	0.1775	17.8	0.793
6	00:04:00	0.0	0.1874	0.1773	17.7	0.794
7	00:08:00	0.0	0.1872	0.1771	17.7	0.794
8	00:15:00	0.0	0.1869	0.1768	17.7	0.795
9	00:30:00	0.0	0.1866	0.1765	17.7	0.795
10	01:00:00	0.0	0.1863	0.1762	17.6	0.796
11	02:00:00	0.0	0.1860	0.1759	17.6	0.797
12	04:00:00	0.0	0.1856	0.1755	17.6	0.797
13	08:00:00	0.0	0.1854	0.1753	17.5	0.798
14	12:00:00	0.0	0.1853	0.1752	17.5	0.798
15	16:00:00	0.0	0.1853	0.1752	17.5	0.798
16	20:00:00	0.0	0.1852	0.1751	17.5	0.798
17	20:16:08	0.0	0.1852	0.1751	17.5	0.798

Square Root Time [12] 0.500 tsf

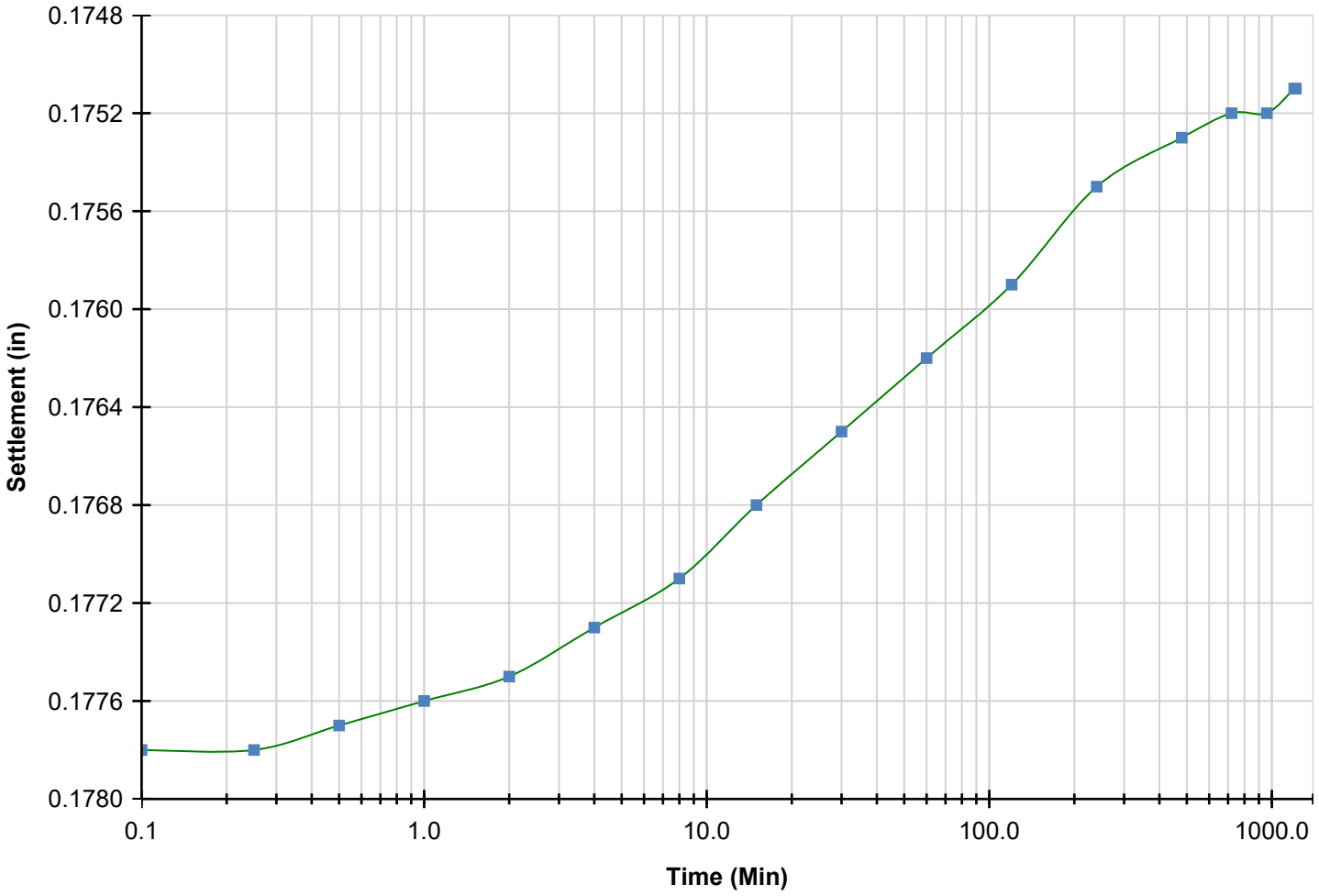
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [12] 0.500 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 13 - 1.000 tsf

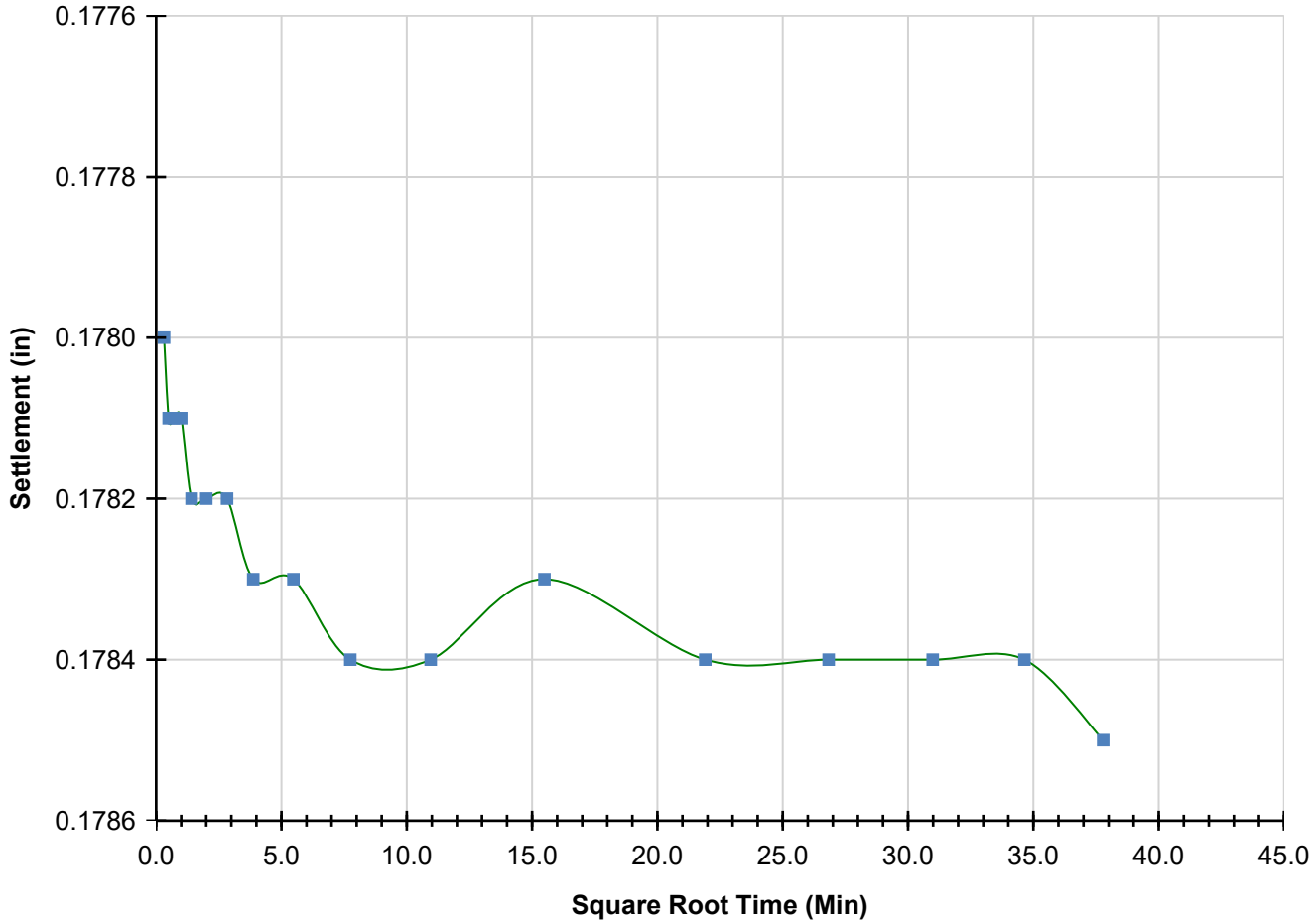
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1852	0.1751	17.5	0.798
1	00:00:06	0.0	0.1856	0.1780	17.8	0.792
2	00:00:15	0.0	0.1857	0.1781	17.8	0.792
3	00:00:30	0.0	0.1857	0.1781	17.8	0.792
4	00:01:00	0.0	0.1857	0.1781	17.8	0.792
5	00:02:00	0.0	0.1858	0.1782	17.8	0.792
6	00:04:00	0.0	0.1858	0.1782	17.8	0.792
7	00:08:00	0.0	0.1858	0.1782	17.8	0.792
8	00:15:00	0.0	0.1859	0.1783	17.8	0.791
9	00:30:00	0.0	0.1859	0.1783	17.8	0.791
10	01:00:00	0.0	0.1860	0.1784	17.8	0.791
11	02:00:00	0.0	0.1860	0.1784	17.8	0.791
12	04:00:00	0.0	0.1859	0.1783	17.8	0.791
13	08:00:00	0.0	0.1860	0.1784	17.8	0.791
14	12:00:00	0.0	0.1860	0.1784	17.8	0.791
15	16:00:00	0.0	0.1860	0.1784	17.8	0.791
16	20:00:00	0.0	0.1860	0.1784	17.8	0.791
17	23:47:39	0.0	0.1861	0.1785	17.9	0.791

Square Root Time [13] 1.000 tsf

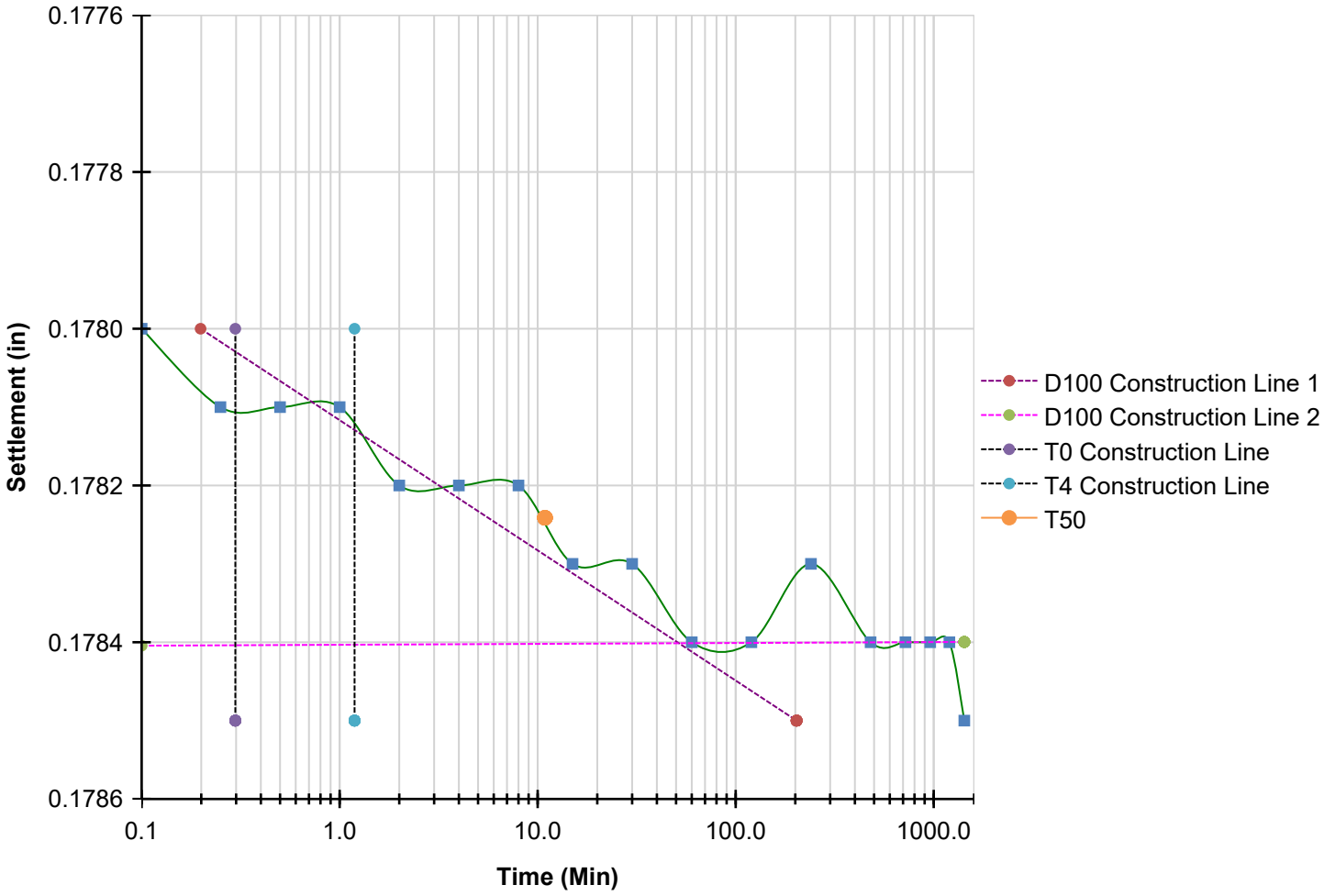
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [13] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	10.883
Cv (in²/Min)	0.0031

Tabulated Data - Load Sequence 14 - 2.000 tsf

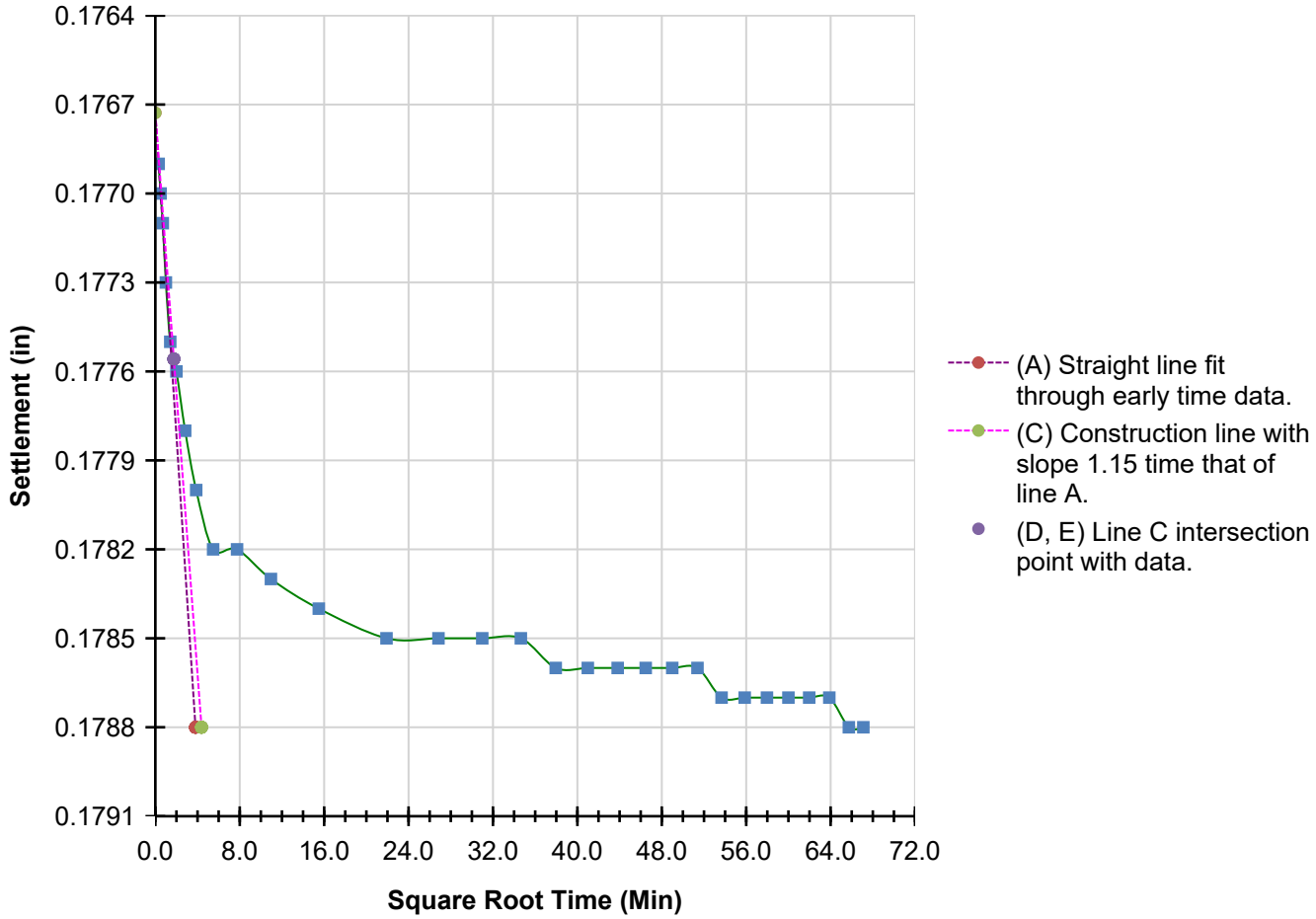
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1861	0.1785	17.9	0.791
1	00:00:06	0.0	0.1872	0.1769	17.7	0.794
2	00:00:15	0.0	0.1873	0.1770	17.7	0.794
3	00:00:30	0.0	0.1874	0.1771	17.7	0.794
4	00:01:00	0.0	0.1876	0.1773	17.7	0.794
5	00:02:00	0.0	0.1878	0.1775	17.8	0.793
6	00:04:00	0.0	0.1879	0.1776	17.8	0.793
7	00:08:00	0.0	0.1881	0.1778	17.8	0.792
8	00:15:00	0.0	0.1883	0.1780	17.8	0.792
9	00:30:00	0.0	0.1885	0.1782	17.8	0.792
10	01:00:00	0.0	0.1885	0.1782	17.8	0.792
11	02:00:00	0.0	0.1886	0.1783	17.8	0.791
12	04:00:00	0.0	0.1887	0.1784	17.8	0.791
13	08:00:00	0.0	0.1888	0.1785	17.9	0.791
14	12:00:00	0.0	0.1888	0.1785	17.9	0.791
15	16:00:00	0.0	0.1888	0.1785	17.9	0.791
16	20:00:00	0.0	0.1888	0.1785	17.9	0.791
17	24:00:00	0.0	0.1889	0.1786	17.9	0.791
18	28:00:00	0.0	0.1889	0.1786	17.9	0.791
19	32:00:00	0.0	0.1889	0.1786	17.9	0.791
20	36:00:00	0.0	0.1889	0.1786	17.9	0.791
21	40:00:00	0.0	0.1889	0.1786	17.9	0.791
22	44:00:00	0.0	0.1889	0.1786	17.9	0.791
23	48:00:00	0.0	0.1890	0.1787	17.9	0.790
24	52:00:00	0.0	0.1890	0.1787	17.9	0.790
25	56:00:00	0.0	0.1890	0.1787	17.9	0.790
26	60:00:00	0.0	0.1890	0.1787	17.9	0.790
27	64:00:00	0.0	0.1890	0.1787	17.9	0.790
28	68:00:00	0.0	0.1890	0.1787	17.9	0.790
29	72:00:00	0.0	0.1891	0.1788	17.9	0.790
30	75:02:26	0.0	0.1891	0.1788	17.9	0.790

Square Root Time [14] 2.000 tsf

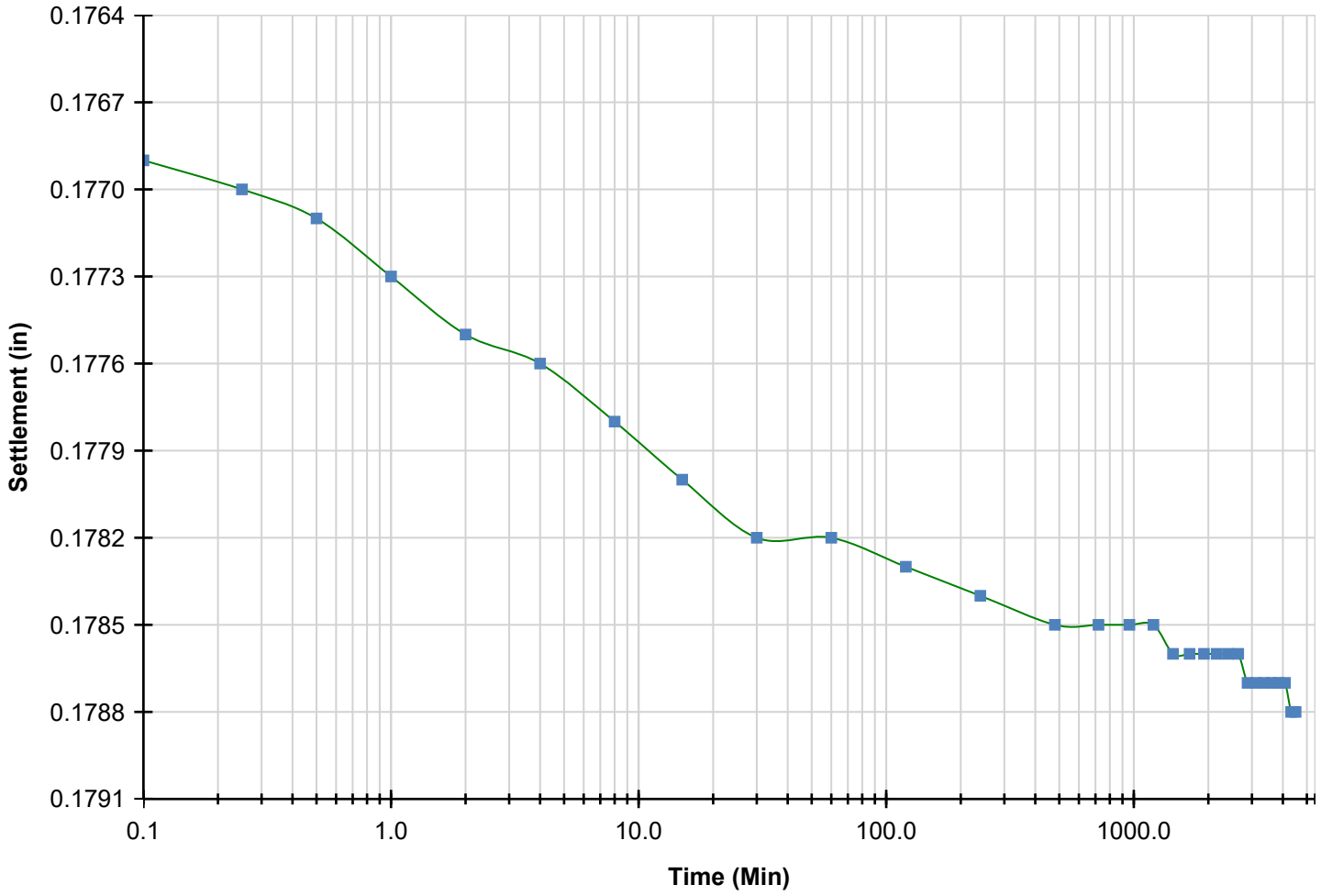
ASTM D2435



Tangent Construction Results	
T90 (Min)	3.078
T50 (Min)	0.701
Cv (in²/Min)	0.0464

Logarithmic Time [14] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 15 - 4.000 tsf

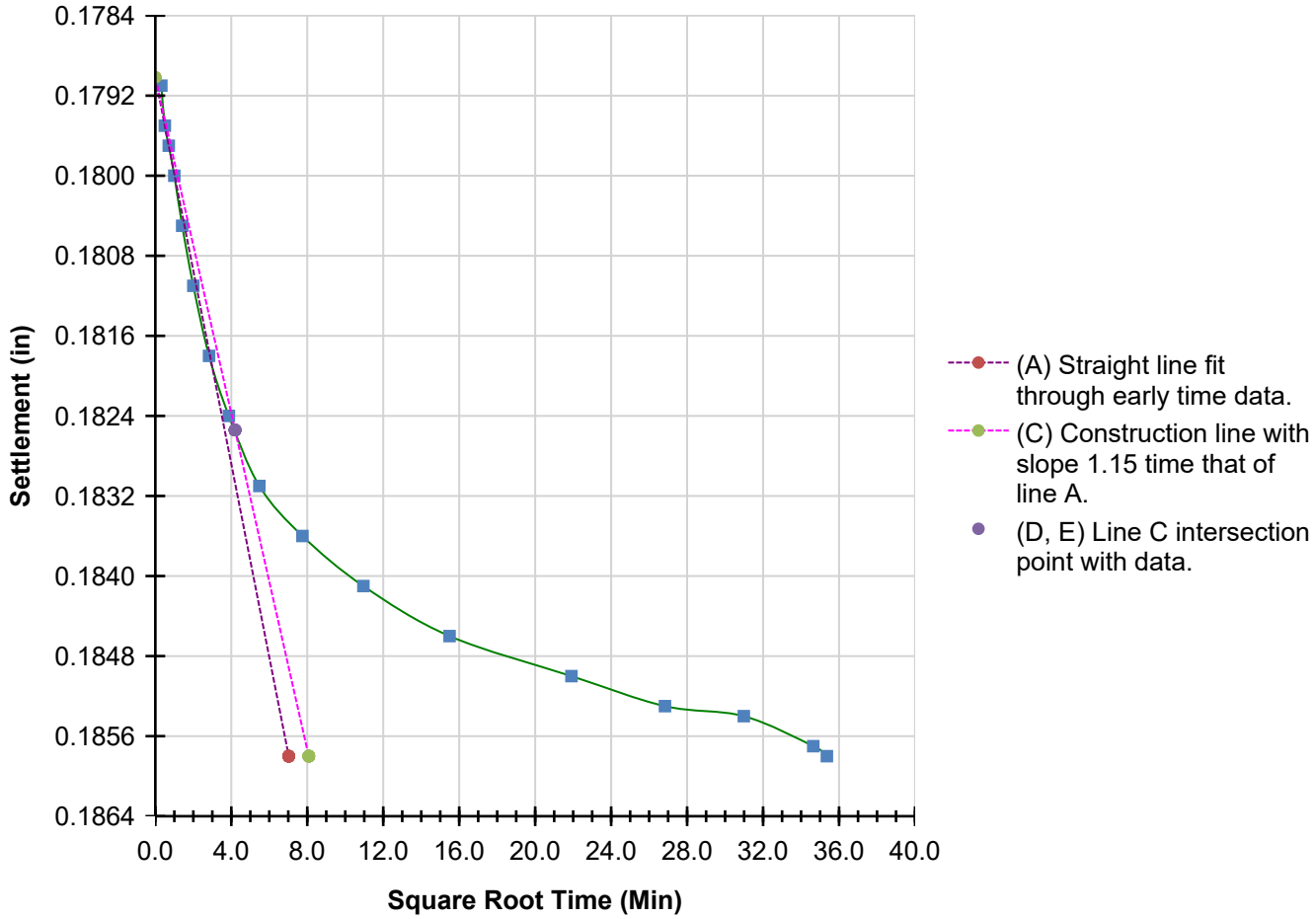
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1891	0.1788	17.9	0.790
1	00:00:06	0.0	0.1912	0.1791	17.9	0.790
2	00:00:15	0.0	0.1916	0.1795	18.0	0.789
3	00:00:30	0.0	0.1918	0.1797	18.0	0.788
4	00:01:00	0.0	0.1921	0.1800	18.0	0.788
5	00:02:00	0.0	0.1926	0.1805	18.1	0.787
6	00:04:00	0.0	0.1932	0.1811	18.1	0.785
7	00:08:00	0.0	0.1939	0.1818	18.2	0.784
8	00:15:00	0.0	0.1945	0.1824	18.2	0.782
9	00:30:00	0.0	0.1952	0.1831	18.3	0.781
10	01:00:00	0.0	0.1957	0.1836	18.4	0.780
11	02:00:00	0.0	0.1962	0.1841	18.4	0.779
12	04:00:00	0.0	0.1967	0.1846	18.5	0.778
13	08:00:00	0.0	0.1971	0.1850	18.5	0.777
14	12:00:00	0.0	0.1974	0.1853	18.5	0.776
15	16:00:00	0.0	0.1975	0.1854	18.5	0.776
16	20:00:00	0.0	0.1978	0.1857	18.6	0.775
17	20:50:12	0.0	0.1979	0.1858	18.6	0.775

Square Root Time [15] 4.000 tsf

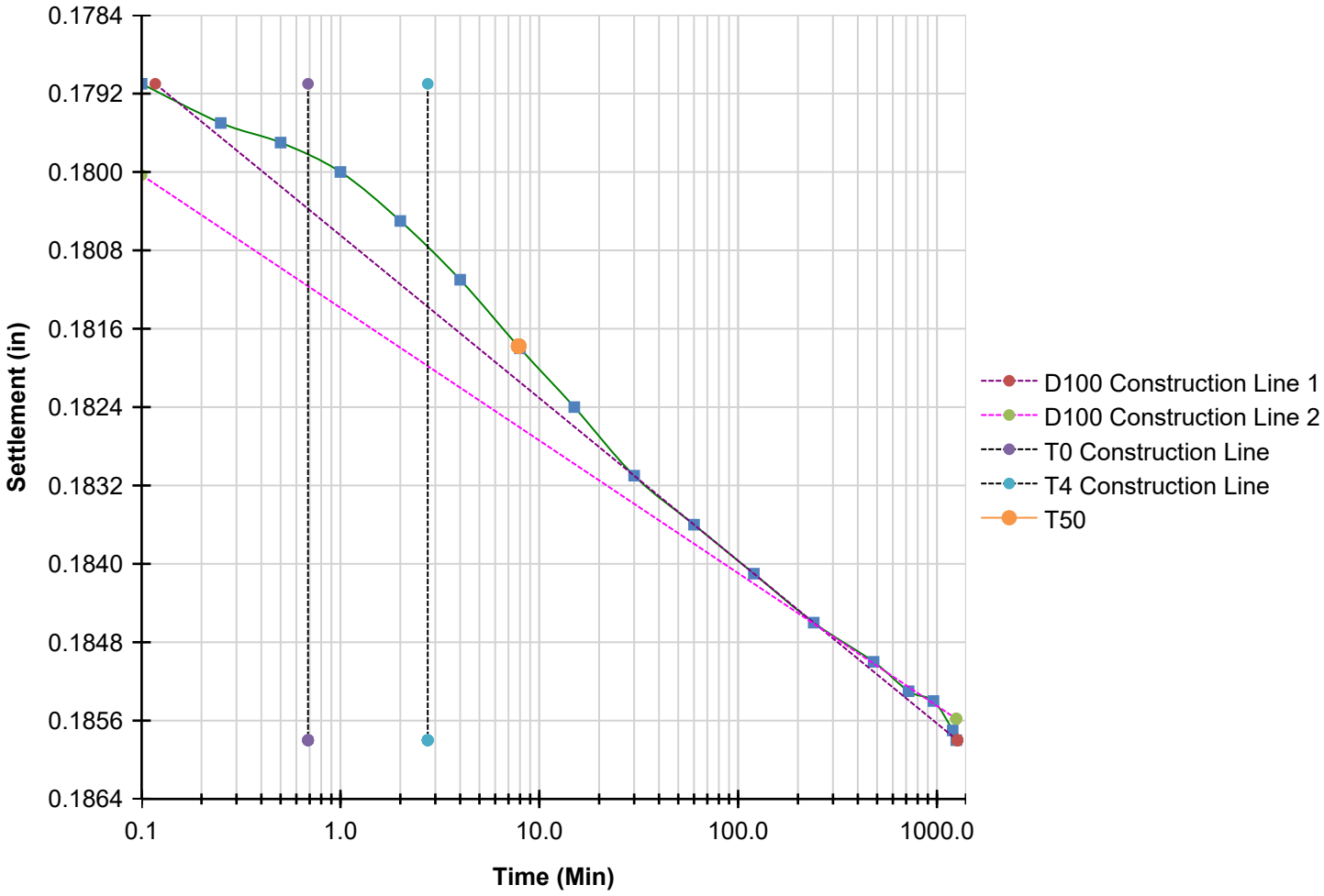
ASTM D2435



Tangent Construction Results	
T90 (Min)	17.612
T50 (Min)	3.525
Cv (in²/Min)	0.0080

Logarithmic Time [15] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	7.873
Cv (in²/Min)	0.0041

Tabulated Data - Load Sequence 16 - 8.000 tsf

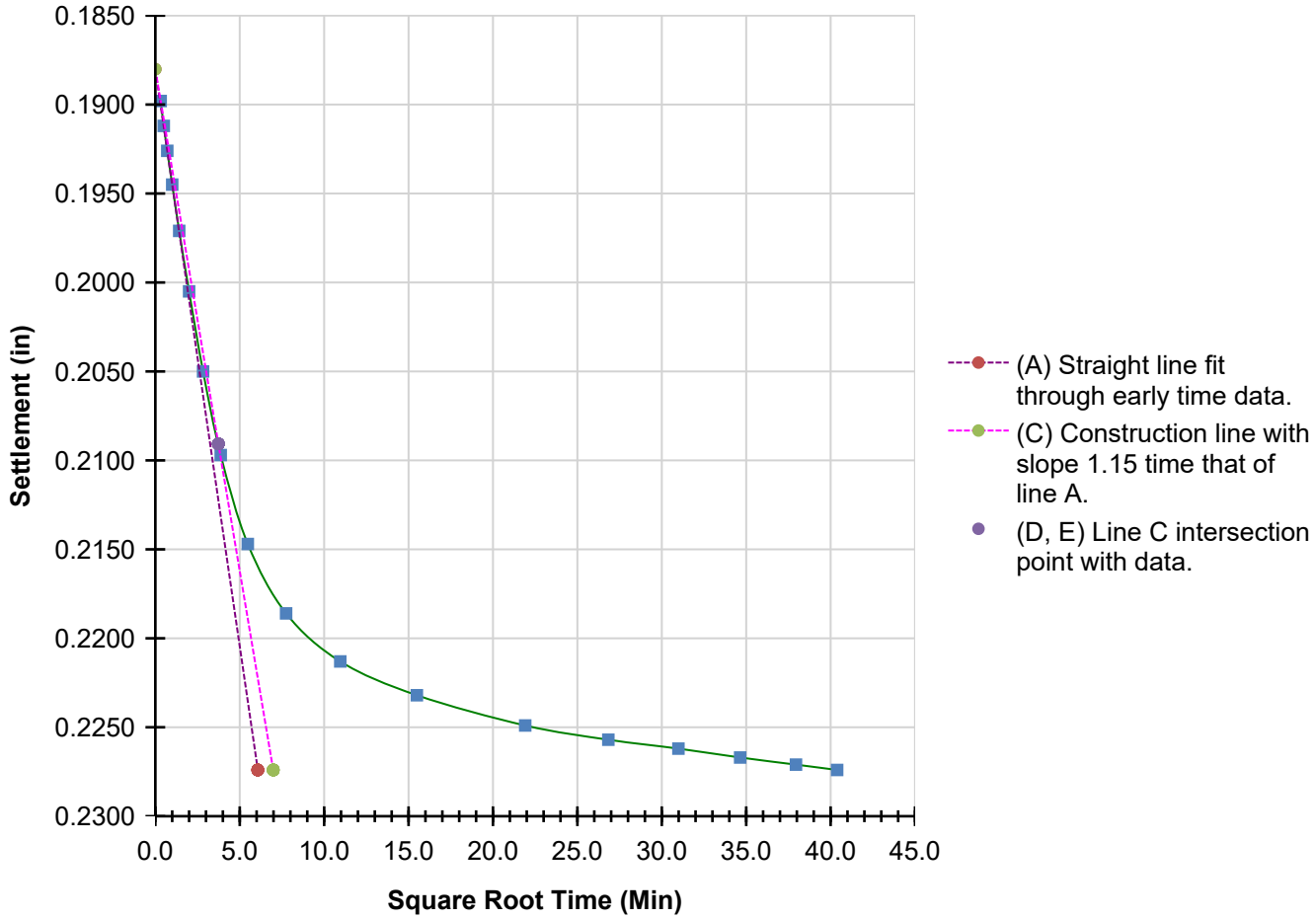
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1979	0.1858	18.6	0.775
1	00:00:06	0.0	0.2043	0.1898	19.0	0.766
2	00:00:15	0.0	0.2057	0.1912	19.1	0.763
3	00:00:30	0.0	0.2071	0.1926	19.3	0.760
4	00:01:00	0.0	0.2090	0.1945	19.5	0.756
5	00:02:00	0.0	0.2116	0.1971	19.7	0.750
6	00:04:00	0.0	0.2150	0.2005	20.1	0.743
7	00:08:00	0.0	0.2195	0.2050	20.5	0.733
8	00:15:00	0.0	0.2242	0.2097	21.0	0.723
9	00:30:00	0.0	0.2292	0.2147	21.5	0.712
10	01:00:00	0.0	0.2331	0.2186	21.9	0.703
11	02:00:00	0.0	0.2358	0.2213	22.1	0.698
12	04:00:00	0.0	0.2377	0.2232	22.3	0.693
13	08:00:00	0.0	0.2394	0.2249	22.5	0.690
14	12:00:00	0.0	0.2402	0.2257	22.6	0.688
15	16:00:00	0.0	0.2407	0.2262	22.6	0.687
16	20:00:00	0.0	0.2412	0.2267	22.7	0.686
17	24:00:00	0.0	0.2416	0.2271	22.7	0.685
18	27:11:01	0.0	0.2419	0.2274	22.7	0.684

Square Root Time [16] 8.000 tsf

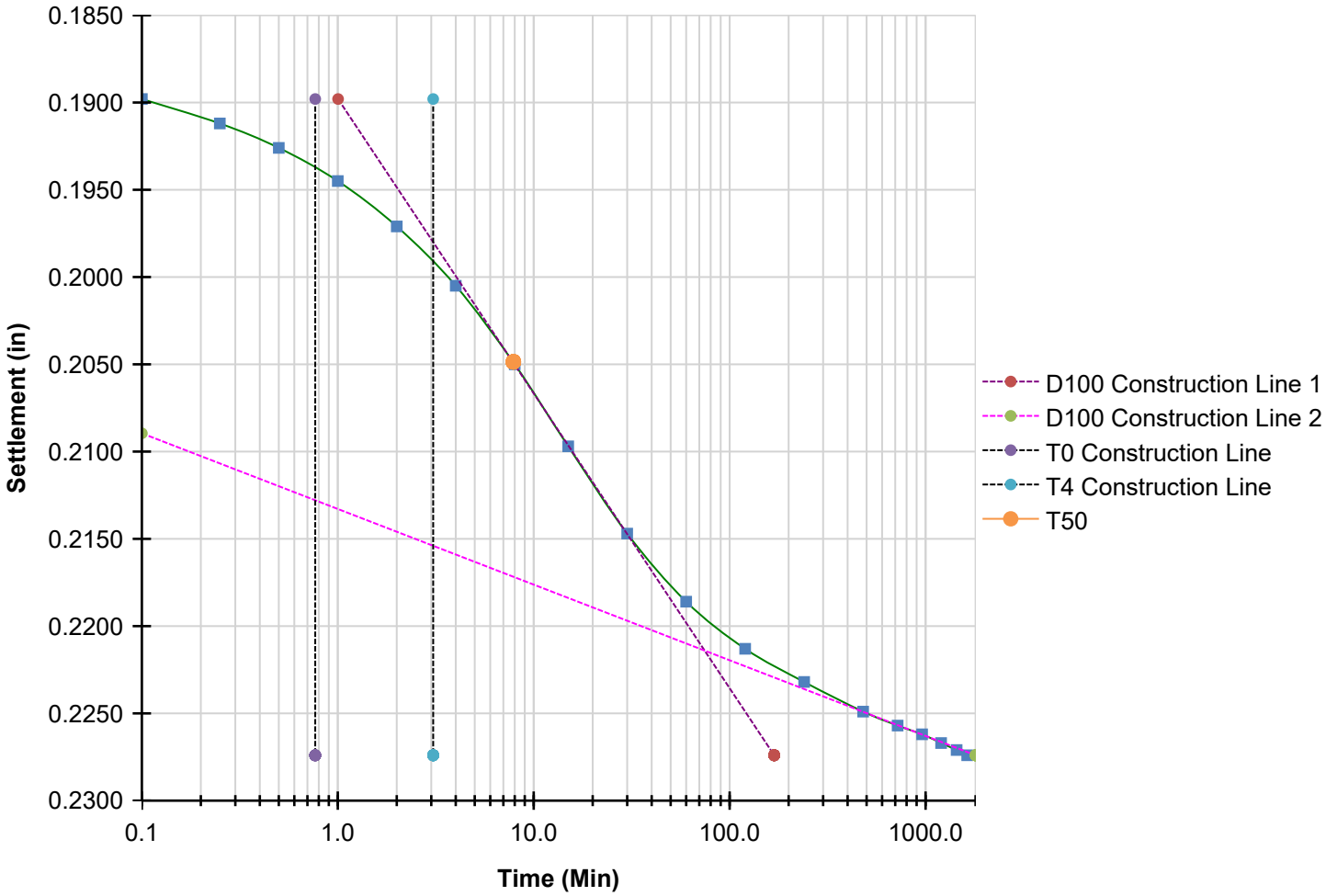
ASTM D2435



Tangent Construction Results	
T90 (Min)	13.934
T50 (Min)	3.481
Cv (in²/Min)	0.0091

Logarithmic Time [16] 8.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	7.875
Cv (in²/Min)	0.0037

Tabulated Data - Load Sequence 17 - 16.000 tsf

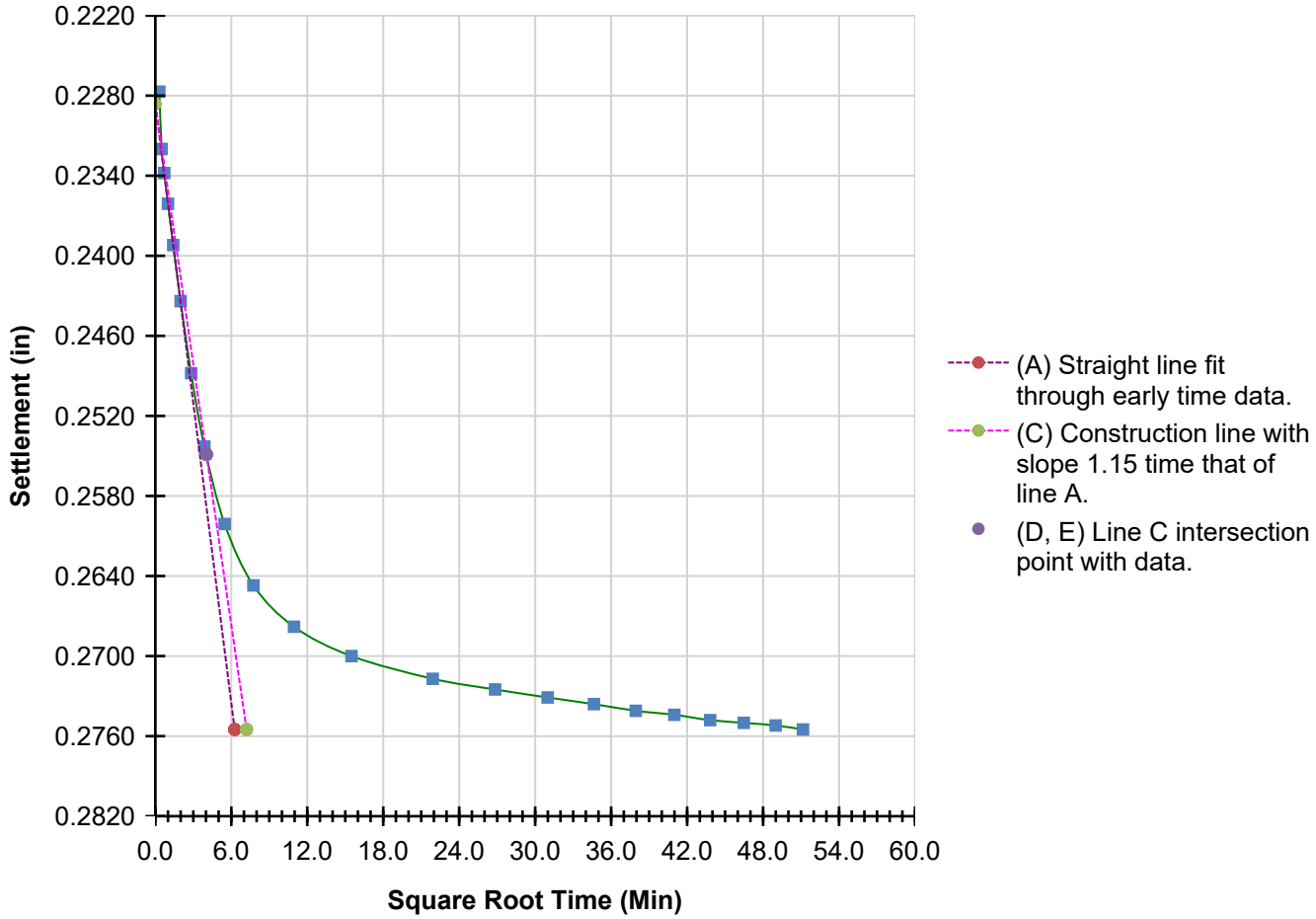
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.2419	0.2274	22.7	0.684
1	00:00:06	0.0	0.2452	0.2277	22.8	0.684
2	00:00:15	0.0	0.2495	0.2320	23.2	0.674
3	00:00:30	0.0	0.2513	0.2338	23.4	0.670
4	00:01:00	0.0	0.2536	0.2361	23.6	0.665
5	00:02:00	0.0	0.2567	0.2392	23.9	0.659
6	00:04:00	0.0	0.2609	0.2434	24.3	0.649
7	00:08:00	0.0	0.2663	0.2488	24.9	0.638
8	00:15:00	0.0	0.2718	0.2543	25.4	0.626
9	00:30:00	0.0	0.2776	0.2601	26.0	0.613
10	01:00:00	0.0	0.2822	0.2647	26.5	0.603
11	02:00:00	0.0	0.2853	0.2678	26.8	0.596
12	04:00:00	0.0	0.2875	0.2700	27.0	0.591
13	08:00:00	0.0	0.2892	0.2717	27.2	0.588
14	12:00:00	0.0	0.2900	0.2725	27.3	0.586
15	16:00:00	0.0	0.2906	0.2731	27.3	0.585
16	20:00:00	0.0	0.2911	0.2736	27.4	0.583
17	24:00:00	0.0	0.2916	0.2741	27.4	0.582
18	28:00:00	0.0	0.2919	0.2744	27.4	0.582
19	32:00:00	0.0	0.2923	0.2748	27.5	0.581
20	36:00:00	0.0	0.2925	0.2750	27.5	0.580
21	40:00:00	0.0	0.2927	0.2752	27.5	0.580
22	43:36:15	0.0	0.2930	0.2755	27.6	0.579

Square Root Time [17] 16.000 tsf

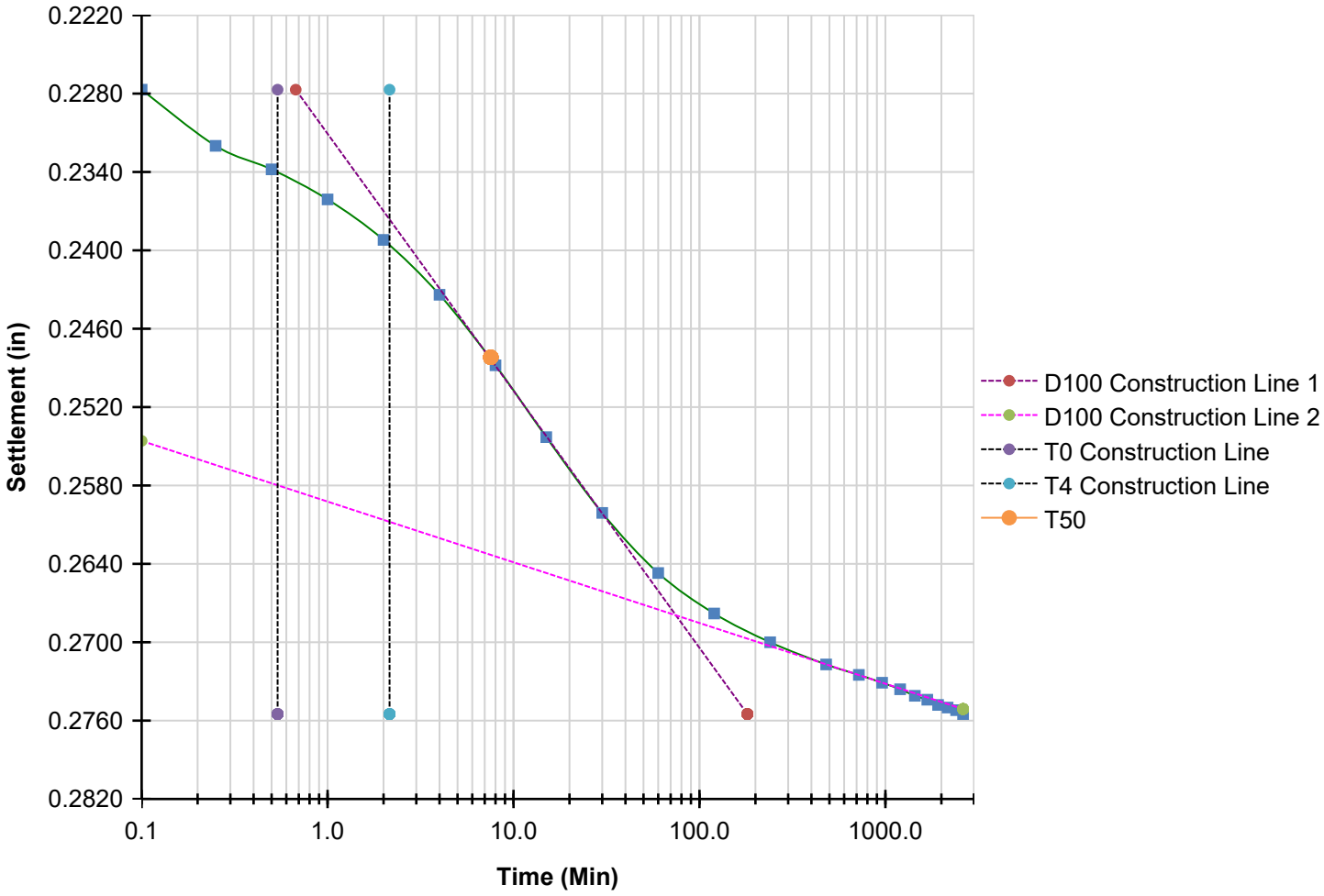
ASTM D2435



Tangent Construction Results	
T90 (Min)	16.311
T50 (Min)	3.904
Cv (in²/Min)	0.0068

Logarithmic Time [17] 16.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	7.545
Cv (in²/Min)	0.0034

Tabulated Data - Load Sequence 18 - 4.000 tsf

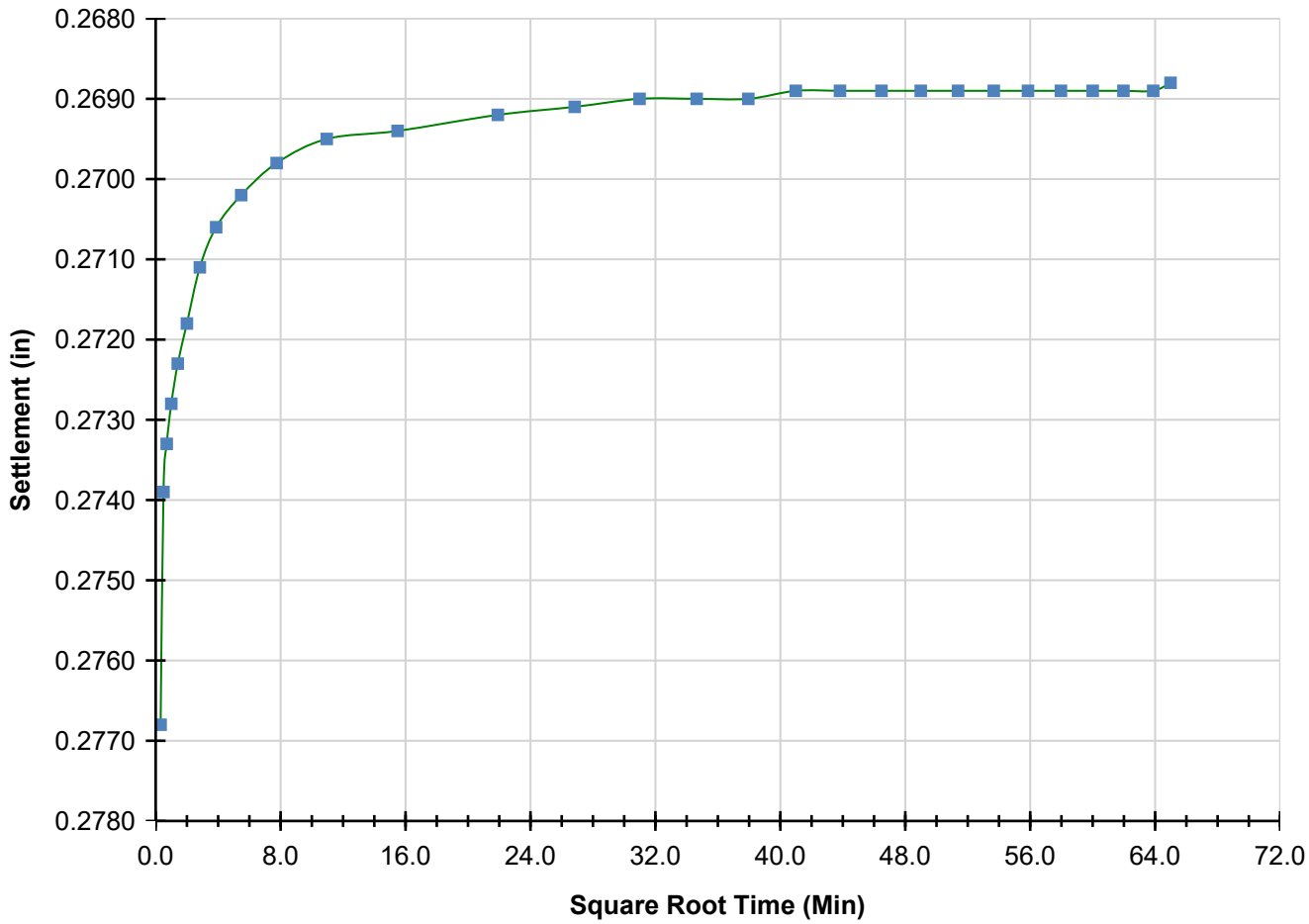
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.2930	0.2755	27.6	0.579
1	00:00:06	0.0	0.2910	0.2768	27.7	0.577
2	00:00:15	0.0	0.2881	0.2739	27.4	0.583
3	00:00:30	0.0	0.2875	0.2733	27.3	0.584
4	00:01:00	0.0	0.2870	0.2728	27.3	0.585
5	00:02:00	0.0	0.2865	0.2723	27.2	0.586
6	00:04:00	0.0	0.2860	0.2718	27.2	0.587
7	00:08:00	0.0	0.2853	0.2711	27.1	0.589
8	00:15:00	0.0	0.2848	0.2706	27.1	0.590
9	00:30:00	0.0	0.2844	0.2702	27.0	0.591
10	01:00:00	0.0	0.2840	0.2698	27.0	0.592
11	02:00:00	0.0	0.2837	0.2695	27.0	0.592
12	04:00:00	0.0	0.2836	0.2694	26.9	0.593
13	08:00:00	0.0	0.2834	0.2692	26.9	0.593
14	12:00:00	0.0	0.2833	0.2691	26.9	0.593
15	16:00:00	0.0	0.2832	0.2690	26.9	0.594
16	20:00:00	0.0	0.2832	0.2690	26.9	0.594
17	24:00:00	0.0	0.2832	0.2690	26.9	0.594
18	28:00:00	0.0	0.2831	0.2689	26.9	0.594
19	32:00:00	0.0	0.2831	0.2689	26.9	0.594
20	36:00:00	0.0	0.2831	0.2689	26.9	0.594
21	40:00:00	0.0	0.2831	0.2689	26.9	0.594
22	44:00:00	0.0	0.2831	0.2689	26.9	0.594
23	48:00:00	0.0	0.2831	0.2689	26.9	0.594
24	52:00:00	0.0	0.2831	0.2689	26.9	0.594
25	56:00:00	0.0	0.2831	0.2689	26.9	0.594
26	60:00:00	0.0	0.2831	0.2689	26.9	0.594
27	64:00:00	0.0	0.2831	0.2689	26.9	0.594
28	68:00:00	0.0	0.2831	0.2689	26.9	0.594
29	70:22:57	0.0	0.2830	0.2688	26.9	0.594

Square Root Time [18] 4.000 tsf

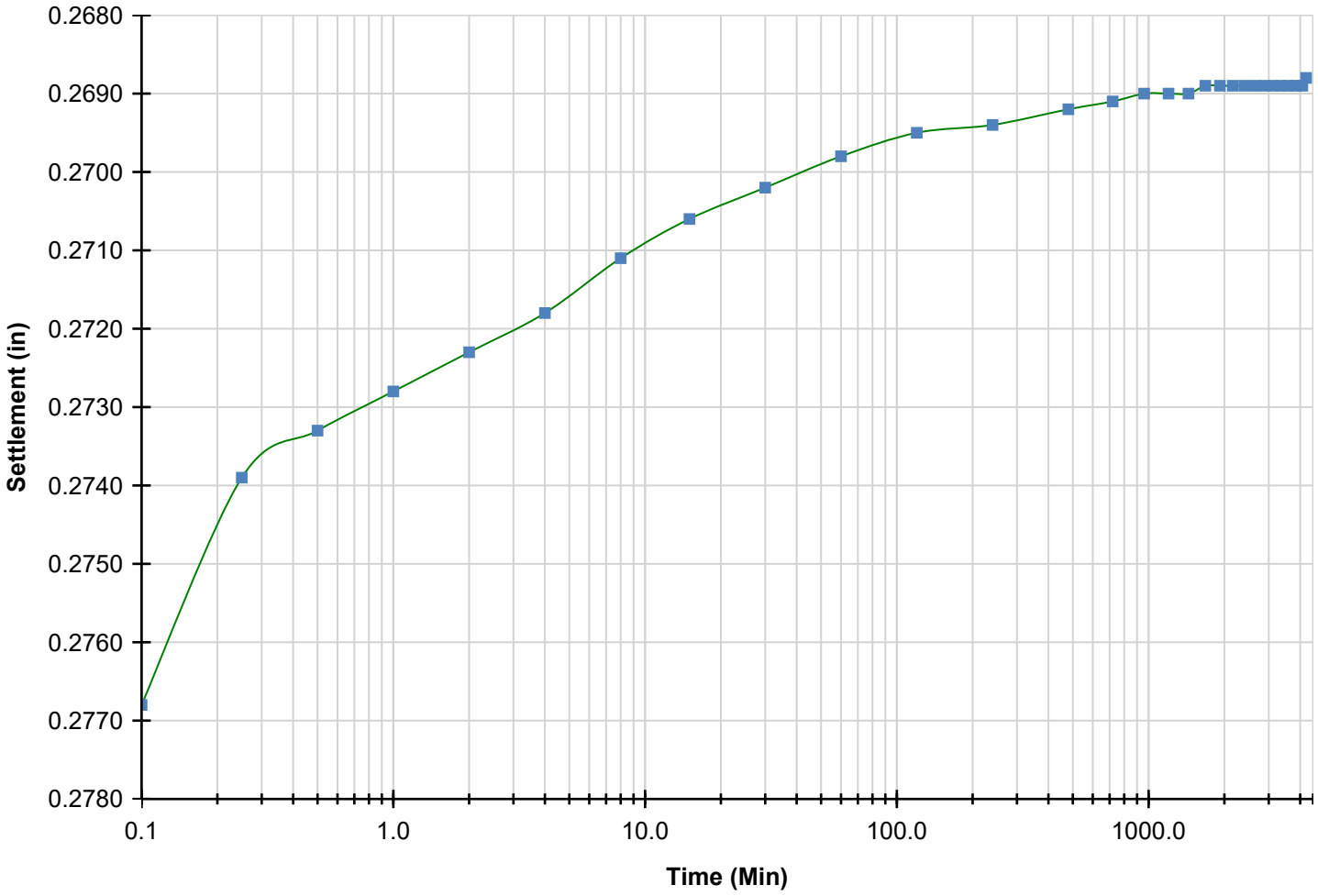
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [18] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 19 - 0.016 tsf

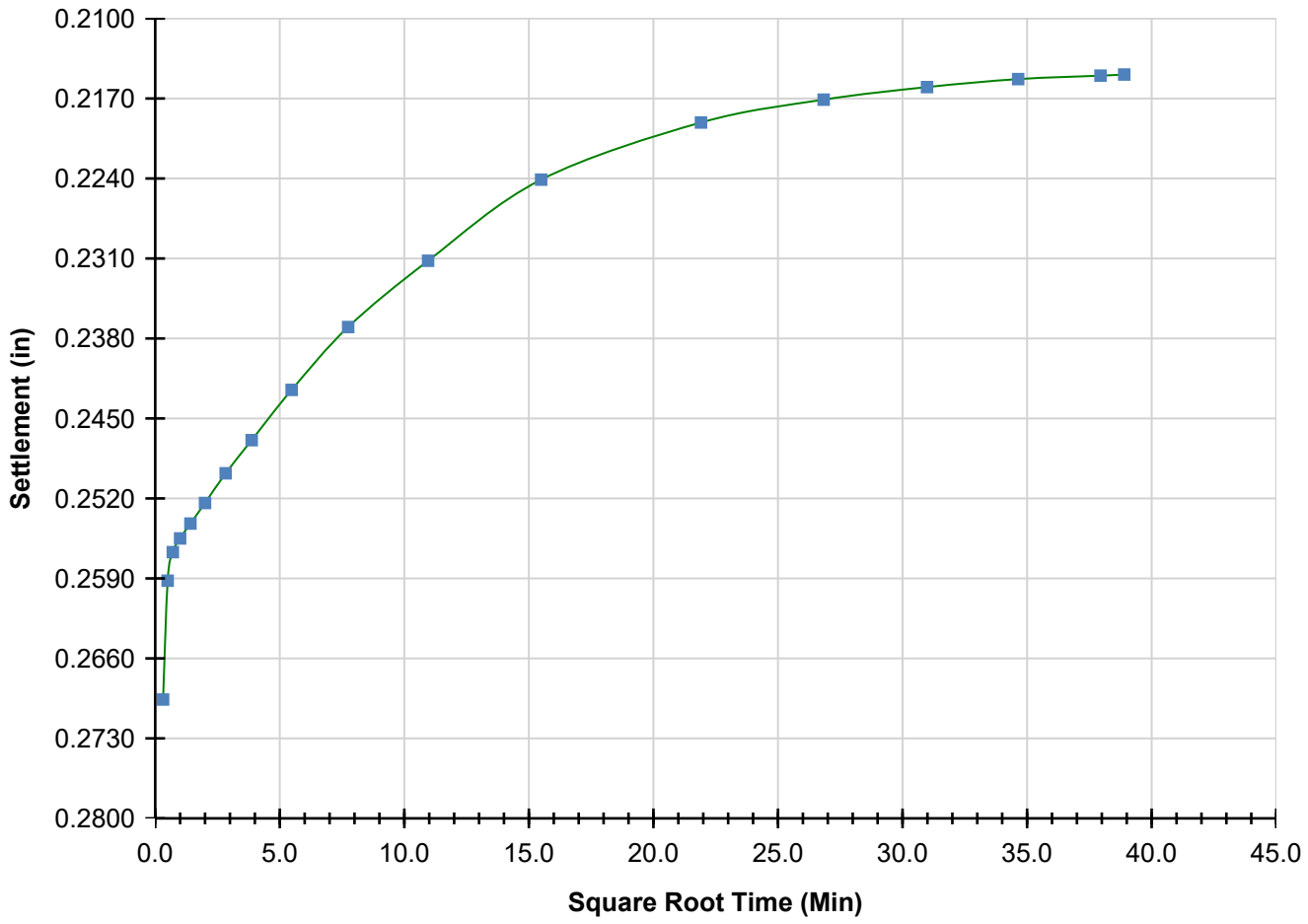
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.2830	0.2688	26.9	0.594
1	00:00:06	0.0	0.2766	0.2696	27.0	0.592
2	00:00:15	0.0	0.2662	0.2592	25.9	0.615
3	00:00:30	0.0	0.2637	0.2567	25.7	0.620
4	00:01:00	0.0	0.2625	0.2555	25.6	0.623
5	00:02:00	0.0	0.2612	0.2542	25.4	0.626
6	00:04:00	0.0	0.2594	0.2524	25.2	0.630
7	00:08:00	0.0	0.2568	0.2498	25.0	0.635
8	00:15:00	0.0	0.2539	0.2469	24.7	0.642
9	00:30:00	0.0	0.2495	0.2425	24.3	0.651
10	01:00:00	0.0	0.2440	0.2370	23.7	0.663
11	02:00:00	0.0	0.2382	0.2312	23.1	0.676
12	04:00:00	0.0	0.2311	0.2241	22.4	0.691
13	08:00:00	0.0	0.2261	0.2191	21.9	0.702
14	12:00:00	0.0	0.2241	0.2171	21.7	0.707
15	16:00:00	0.0	0.2230	0.2160	21.6	0.709
16	20:00:00	0.0	0.2223	0.2153	21.5	0.711
17	24:00:00	0.0	0.2220	0.2150	21.5	0.711
18	25:13:07	0.0	0.2219	0.2149	21.5	0.712

Square Root Time [19] 0.016 tsf

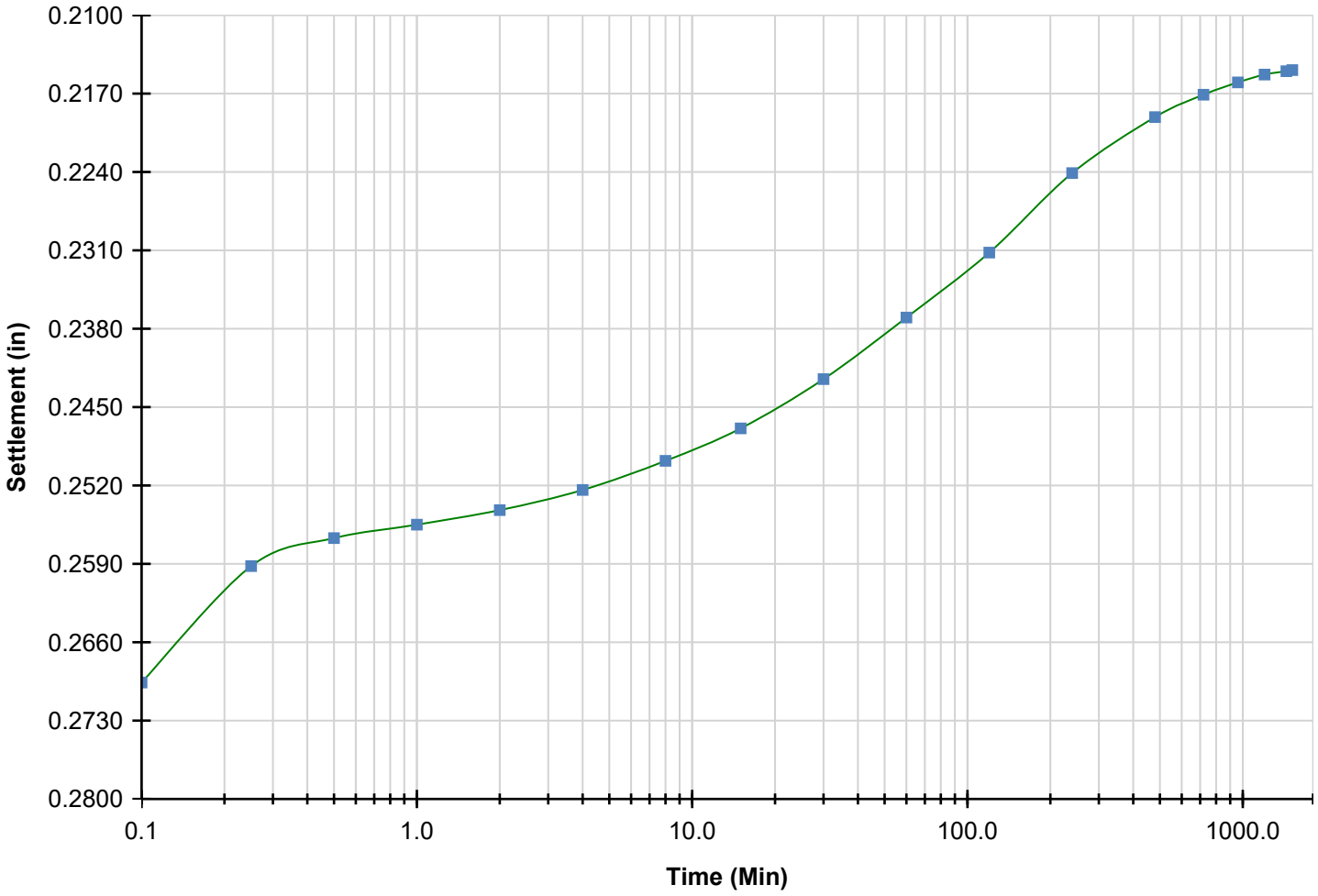
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [19] 0.016 tsf

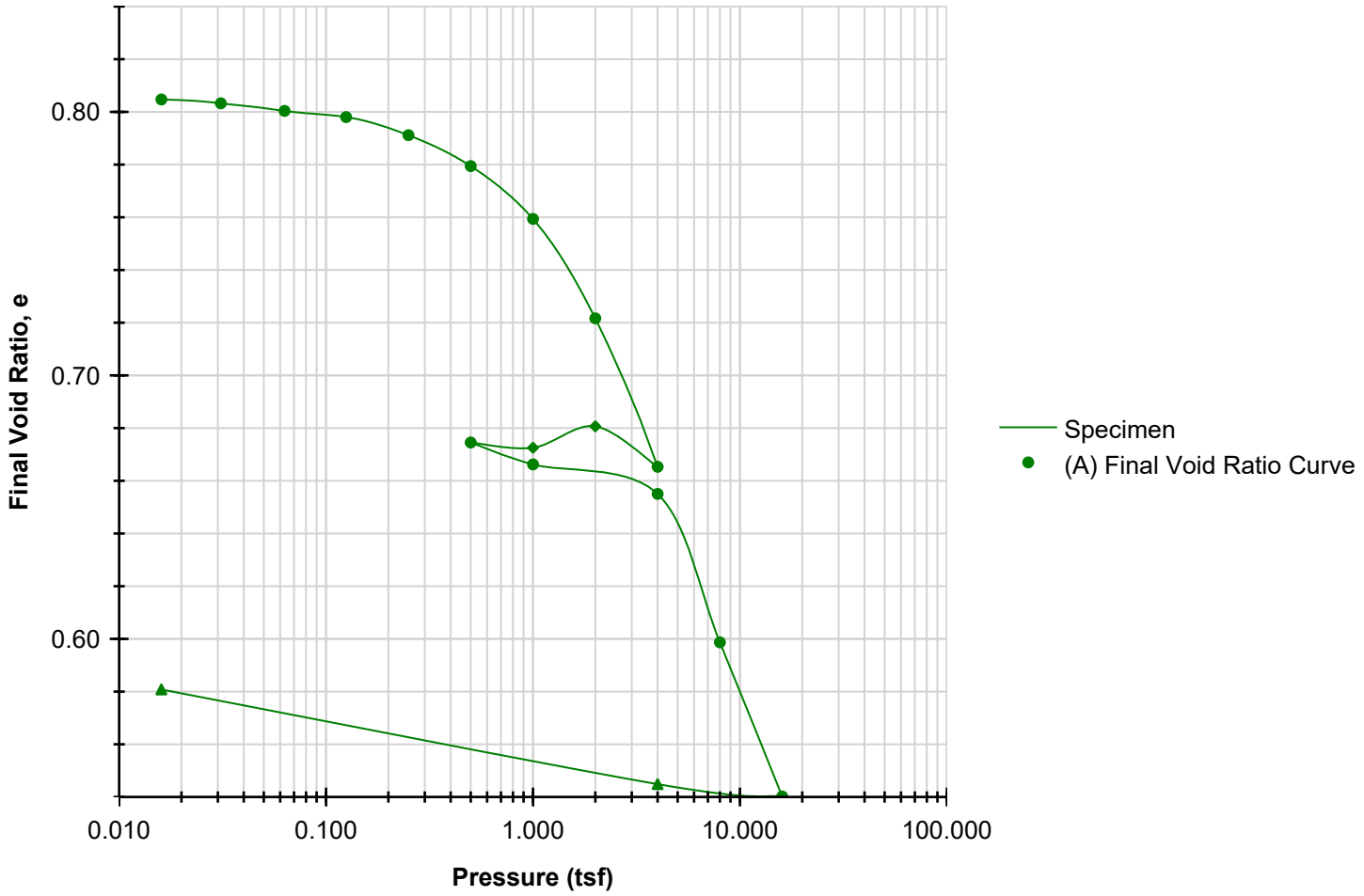
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Final Voids [Log]

ASTM D2435



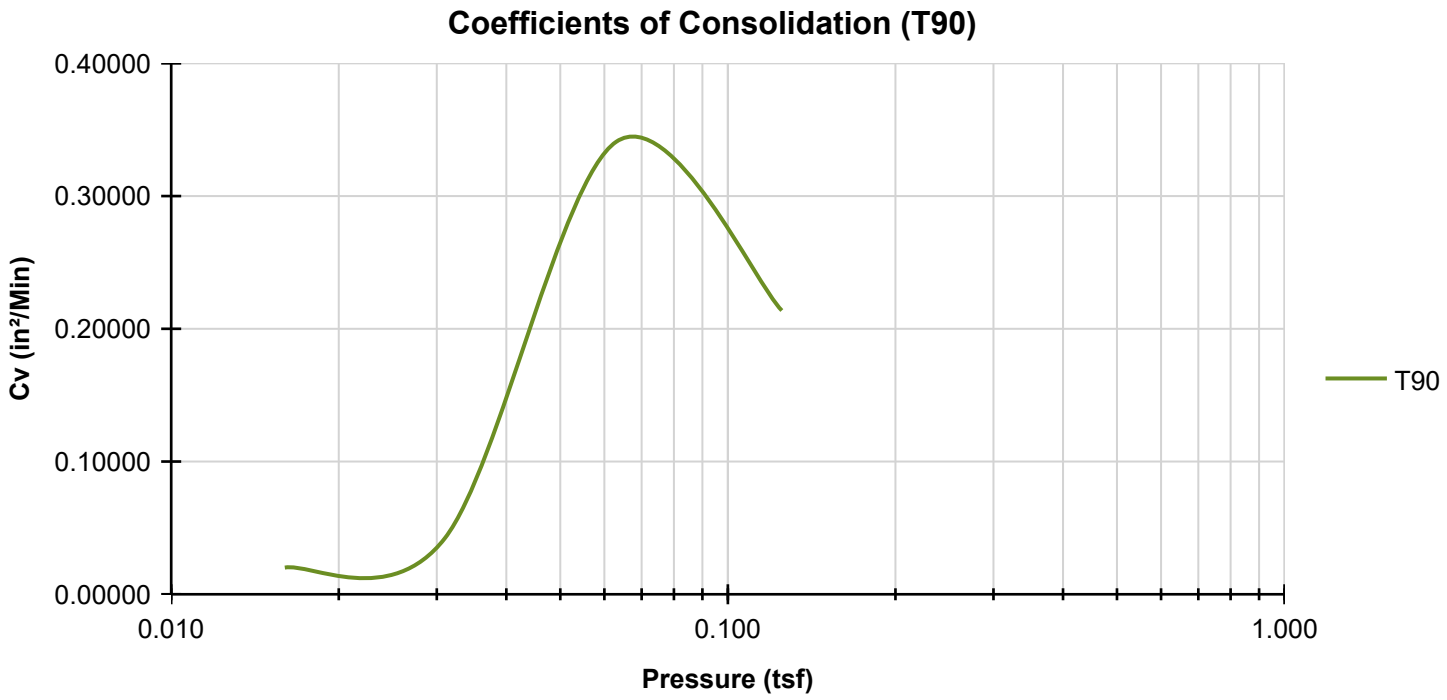
Preconsolidation Stress (tsf)	0.000	**Cc**	0.000	**Cr**	0.000

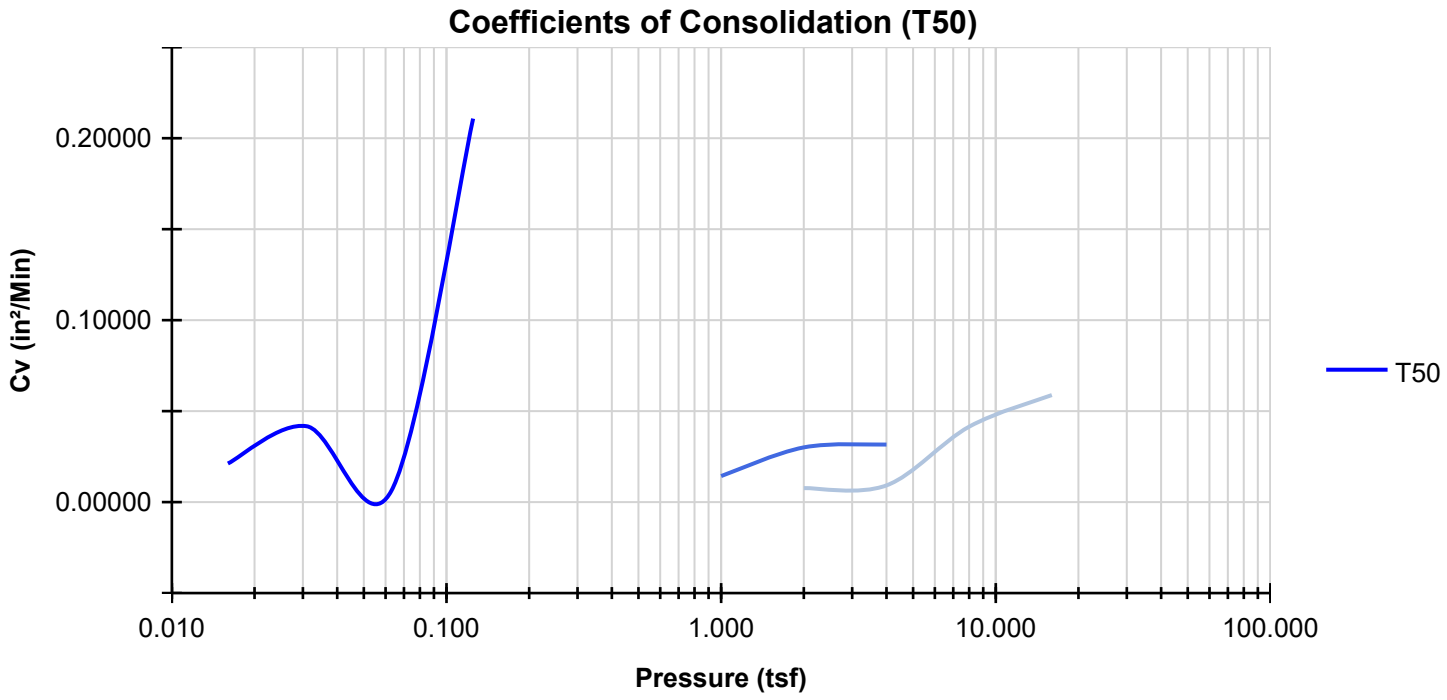
	BEFORE	AFTER			
			Liquid Limits	0	**Test Date** 1/15/2024
Moisture (%)	27.6	21.5	**Plastic Limits**	0	
Dry Density (pcf)	91.1	104.1			
Saturation (%)	90.0	97.3			
Void Ratio	0.81	0.58	**Specific Gravity**	2.64	MEASURED

Sample Description	Grey colored soft clayey silt			
Project Number	BP1.R017.1	**Depth (ft)**	4.8-6.3	**Remarks**
Sample Number	ST-2	**Boring Number**		
Project	SF-650053			
Client	T-6222			
Location	STA. 15+03 (NORTHAMPTON COUNTY)			

Coefficients of Consolidation

ASTM D2435





Summary

ASTM D2435

Sample Description	Grey colored soft clayey silt			
Project Number	BP1.R017.1	**Depth (ft)**	4.8-6.3	**Remarks**
Sample Number	ST-2	**Boring Number**		
Project	SF-650053			
Client	T-6222			
Location	STA. 15+03 (NORTHAMPTON COUNTY)			

Index	Loading Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Voids (in)	Vertical Strain (%)	Void Ratio	T90 Fitting Time (Hr)	T50 Fitting Time (Hr)	T90 Cv (in²/Min)	T50 Cv (in²/Min)	Sequence Status
0	0.000	0.0000	1.0000	0.0000	0.0	0.809	0.000	0.000	0.00000	0.00000	ENABLED
1	0.016	0.0005	0.9995	0.4457	0.1	0.805	0.176	0.039	0.02010	0.02121	ENABLED
2	0.031	0.0013	0.9987	0.4449	0.1	0.803	0.084	0.020	0.04208	0.04168	ENABLED
3	0.063	0.0029	0.9971	0.4433	0.3	0.800	0.010	0.131	0.34087	0.00622	ENABLED
4	0.125	0.0042	0.9958	0.4420	0.4	0.798	0.016	0.004	0.21377	0.21077	ENABLED
5	0.250	0.0080	0.9920	0.4382	0.8	0.791	0.052	0.000	0.00000	0.00000	ENABLED
6	0.500	0.0145	0.9855	0.4317	1.5	0.779	0.039	0.000	0.00000	0.00000	ENABLED
7	1.000	0.0256	0.9744	0.4206	2.6	0.759	0.068	0.054	0.00000	0.01430	ENABLED
8	2.000	0.0465	0.9535	0.3997	4.7	0.722	0.025	0.025	0.00000	0.03007	ENABLED
9	4.000	0.0777	0.9223	0.3685	7.8	0.665	0.026	0.022	0.00000	0.03162	ENABLED
10	2.000	0.0692	0.9308	0.3770	6.9	0.681	0.000	0.000	0.00000	0.00000	ENABLED
11	1.000	0.0737	0.9263	0.3725	7.4	0.673	0.000	0.000	0.00000	0.00000	ENABLED
12	0.500	0.0726	0.9274	0.3736	7.3	0.675	0.000	0.000	0.00000	0.00000	ENABLED
13	1.000	0.0772	0.9228	0.3690	7.7	0.666	1.051	0.000	0.00000	0.00000	ENABLED
14	2.000	0.0772	0.9228	0.3690	7.7	0.666	0.163	0.091	0.00000	0.00770	ENABLED
15	4.000	0.0834	0.9166	0.3628	8.3	0.655	0.048	0.075	0.00000	0.00919	ENABLED
16	8.000	0.1146	0.8854	0.3316	11.5	0.599	0.016	0.016	0.00000	0.04146	ENABLED

Summary

ASTM D2435

Index	Loading Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Voids (in)	Vertical Strain (%)	Void Ratio	T90 Fitting Time (Hr)	T50 Fitting Time (Hr)	T90 Cv (in²/Min)	T50 Cv (in²/Min)	Sequence Status
17	16.000	0.1470	0.8530	0.2992	14.7	0.540	0.214	0.007	0.01200	0.05883	ENABLED
18	4.000	0.1444	0.8556	0.3018	14.4	0.545	0.000	0.000	0.00000	0.00000	ENABLED
19	0.016	0.1245	0.8755	0.3217	12.5	0.581	0.000	0.000	0.00000	0.00000	ENABLED

Consolidated Test Results

ASTM D2435

Project:	SF-650053
Project Number:	BP1.R017.1
Job Number:	T-6222
Test Date:	1/15/2024

Sampling Date:	1/15/2024
Sample Number:	ST-2
Depth (ft)	4.8-6.3
Boring Number:	
Location:	STA. 15+03 (NORTHAMPTON COUNTY)
Client Name:	T-6222
Remarks:	

Specific Gravity:	2.64	Plastic Limit:	0	Liquid Limit:	0
Specific Gravity Method:	MEASURED			Weight of Ring (g)	111.2
Sampling Method:	Undisturbed	Soil Classification:			
Specimen Description:	Grey colored soft clayey silt				

Parameters	Initial	Final
Height (in)	1.0000	0.8755
Height Source	NA	TEST RESULTS
Diameter (in)	2.4997	NA
Area (in²)	4.907	NA
Volume (in³)	4.9074	4.2965
Weight of Container (g)	0.0	0.0
Weight of Wet Soil + Container (g)	149.7	142.6
Weight of Dry Soil + Container (g)	117.4	117.4
Moisture Content (%)	27.6	21.5
Moist Weight + Ring Weight (g)	260.9	253.8
Dry Density (pcf)	91.1	104.1
Wet Density (pcf)	116.2	126.5
Saturation (%)	90.0	97.3
Void Ratio	0.8	0.6

Consolidation Test Results

ASTM D2435

Specimen 1			
Test Description:			
Other Associated Tests:			
Device Details:			
Test Specification:			
Test Time:	1/15/2024 12:00:00 AM		
Technician:		Sampling Method:	Undisturbed
Specimen Code:		Specimen Lab #:	T-6222
Specimen Description:	Grey colored soft clayey silt		
Specimen Preparation:	Cutting Shoe		
Large Particle:			
Moisture Content:	Inundated		
Test Condition:			
Test Procedure:			
Seating Pressure Used:	NO	Seating Pressure (tsf):	0.000
Preconsolidation Stress:			
Percent Strain [LOG] Graph (tsf):	0.000	Final Voids Graph (tsf):	0.000

Tabulated Data - Load Sequence 1 - 0.016 tsf

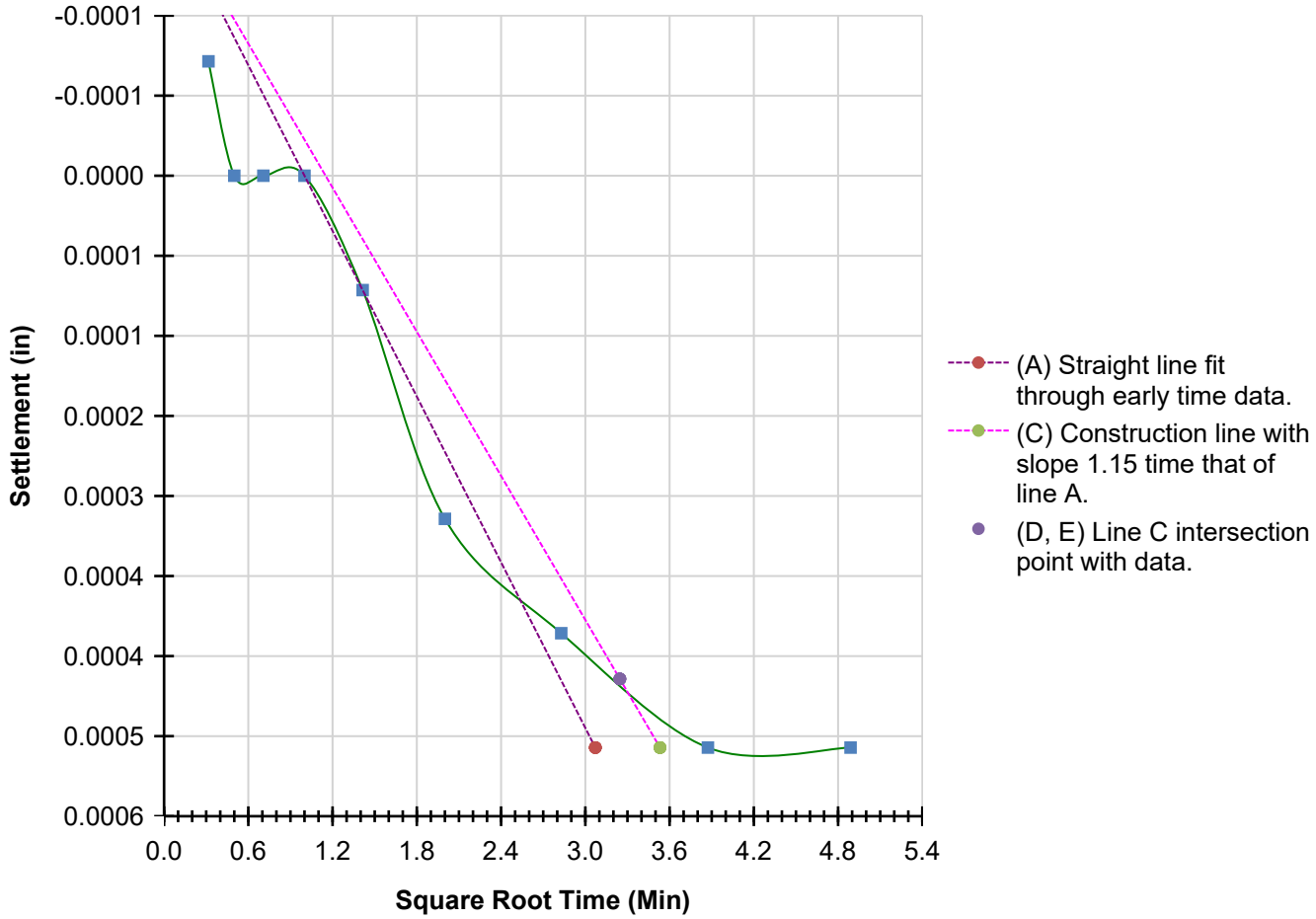
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0002	0.0000	0.0	0.809
1	00:00:06	0.0	0.0003	-0.0001	0.0	0.806
2	00:00:15	0.0	0.0004	0.0000	0.0	0.806
3	00:00:30	0.0	0.0004	0.0000	0.0	0.806
4	00:01:00	0.0	0.0004	0.0000	0.0	0.806
5	00:02:00	0.0	0.0005	0.0001	0.0	0.805
6	00:04:00	0.0	0.0007	0.0003	0.0	0.805
7	00:08:00	0.0	0.0008	0.0004	0.0	0.805
8	00:15:00	0.0	0.0009	0.0005	0.1	0.805
9	00:23:54	0.0	0.0009	0.0005	0.1	0.805

Square Root Time [1] 0.016 tsf

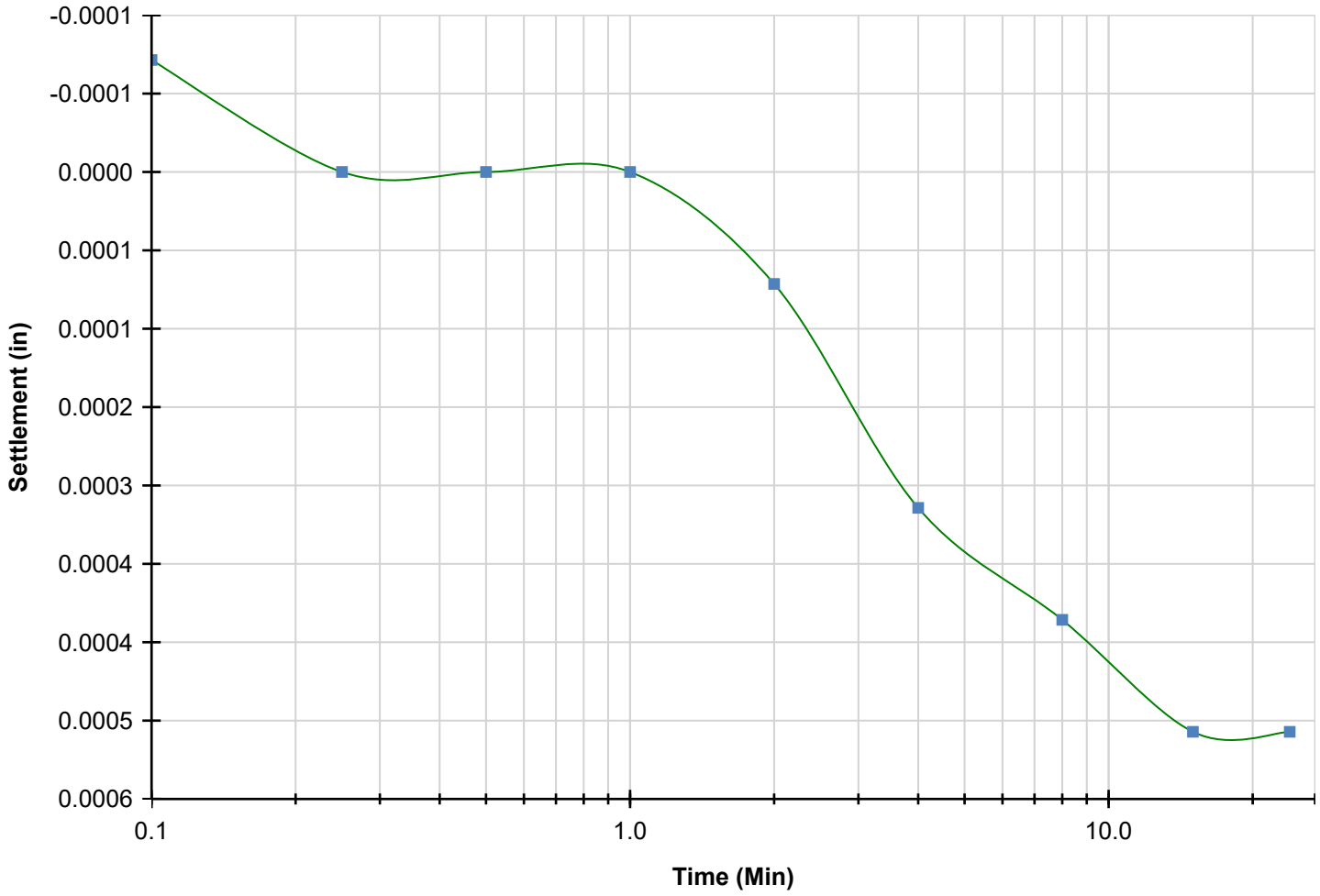
ASTM D2435



Tangent Construction Results	
T90 (Min)	10.534
T50 (Min)	2.319
Cv (in²/Min)	0.0201

Logarithmic Time [1] 0.016 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 2 - 0.031 tsf

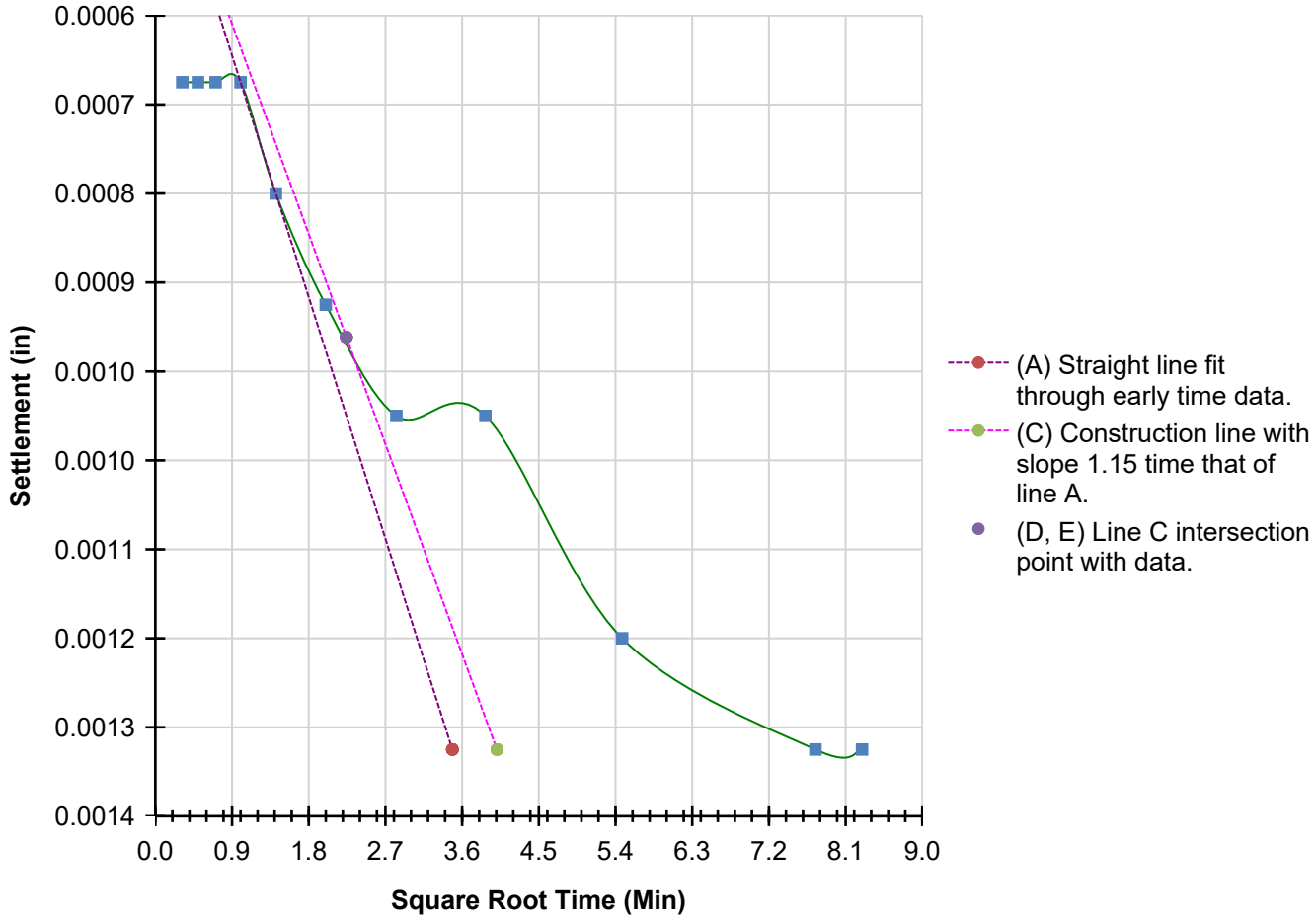
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0009	0.0005	0.1	0.805
1	00:00:06	0.0	0.0013	0.0007	0.1	0.804
2	00:00:15	0.0	0.0013	0.0007	0.1	0.804
3	00:00:30	0.0	0.0013	0.0007	0.1	0.804
4	00:01:00	0.0	0.0013	0.0007	0.1	0.804
5	00:02:00	0.0	0.0014	0.0008	0.1	0.804
6	00:04:00	0.0	0.0015	0.0009	0.1	0.804
7	00:08:00	0.0	0.0016	0.0010	0.1	0.804
8	00:15:00	0.0	0.0016	0.0010	0.1	0.804
9	00:30:00	0.0	0.0018	0.0012	0.1	0.803
10	01:00:00	0.0	0.0019	0.0013	0.1	0.803
11	01:08:46	0.0	0.0019	0.0013	0.1	0.803

Square Root Time [2] 0.031 tsf

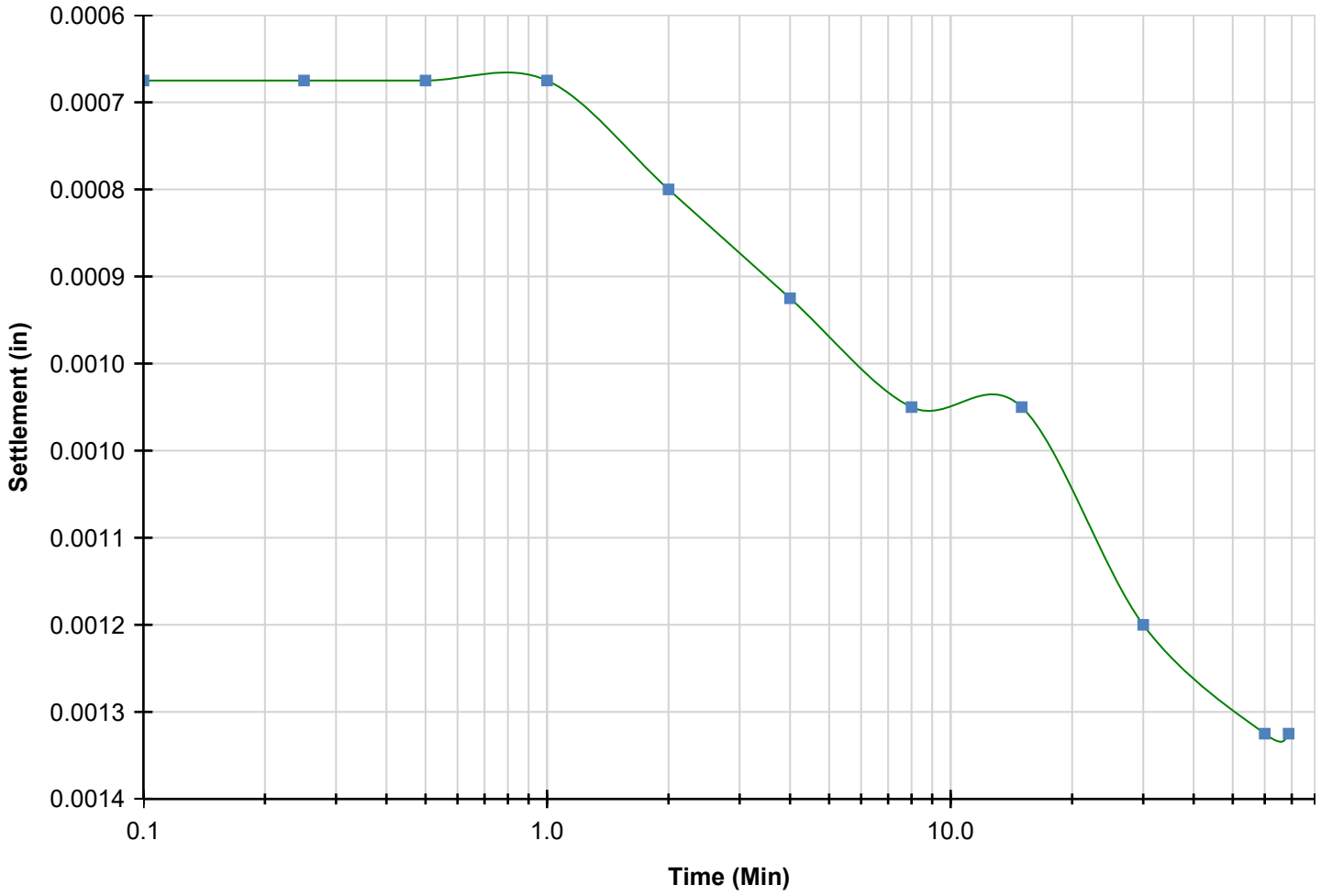
ASTM D2435



Tangent Construction Results	
T90 (Min)	5.025
T50 (Min)	1.177
Cv (in²/Min)	0.0421

Logarithmic Time [2] 0.031 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 3 - 0.063 tsf

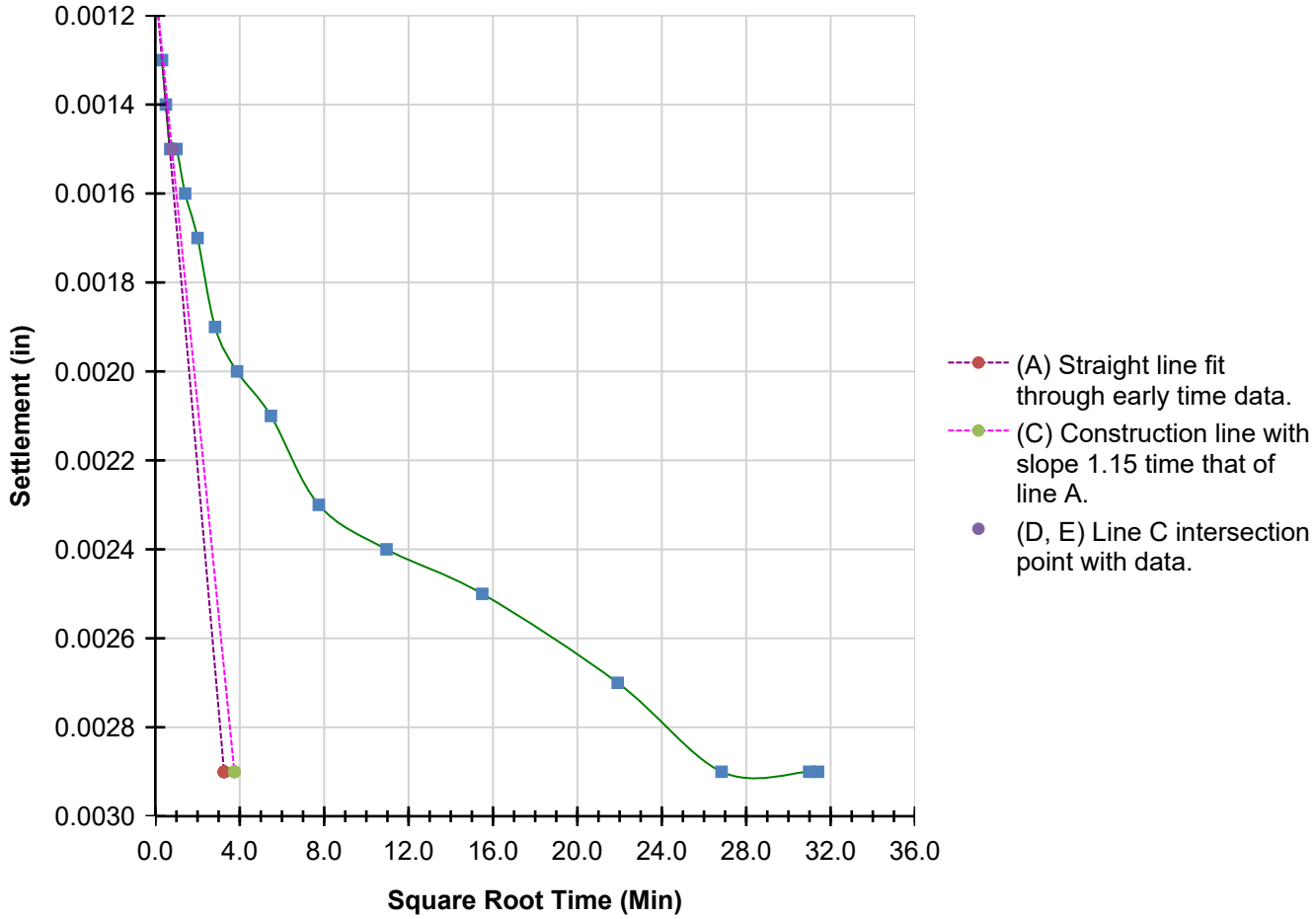
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0019	0.0013	0.1	0.803
1	00:00:06	0.0	0.0024	0.0013	0.1	0.803
2	00:00:15	0.0	0.0025	0.0014	0.1	0.803
3	00:00:30	0.0	0.0026	0.0015	0.2	0.803
4	00:01:00	0.0	0.0026	0.0015	0.2	0.803
5	00:02:00	0.0	0.0027	0.0016	0.2	0.803
6	00:04:00	0.0	0.0028	0.0017	0.2	0.803
7	00:08:00	0.0	0.0030	0.0019	0.2	0.802
8	00:15:00	0.0	0.0031	0.0020	0.2	0.802
9	00:30:00	0.0	0.0032	0.0021	0.2	0.802
10	01:00:00	0.0	0.0034	0.0023	0.2	0.801
11	02:00:00	0.0	0.0035	0.0024	0.2	0.801
12	04:00:00	0.0	0.0036	0.0025	0.3	0.801
13	08:00:00	0.0	0.0038	0.0027	0.3	0.801
14	12:00:00	0.0	0.0040	0.0029	0.3	0.800
15	16:00:00	0.0	0.0040	0.0029	0.3	0.800
16	16:26:13	0.0	0.0040	0.0029	0.3	0.800

Square Root Time [3] 0.063 tsf

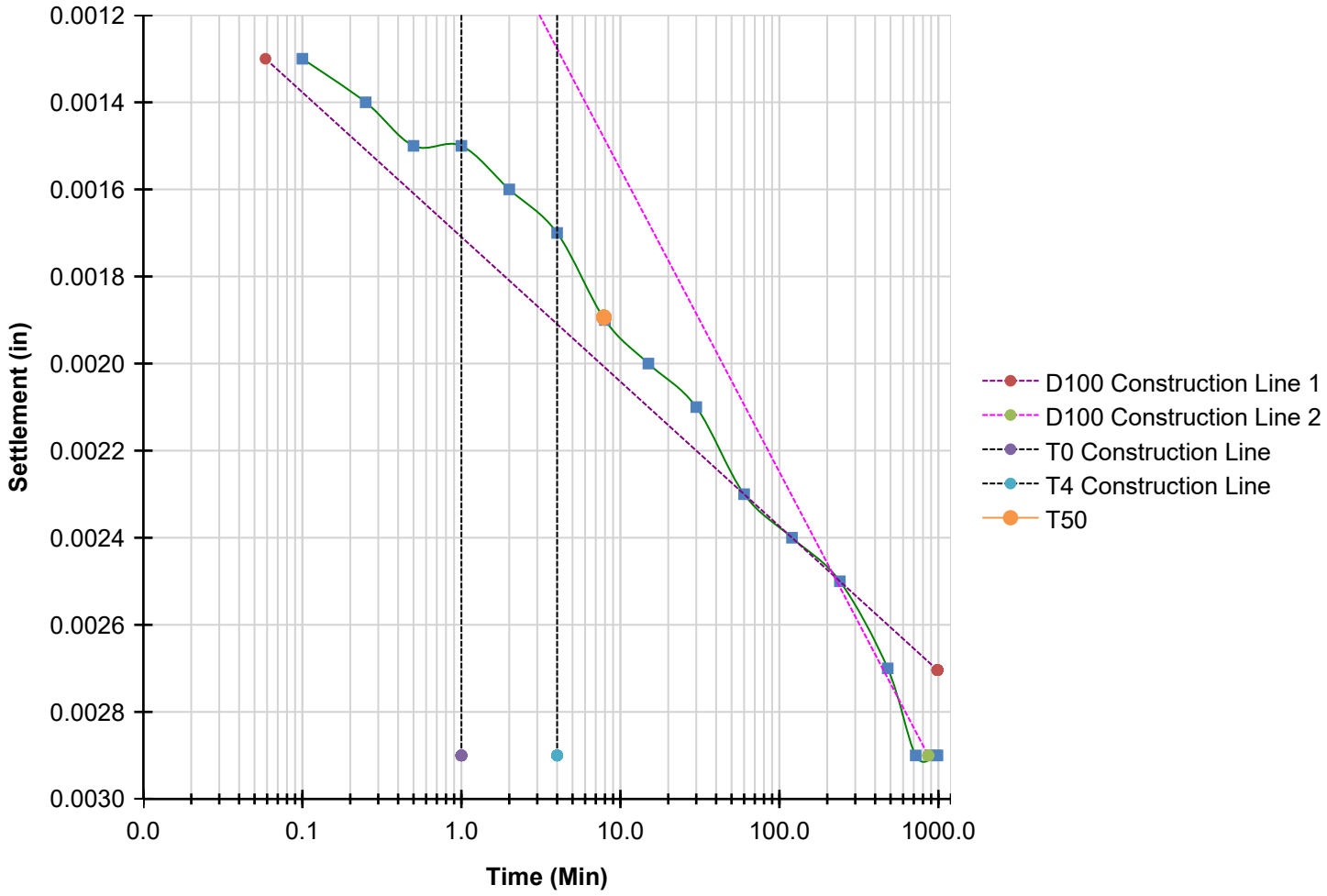
ASTM D2435



Tangent Construction Results	
T90 (Min)	0.618
T50 (Min)	0.143
Cv (in²/Min)	0.3409

Logarithmic Time [3] 0.063 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	7.877
Cv (in²/Min)	0.0062

Tabulated Data - Load Sequence 4 - 0.125 tsf

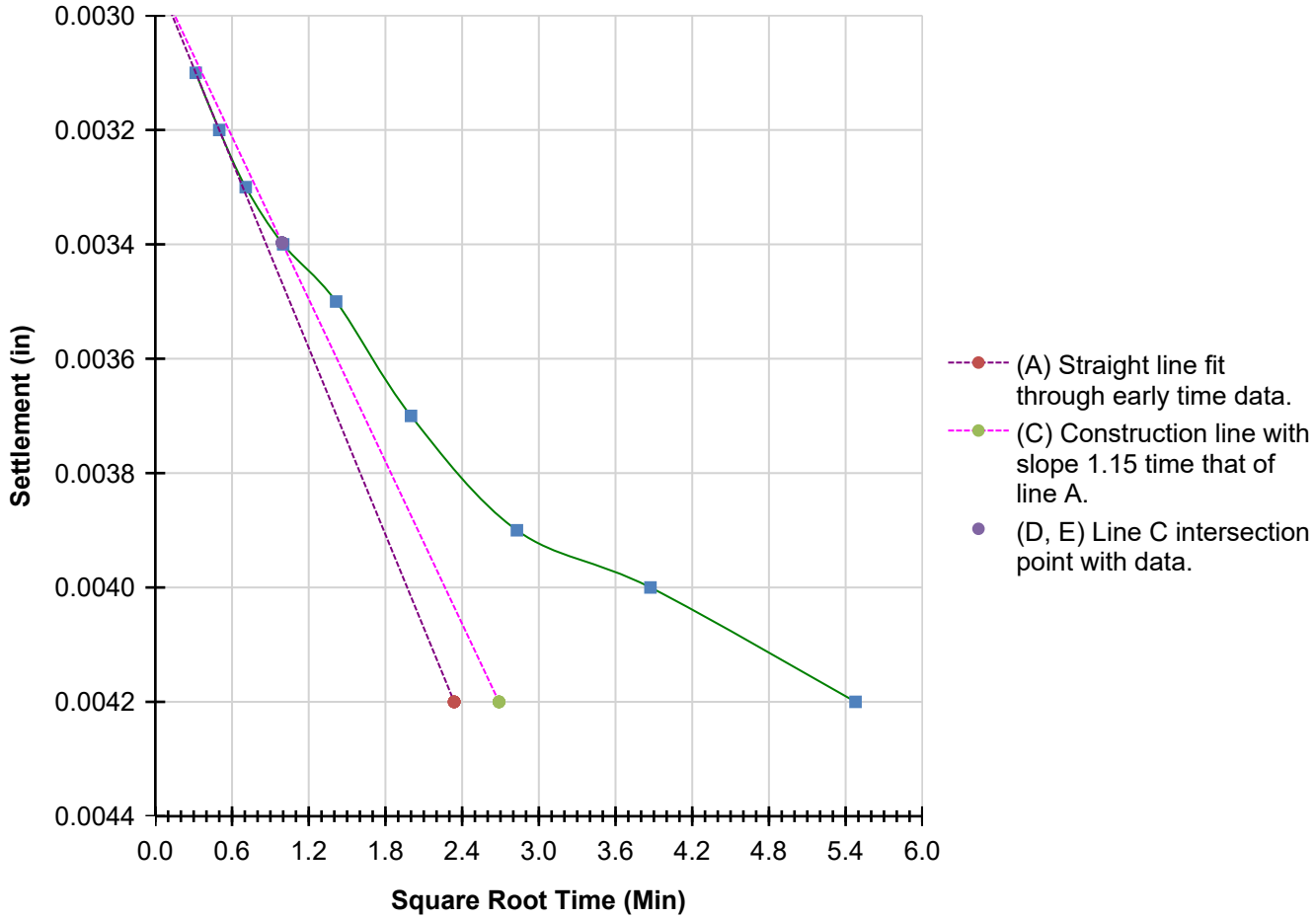
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0040	0.0029	0.3	0.800
1	00:00:06	0.0	0.0048	0.0031	0.3	0.800
2	00:00:15	0.0	0.0049	0.0032	0.3	0.800
3	00:00:30	0.0	0.0050	0.0033	0.3	0.800
4	00:01:00	0.0	0.0051	0.0034	0.3	0.799
5	00:02:00	0.0	0.0052	0.0035	0.4	0.799
6	00:04:00	0.0	0.0054	0.0037	0.4	0.799
7	00:08:00	0.0	0.0056	0.0039	0.4	0.799
8	00:15:00	0.0	0.0057	0.0040	0.4	0.798
9	00:30:00	0.0	0.0059	0.0042	0.4	0.798

Square Root Time [4] 0.125 tsf

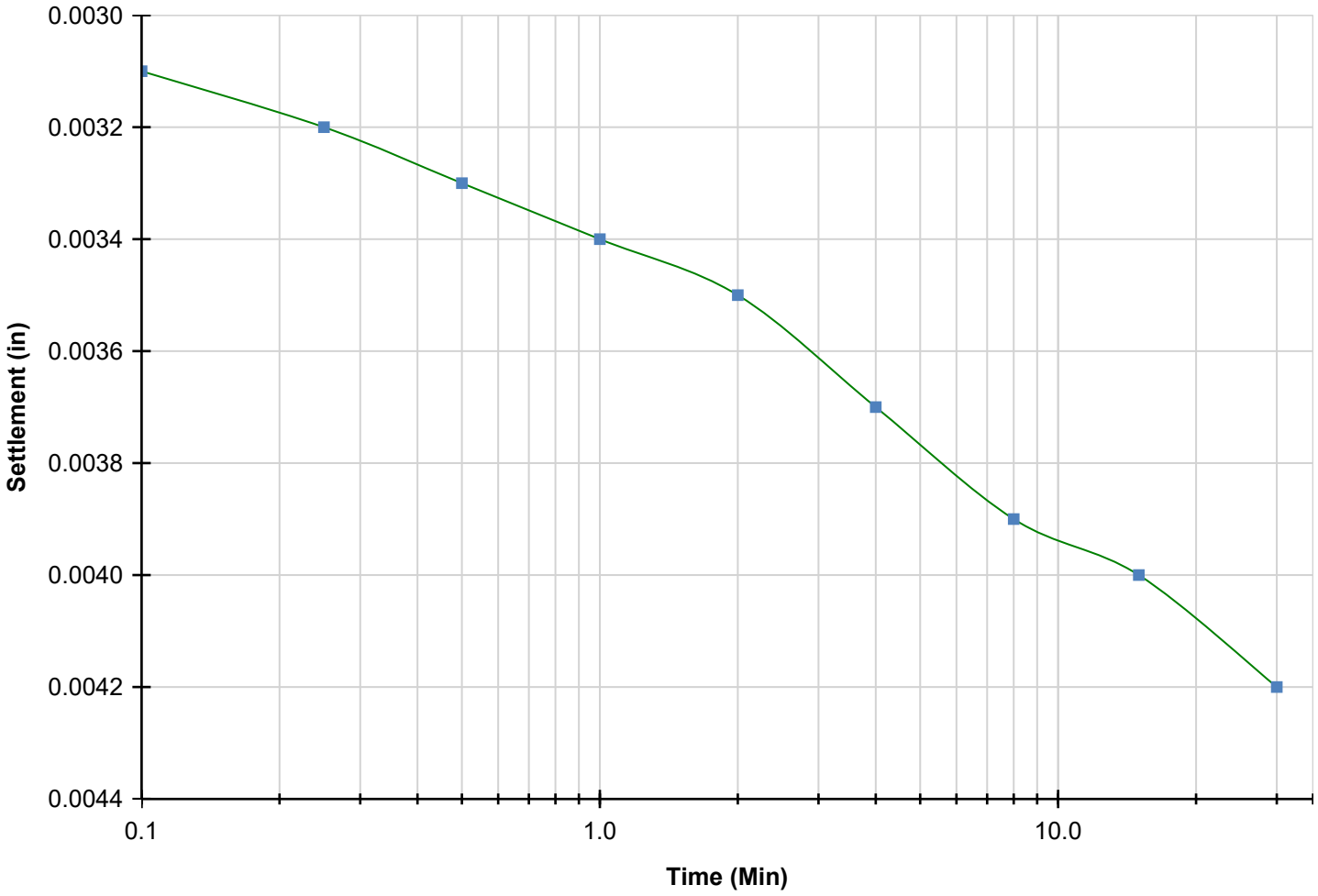
ASTM D2435



Tangent Construction Results	
T90 (Min)	0.983
T50 (Min)	0.230
Cv (in²/Min)	0.2138

Logarithmic Time [4] 0.125 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 5 - 0.250 tsf

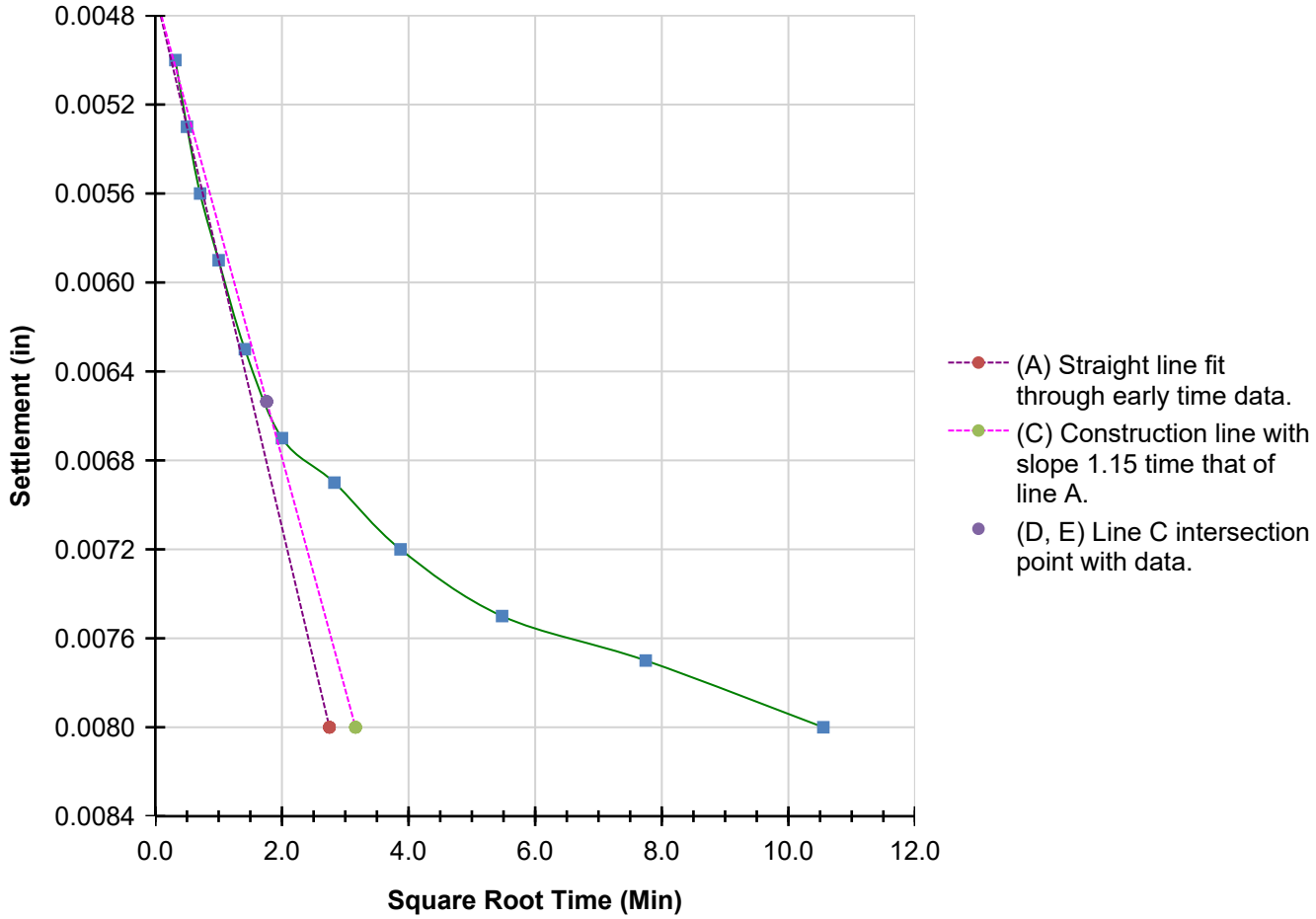
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0059	0.0042	0.4	0.798
1	00:00:06	0.0	0.0077	0.0050	0.5	0.797
2	00:00:15	0.0	0.0080	0.0053	0.5	0.796
3	00:00:30	0.0	0.0083	0.0056	0.6	0.795
4	00:01:00	0.0	0.0086	0.0059	0.6	0.795
5	00:02:00	0.0	0.0090	0.0063	0.6	0.794
6	00:04:00	0.0	0.0094	0.0067	0.7	0.794
7	00:08:00	0.0	0.0096	0.0069	0.7	0.793
8	00:15:00	0.0	0.0099	0.0072	0.7	0.793
9	00:30:00	0.0	0.0102	0.0075	0.8	0.792
10	01:00:00	0.0	0.0104	0.0077	0.8	0.792
11	01:51:20	0.0	0.0107	0.0080	0.8	0.791

Square Root Time [5] 0.250 tsf

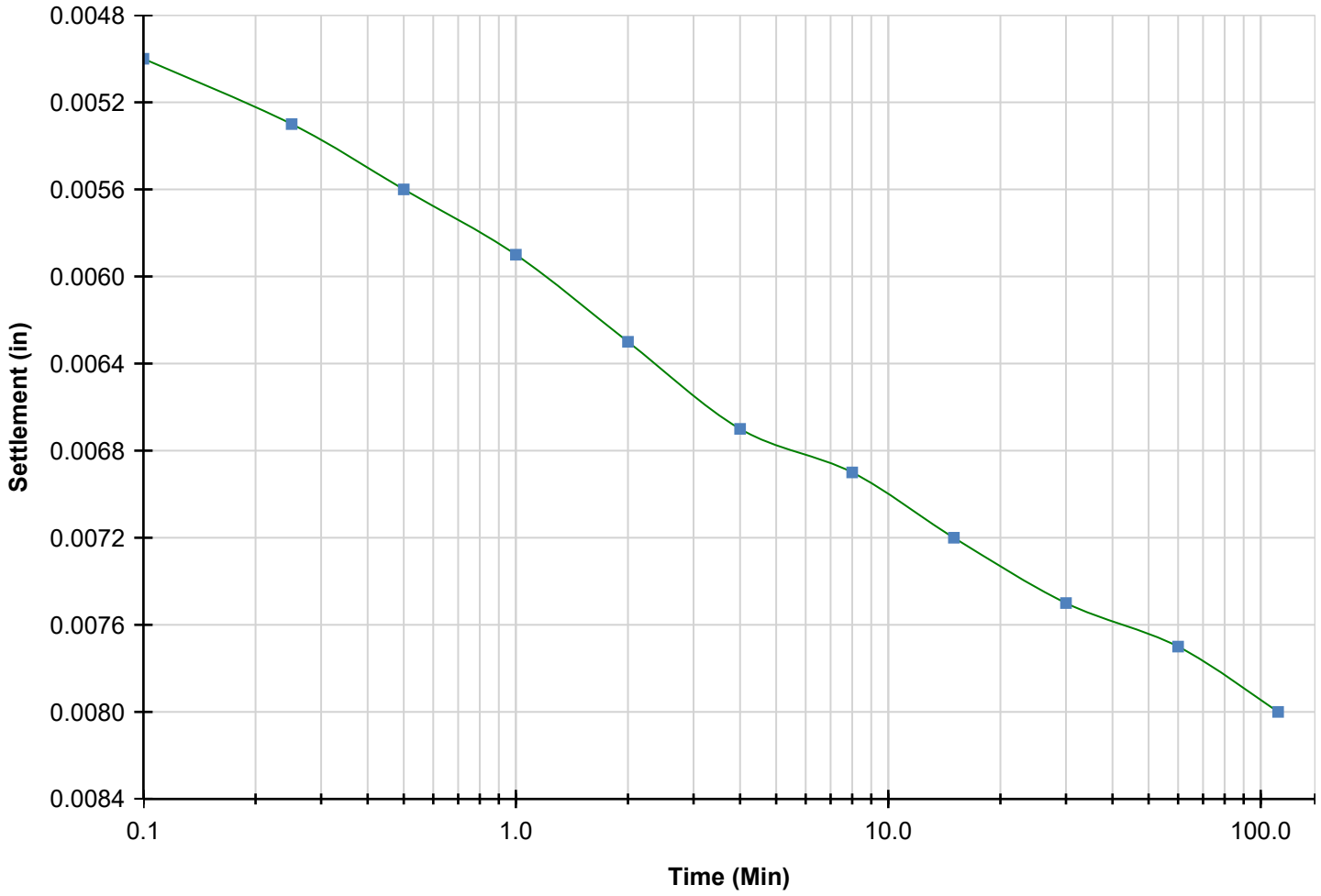
ASTM D2435



Tangent Construction Results	
T90 (Min)	3.094
T50 (Min)	0.677
Cv (in²/Min)	0.0674

Logarithmic Time [5] 0.250 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 6 - 0.500 tsf

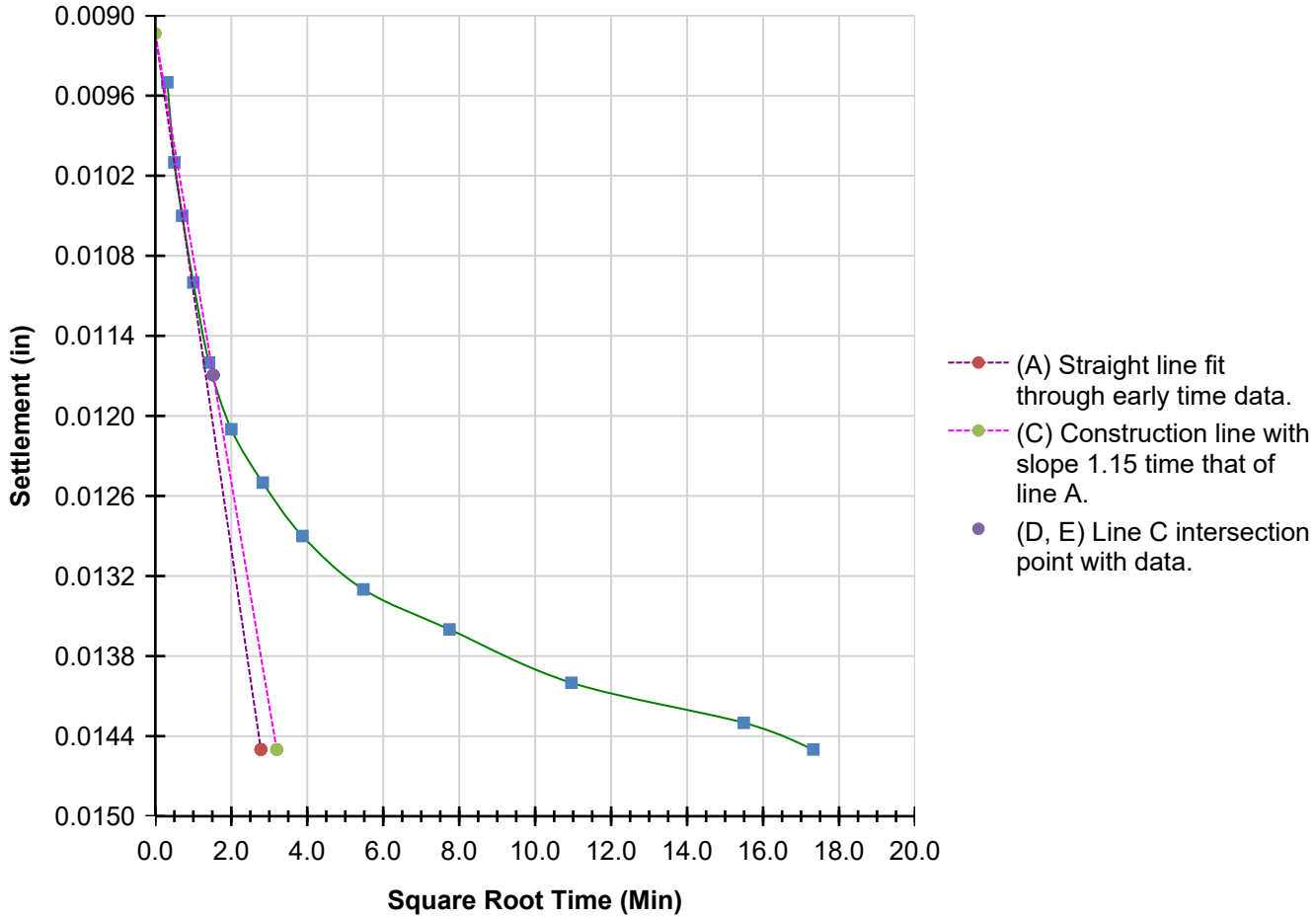
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0107	0.0080	0.8	0.791
1	00:00:06	0.0	0.0137	0.0095	1.0	0.788
2	00:00:15	0.0	0.0143	0.0101	1.0	0.787
3	00:00:30	0.0	0.0147	0.0105	1.1	0.787
4	00:01:00	0.0	0.0152	0.0110	1.1	0.786
5	00:02:00	0.0	0.0158	0.0116	1.2	0.785
6	00:04:00	0.0	0.0163	0.0121	1.2	0.784
7	00:08:00	0.0	0.0167	0.0125	1.3	0.783
8	00:15:00	0.0	0.0171	0.0129	1.3	0.782
9	00:30:00	0.0	0.0175	0.0133	1.3	0.782
10	01:00:00	0.0	0.0178	0.0136	1.4	0.781
11	02:00:00	0.0	0.0182	0.0140	1.4	0.780
12	04:00:00	0.0	0.0185	0.0143	1.4	0.780
13	05:00:03	0.0	0.0187	0.0145	1.5	0.779

Square Root Time [6] 0.500 tsf

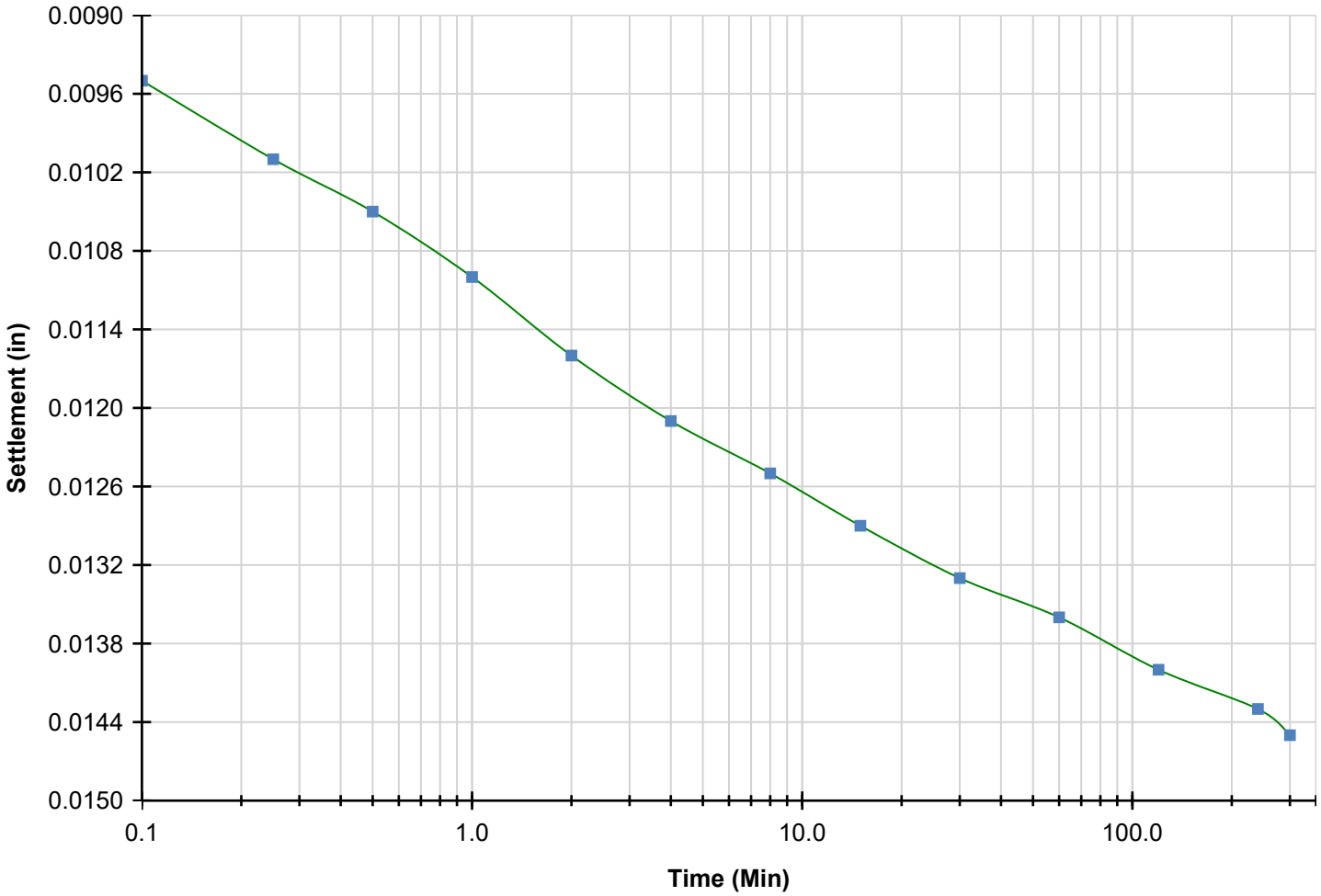
ASTM D2435



Tangent Construction Results	
T90 (Min)	2.322
T50 (Min)	0.546
Cv (in²/Min)	0.0887

Logarithmic Time [6] 0.500 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 7 - 1.000 tsf

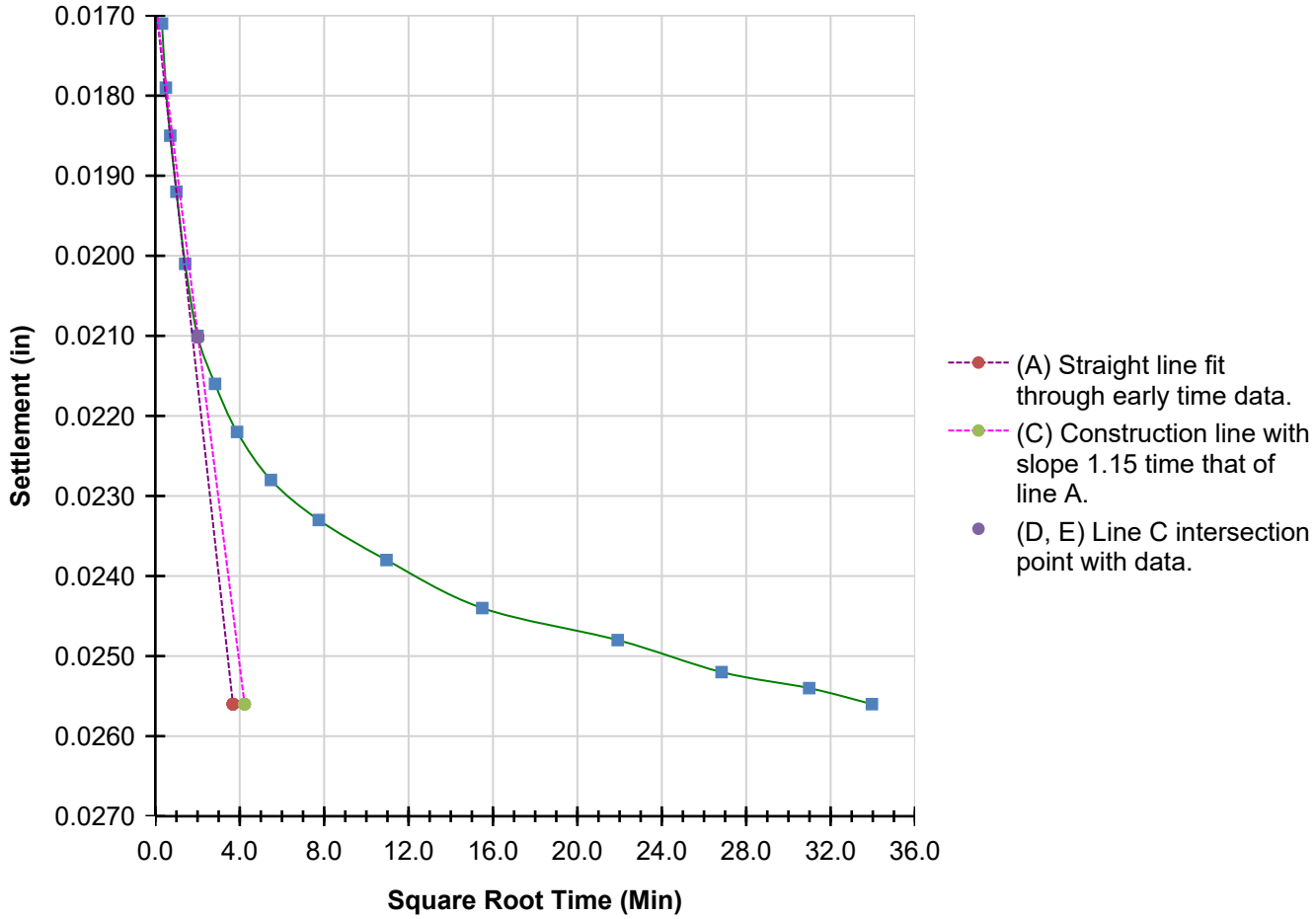
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0187	0.0145	1.5	0.779
1	00:00:06	0.0	0.0236	0.0171	1.7	0.775
2	00:00:15	0.0	0.0244	0.0179	1.8	0.773
3	00:00:30	0.0	0.0250	0.0185	1.9	0.772
4	00:01:00	0.0	0.0257	0.0192	1.9	0.771
5	00:02:00	0.0	0.0266	0.0201	2.0	0.769
6	00:04:00	0.0	0.0275	0.0210	2.1	0.768
7	00:08:00	0.0	0.0281	0.0216	2.2	0.767
8	00:15:00	0.0	0.0287	0.0222	2.2	0.766
9	00:30:00	0.0	0.0293	0.0228	2.3	0.764
10	01:00:00	0.0	0.0298	0.0233	2.3	0.764
11	02:00:00	0.0	0.0303	0.0238	2.4	0.763
12	04:00:00	0.0	0.0309	0.0244	2.4	0.762
13	08:00:00	0.0	0.0313	0.0248	2.5	0.761
14	12:00:00	0.0	0.0317	0.0252	2.5	0.760
15	16:00:00	0.0	0.0319	0.0254	2.5	0.760
16	19:13:02	0.0	0.0321	0.0256	2.6	0.759

Square Root Time [7] 1.000 tsf

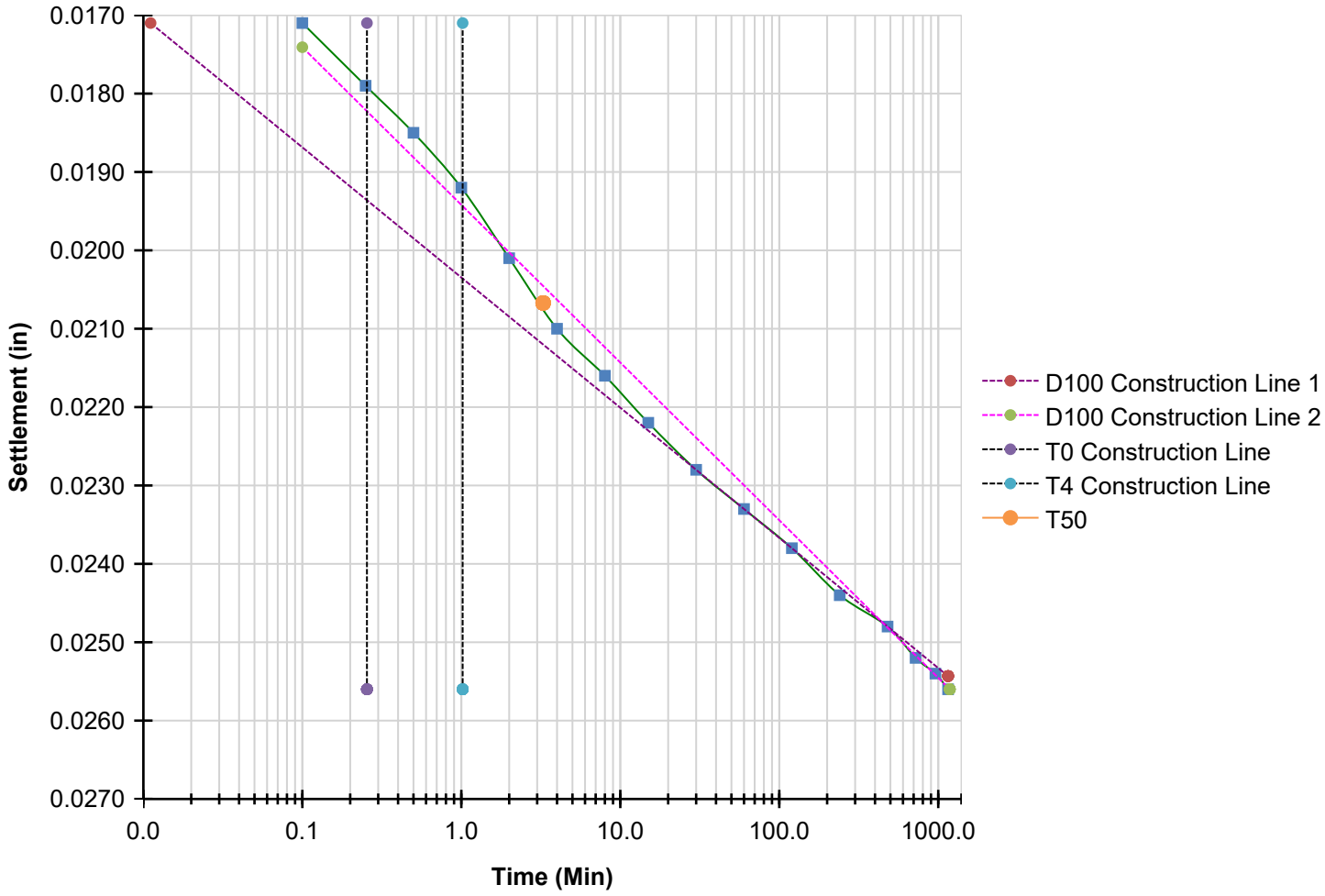
ASTM D2435



Tangent Construction Results	
T90 (Min)	4.100
T50 (Min)	0.956
Cv (in²/Min)	0.0491

Logarithmic Time [7] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	3.269
Cv (in²/Min)	0.0143

Tabulated Data - Load Sequence 8 - 2.000 tsf

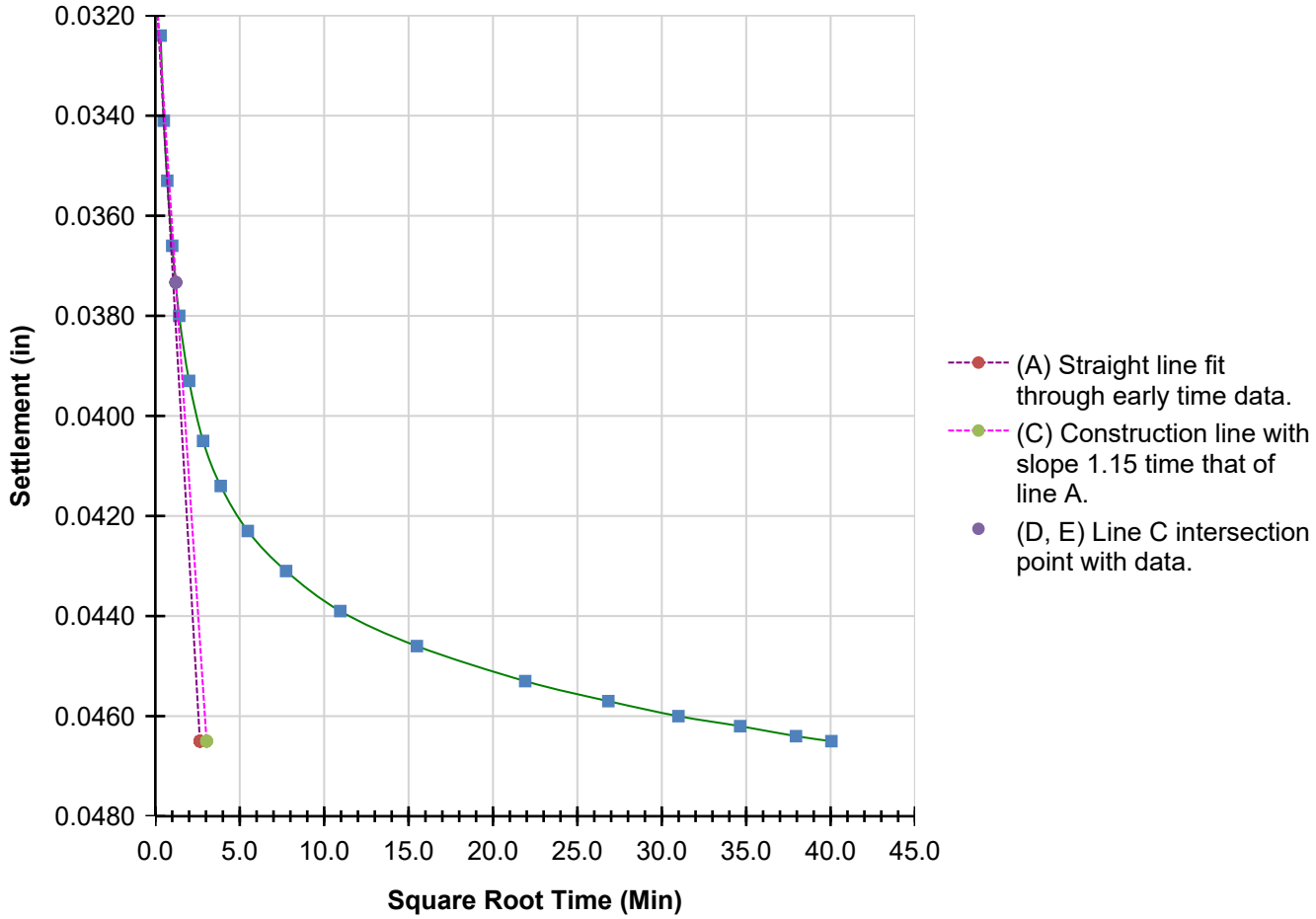
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0321	0.0256	2.6	0.759
1	00:00:06	0.0	0.0413	0.0324	3.2	0.747
2	00:00:15	0.0	0.0430	0.0341	3.4	0.744
3	00:00:30	0.0	0.0442	0.0353	3.5	0.742
4	00:01:00	0.0	0.0455	0.0366	3.7	0.740
5	00:02:00	0.0	0.0469	0.0380	3.8	0.737
6	00:04:00	0.0	0.0482	0.0393	3.9	0.735
7	00:08:00	0.0	0.0494	0.0405	4.1	0.732
8	00:15:00	0.0	0.0503	0.0414	4.1	0.731
9	00:30:00	0.0	0.0512	0.0423	4.2	0.729
10	01:00:00	0.0	0.0520	0.0431	4.3	0.728
11	02:00:00	0.0	0.0528	0.0439	4.4	0.726
12	04:00:00	0.0	0.0535	0.0446	4.5	0.725
13	08:00:00	0.0	0.0542	0.0453	4.5	0.724
14	12:00:00	0.0	0.0546	0.0457	4.6	0.723
15	16:00:00	0.0	0.0549	0.0460	4.6	0.723
16	20:00:00	0.0	0.0551	0.0462	4.6	0.722
17	24:00:00	0.0	0.0553	0.0464	4.6	0.722
18	26:43:38	0.0	0.0554	0.0465	4.7	0.722

Square Root Time [8] 2.000 tsf

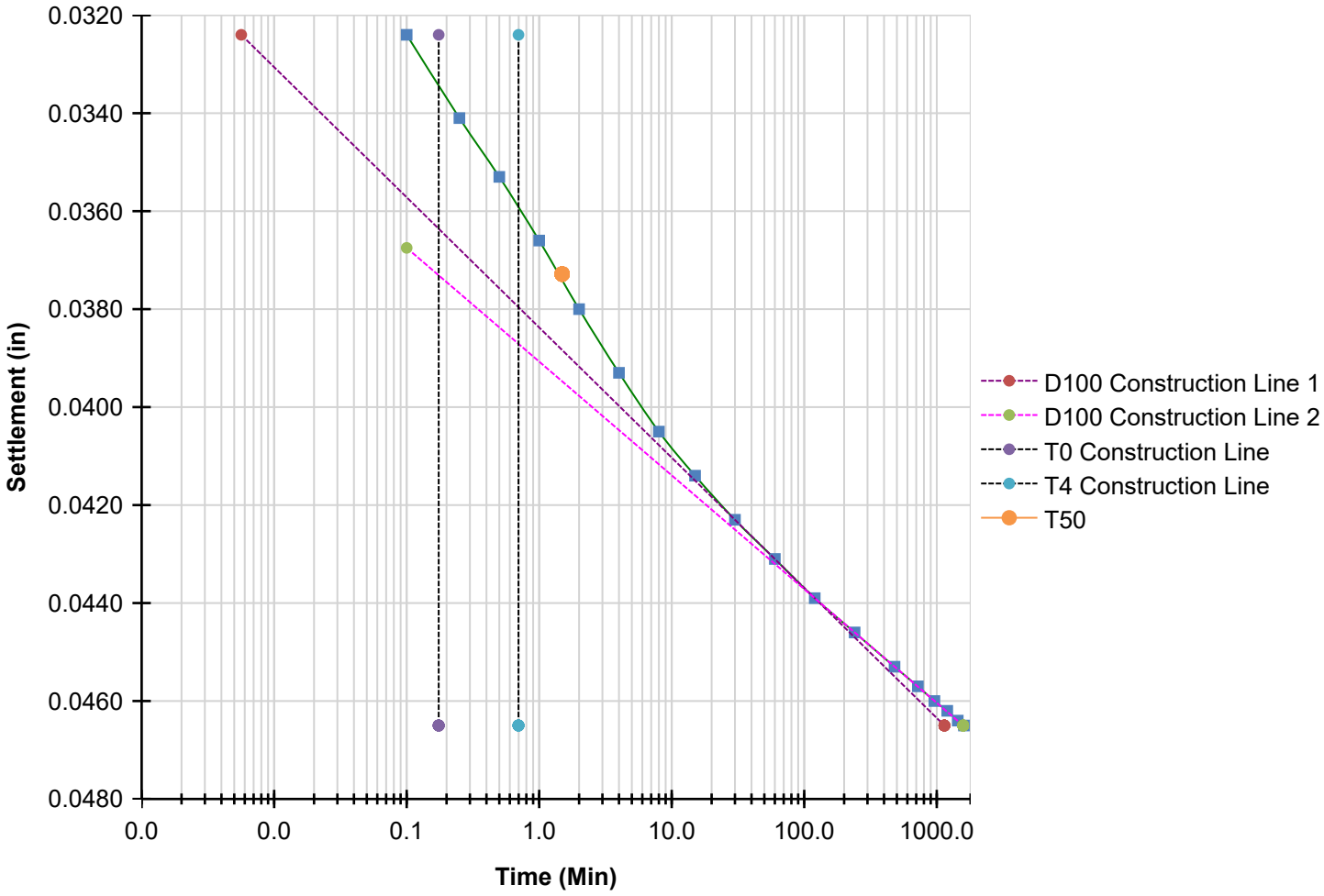
ASTM D2435



Tangent Construction Results	
T90 (Min)	1.479
T50 (Min)	0.345
Cv (in²/Min)	0.1303

Logarithmic Time [8] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	1.489
Cv (in²/Min)	0.0301

Tabulated Data - Load Sequence 9 - 4.000 tsf

ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0554	0.0465	4.7	0.722
1	00:00:06	0.0	0.0684	0.0571	5.7	0.703
2	00:00:15	0.0	0.0707	0.0594	5.9	0.698
3	00:00:30	0.0	0.0727	0.0614	6.1	0.695
4	00:01:00	0.0	0.0750	0.0637	6.4	0.691
5	00:02:00	0.0	0.0773	0.0660	6.6	0.686
6	00:04:00	0.0	0.0792	0.0679	6.8	0.683
7	00:08:00	0.0	0.0807	0.0694	6.9	0.680
8	00:15:00	0.0	0.0818	0.0705	7.1	0.678
9	00:30:00	0.0	0.0828	0.0715	7.2	0.677
10	01:00:00	0.0	0.0838	0.0725	7.3	0.675
11	02:00:00	0.0	0.0846	0.0733	7.3	0.673
12	04:00:00	0.0	0.0854	0.0741	7.4	0.672
13	08:00:00	0.0	0.0862	0.0749	7.5	0.670
14	12:00:00	0.0	0.0866	0.0753	7.5	0.670
15	16:00:00	0.0	0.0869	0.0756	7.6	0.669
16	20:00:00	0.0	0.0872	0.0759	7.6	0.669
17	24:00:00	0.0	0.0875	0.0762	7.6	0.668
18	28:00:00	0.0	0.0876	0.0763	7.6	0.668
19	32:00:00	0.0	0.0878	0.0765	7.7	0.667
20	36:00:00	0.0	0.0879	0.0766	7.7	0.667
21	40:00:00	0.0	0.0880	0.0767	7.7	0.667
22	44:00:00	0.0	0.0882	0.0769	7.7	0.667
23	48:00:00	0.0	0.0883	0.0770	7.7	0.667
24	52:00:00	0.0	0.0884	0.0771	7.7	0.666
25	56:00:00	0.0	0.0884	0.0771	7.7	0.666
26	60:00:00	0.0	0.0885	0.0772	7.7	0.666
27	64:00:00	0.0	0.0886	0.0773	7.7	0.666
28	68:00:00	0.0	0.0887	0.0774	7.7	0.666
29	72:00:00	0.0	0.0887	0.0774	7.7	0.666
30	76:00:00	0.0	0.0887	0.0774	7.7	0.666
31	80:00:00	0.0	0.0888	0.0775	7.8	0.666
32	84:00:00	0.0	0.0888	0.0775	7.8	0.666

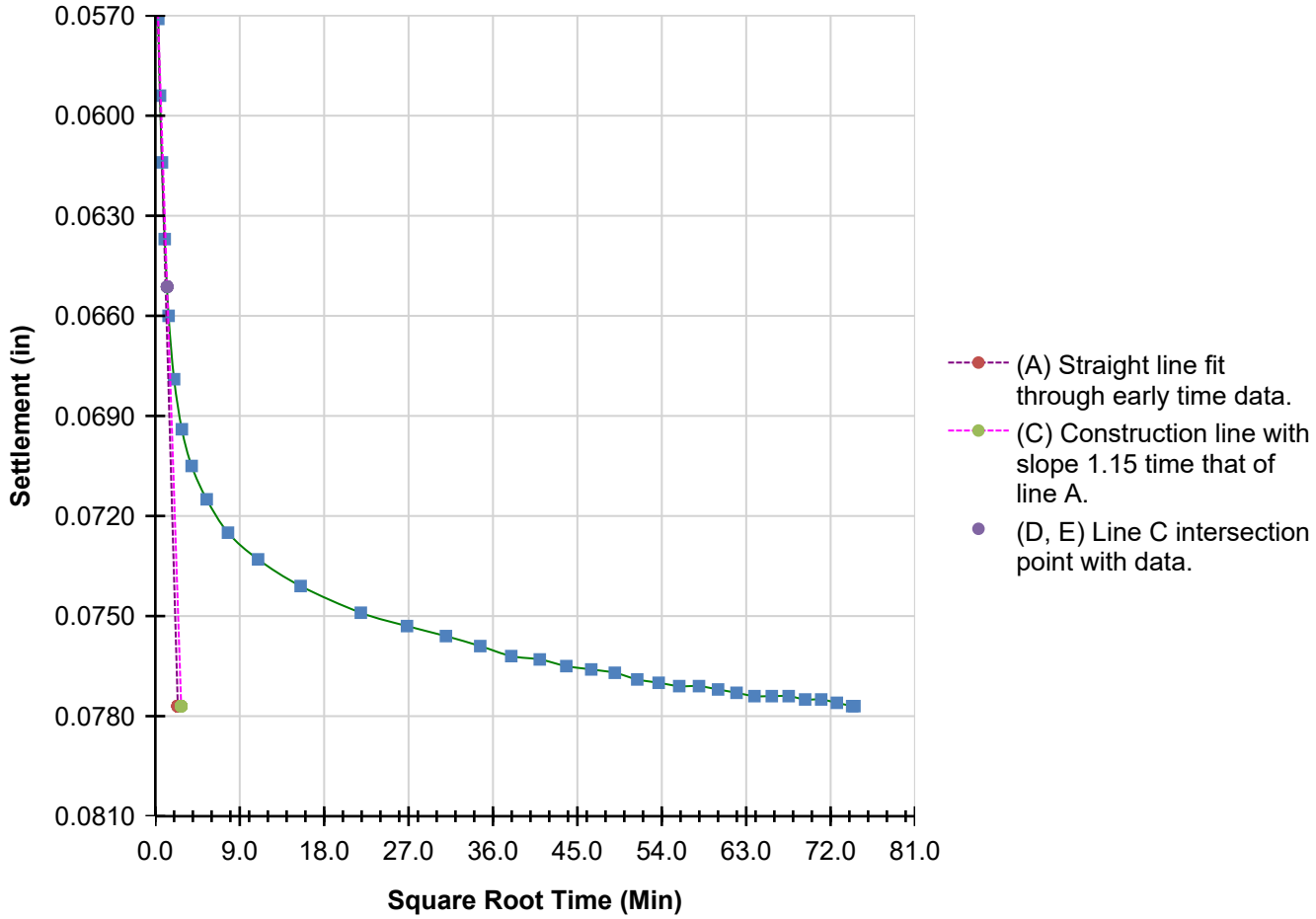
Tabulated Data - Load Sequence 9 - 4.000 tsf

ASTM D2435

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
33	88:00:00	0.0	0.0889	0.0776	7.8	0.665
34	92:00:00	0.0	0.0890	0.0777	7.8	0.665
35	92:36:06	0.0	0.0890	0.0777	7.8	0.665

Square Root Time [9] 4.000 tsf

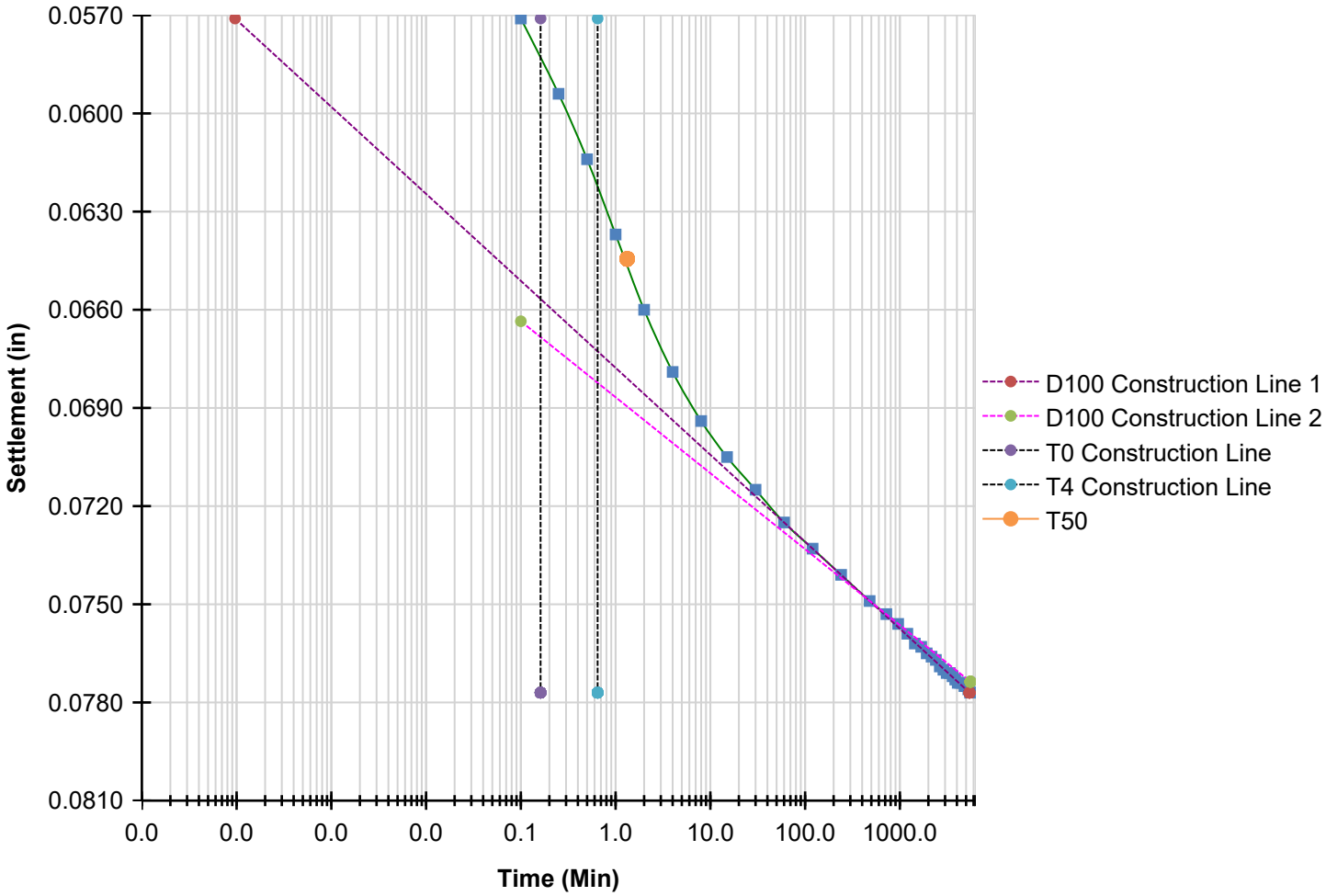
ASTM D2435



Tangent Construction Results	
T90 (Min)	1.580
T50 (Min)	0.370
Cv (in²/Min)	0.1141

Logarithmic Time [9] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	1.325
Cv (in²/Min)	0.0316

Tabulated Data - Load Sequence 10 - 2.000 tsf

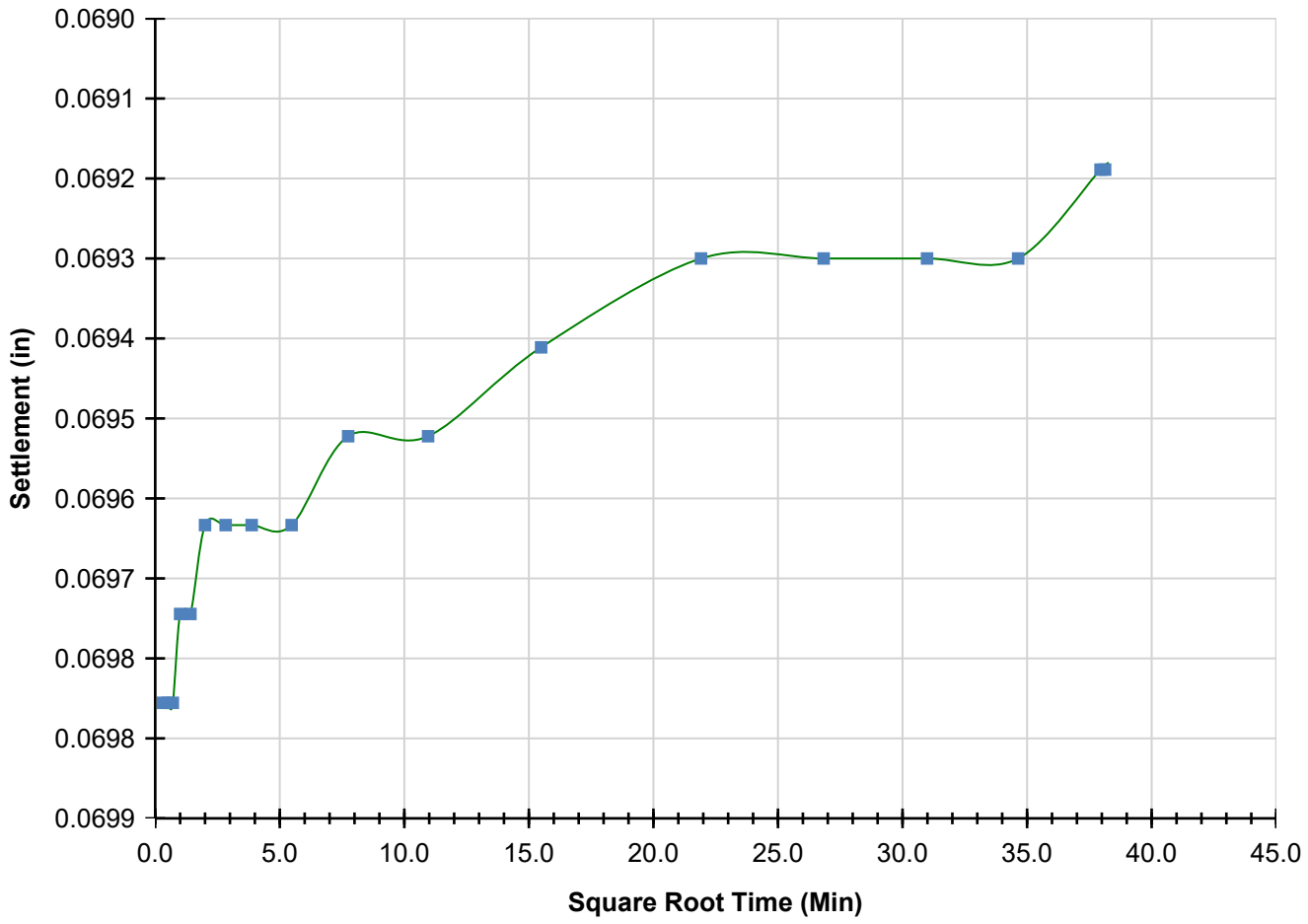
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0890	0.0777	7.8	0.665
1	00:00:06	0.0	0.0878	0.0698	7.0	0.680
2	00:00:15	0.0	0.0878	0.0698	7.0	0.680
3	00:00:30	0.0	0.0878	0.0698	7.0	0.680
4	00:01:00	0.0	0.0877	0.0697	7.0	0.680
5	00:02:00	0.0	0.0877	0.0697	7.0	0.680
6	00:04:00	0.0	0.0876	0.0696	7.0	0.680
7	00:08:00	0.0	0.0876	0.0696	7.0	0.680
8	00:15:00	0.0	0.0876	0.0696	7.0	0.680
9	00:30:00	0.0	0.0876	0.0696	7.0	0.680
10	01:00:00	0.0	0.0875	0.0695	7.0	0.680
11	02:00:00	0.0	0.0875	0.0695	7.0	0.680
12	04:00:00	0.0	0.0874	0.0694	6.9	0.680
13	08:00:00	0.0	0.0873	0.0693	6.9	0.680
14	12:00:00	0.0	0.0873	0.0693	6.9	0.680
15	16:00:00	0.0	0.0873	0.0693	6.9	0.680
16	20:00:00	0.0	0.0873	0.0693	6.9	0.680
17	24:00:00	0.0	0.0872	0.0692	6.9	0.681
18	24:13:58	0.0	0.0872	0.0692	6.9	0.681

Square Root Time [10] 2.000 tsf

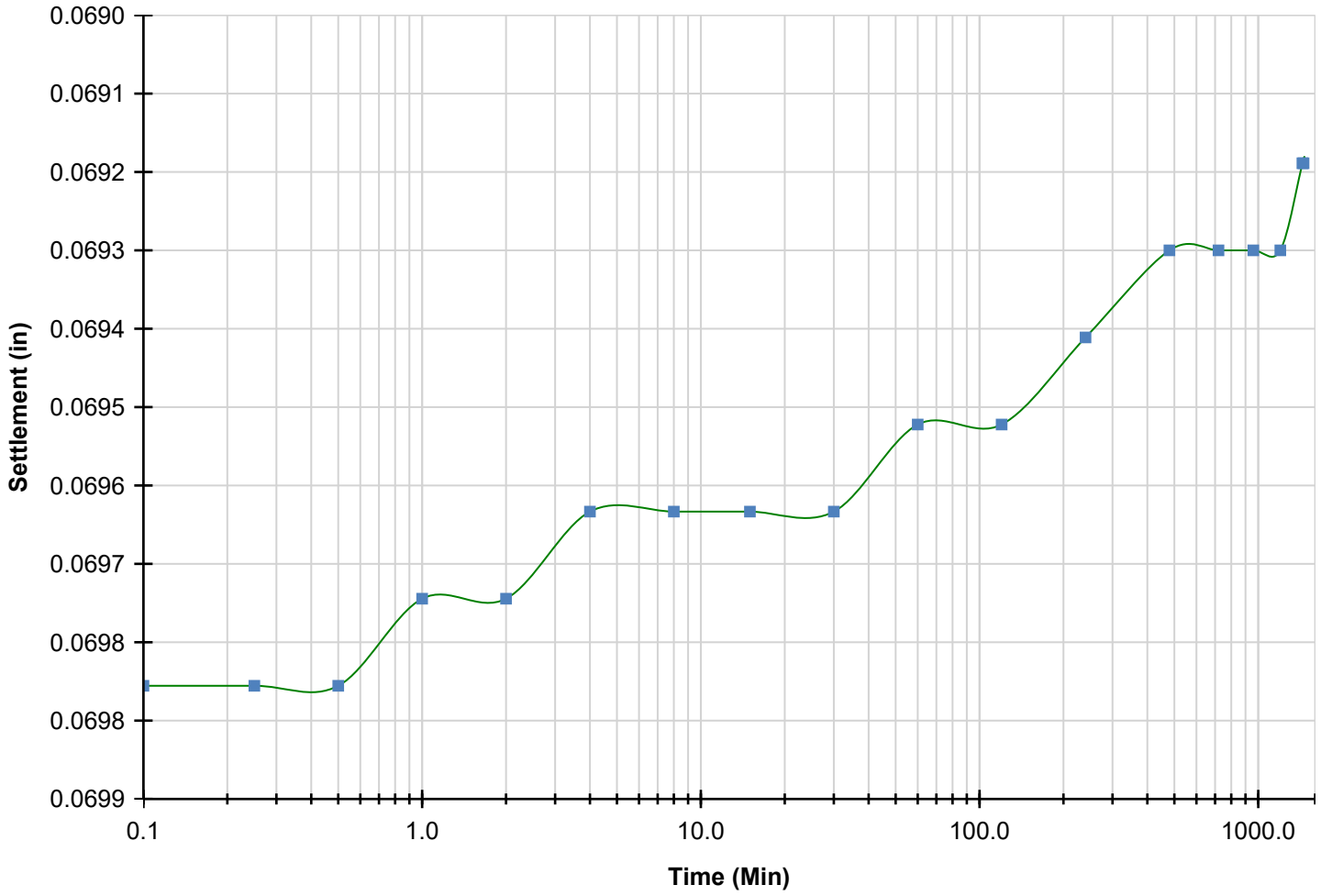
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [10] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 11 - 1.000 tsf

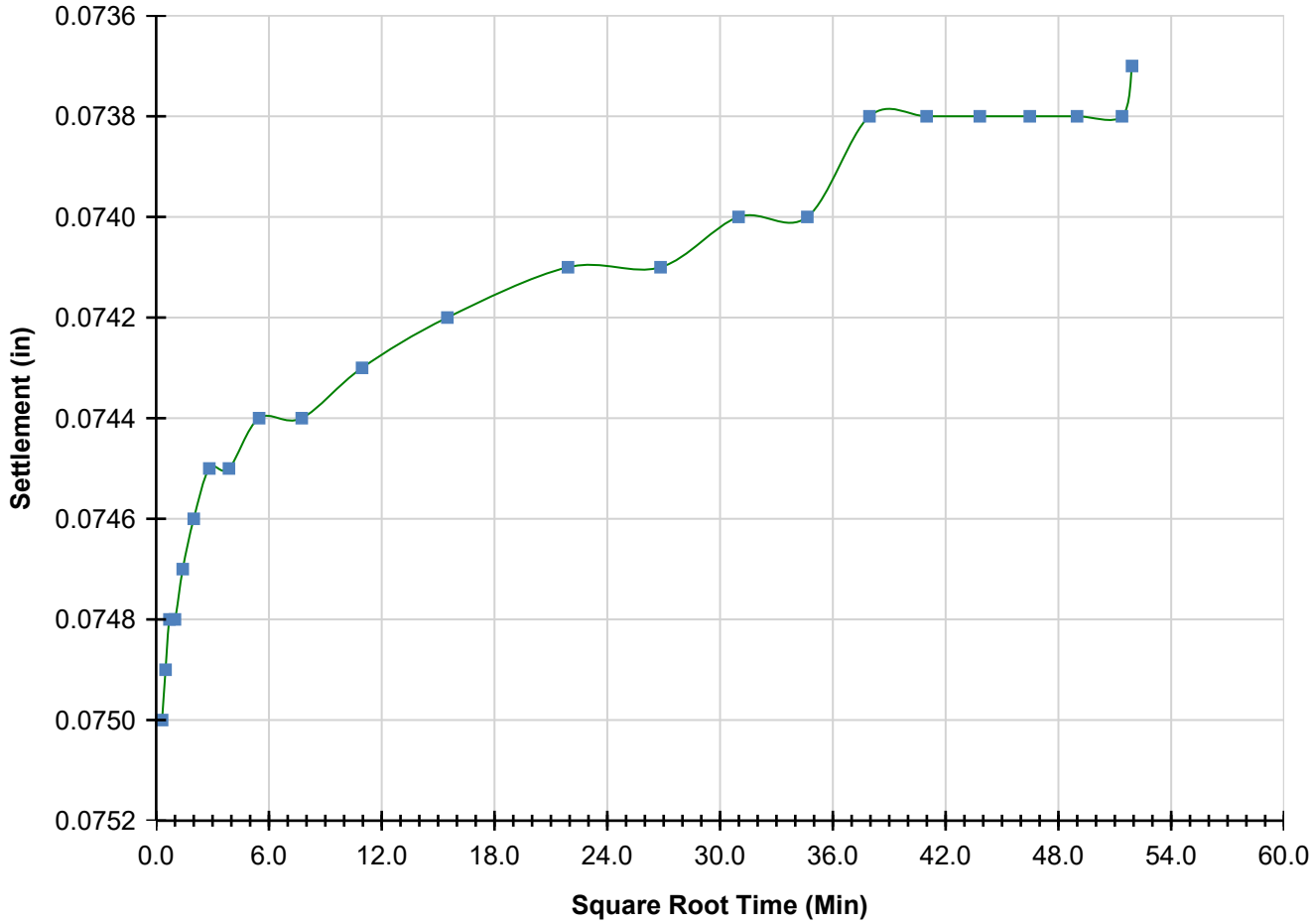
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0872	0.0692	6.9	0.681
1	00:00:06	0.0	0.0861	0.0750	7.5	0.670
2	00:00:15	0.0	0.0860	0.0749	7.5	0.670
3	00:00:30	0.0	0.0859	0.0748	7.5	0.671
4	00:01:00	0.0	0.0859	0.0748	7.5	0.671
5	00:02:00	0.0	0.0858	0.0747	7.5	0.671
6	00:04:00	0.0	0.0857	0.0746	7.5	0.671
7	00:08:00	0.0	0.0856	0.0745	7.5	0.671
8	00:15:00	0.0	0.0856	0.0745	7.5	0.671
9	00:30:00	0.0	0.0855	0.0744	7.4	0.671
10	01:00:00	0.0	0.0855	0.0744	7.4	0.671
11	02:00:00	0.0	0.0854	0.0743	7.4	0.671
12	04:00:00	0.0	0.0853	0.0742	7.4	0.672
13	08:00:00	0.0	0.0852	0.0741	7.4	0.672
14	12:00:00	0.0	0.0852	0.0741	7.4	0.672
15	16:00:00	0.0	0.0851	0.0740	7.4	0.672
16	20:00:00	0.0	0.0851	0.0740	7.4	0.672
17	24:00:00	0.0	0.0849	0.0738	7.4	0.672
18	28:00:00	0.0	0.0849	0.0738	7.4	0.672
19	32:00:00	0.0	0.0849	0.0738	7.4	0.672
20	36:00:00	0.0	0.0849	0.0738	7.4	0.672
21	40:00:00	0.0	0.0849	0.0738	7.4	0.672
22	44:00:00	0.0	0.0849	0.0738	7.4	0.672
23	44:55:10	0.0	0.0848	0.0737	7.4	0.673

Square Root Time [11] 1.000 tsf

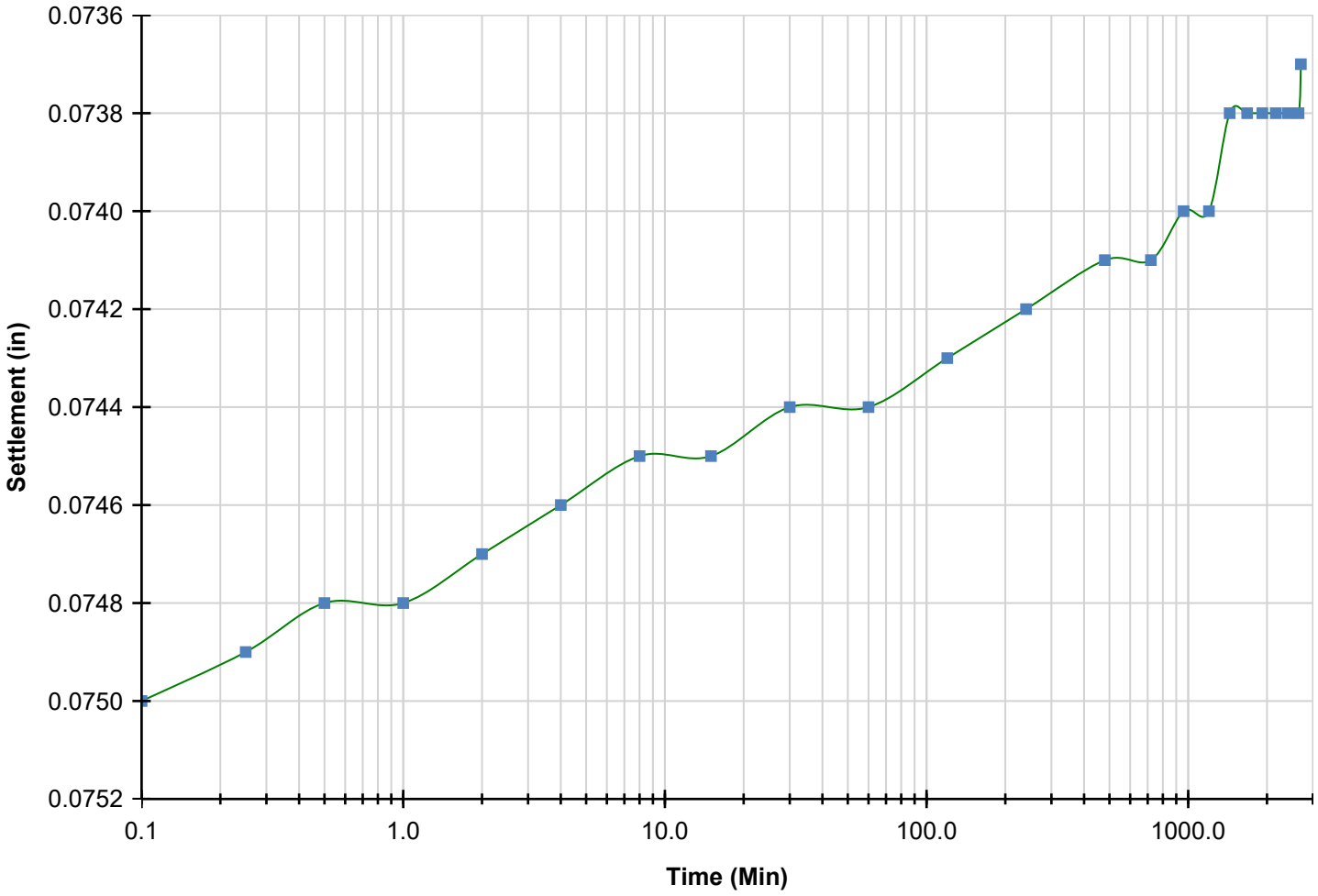
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [11] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 12 - 0.500 tsf

ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0848	0.0737	7.4	0.673
1	00:00:06	0.0	0.0839	0.0740	7.4	0.672
2	00:00:15	0.0	0.0838	0.0739	7.4	0.672
3	00:00:30	0.0	0.0837	0.0738	7.4	0.672
4	00:01:00	0.0	0.0837	0.0738	7.4	0.672
5	00:02:00	0.0	0.0836	0.0737	7.4	0.673
6	00:04:00	0.0	0.0836	0.0737	7.4	0.673
7	00:08:00	0.0	0.0835	0.0736	7.4	0.673
8	00:15:00	0.0	0.0834	0.0735	7.4	0.673
9	00:30:00	0.0	0.0833	0.0734	7.3	0.673
10	01:00:00	0.0	0.0832	0.0733	7.3	0.673
11	02:00:00	0.0	0.0831	0.0732	7.3	0.673
12	04:00:00	0.0	0.0830	0.0731	7.3	0.674
13	08:00:00	0.0	0.0829	0.0730	7.3	0.674
14	12:00:00	0.0	0.0828	0.0729	7.3	0.674
15	16:00:00	0.0	0.0828	0.0729	7.3	0.674
16	20:00:00	0.0	0.0827	0.0728	7.3	0.674
17	24:00:00	0.0	0.0827	0.0728	7.3	0.674
18	28:00:00	0.0	0.0826	0.0727	7.3	0.674
19	32:00:00	0.0	0.0826	0.0727	7.3	0.674
20	36:00:00	0.0	0.0826	0.0727	7.3	0.674
21	40:00:00	0.0	0.0826	0.0727	7.3	0.674
22	44:00:00	0.0	0.0826	0.0727	7.3	0.674
23	48:00:00	0.0	0.0826	0.0727	7.3	0.674
24	52:00:00	0.0	0.0826	0.0727	7.3	0.674
25	56:00:00	0.0	0.0825	0.0726	7.3	0.675
26	60:00:00	0.0	0.0825	0.0726	7.3	0.675
27	64:00:00	0.0	0.0825	0.0726	7.3	0.675
28	68:00:00	0.0	0.0825	0.0726	7.3	0.675
29	72:00:00	0.0	0.0825	0.0726	7.3	0.675
30	76:00:00	0.0	0.0825	0.0726	7.3	0.675
31	80:00:00	0.0	0.0825	0.0726	7.3	0.675
32	84:00:00	0.0	0.0825	0.0726	7.3	0.675

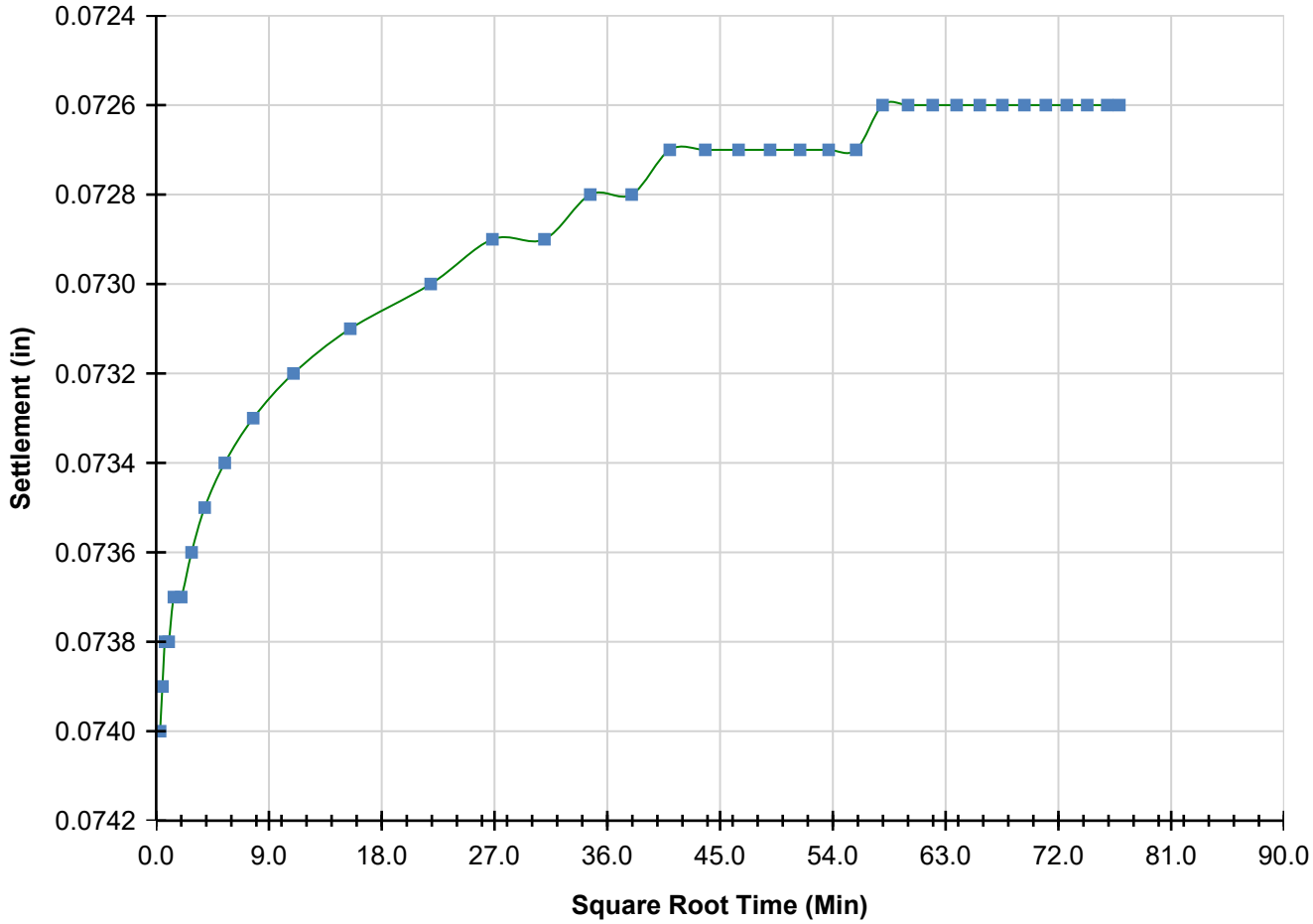
Tabulated Data - Load Sequence 12 - 0.500 tsf

ASTM D2435

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
33	88:00:00	0.0	0.0825	0.0726	7.3	0.675
34	92:00:00	0.0	0.0825	0.0726	7.3	0.675
35	96:00:00	0.0	0.0825	0.0726	7.3	0.675
36	98:27:43	0.0	0.0825	0.0726	7.3	0.675

Square Root Time [12] 0.500 tsf

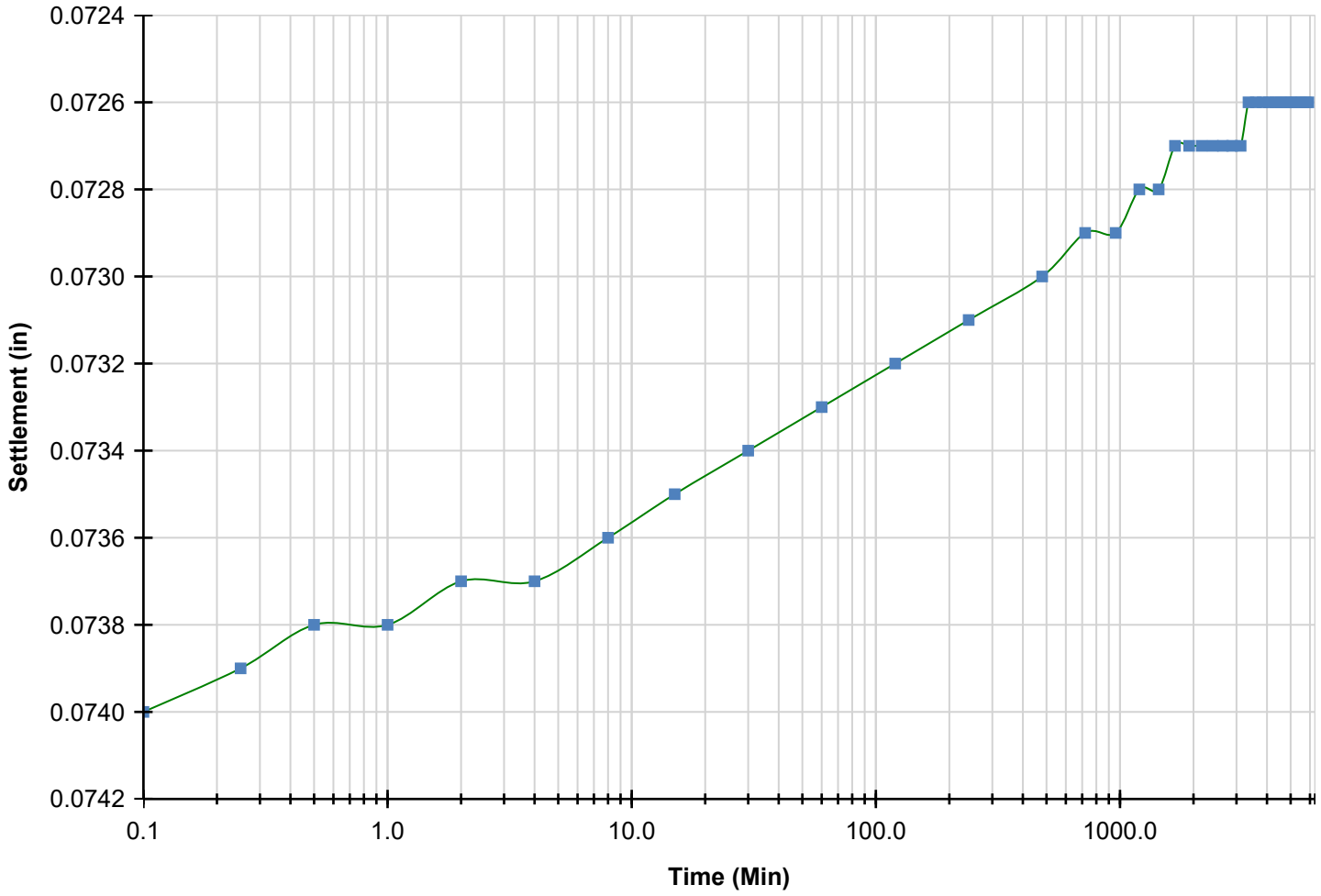
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [12] 0.500 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 13 - 1.000 tsf

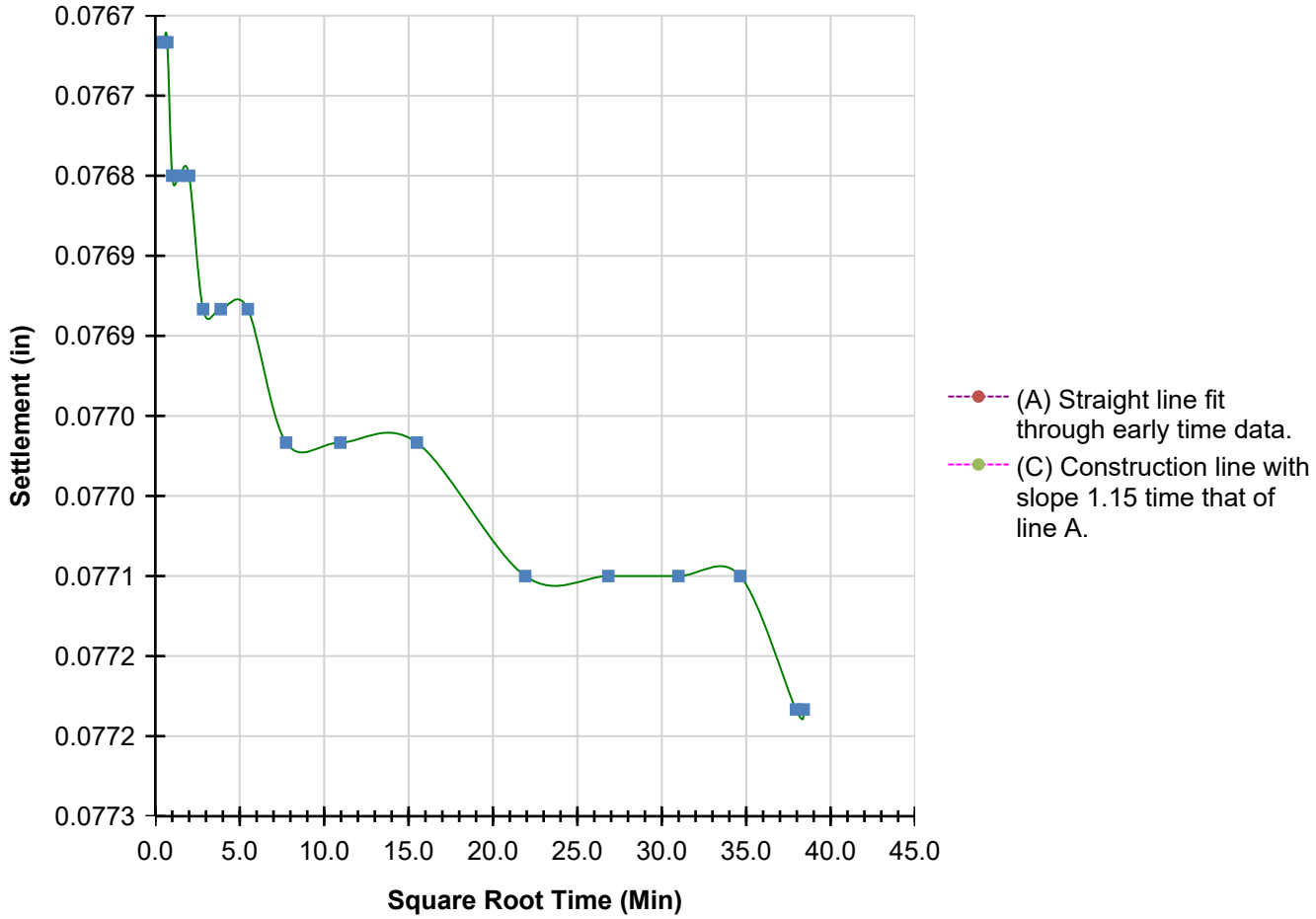
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0825	0.0726	7.3	0.675
1	00:00:06	0.0	0.0832	0.0767	7.7	0.667
2	00:00:15	0.0	0.0832	0.0767	7.7	0.667
3	00:00:30	0.0	0.0832	0.0767	7.7	0.667
4	00:01:00	0.0	0.0833	0.0768	7.7	0.667
5	00:02:00	0.0	0.0833	0.0768	7.7	0.667
6	00:04:00	0.0	0.0833	0.0768	7.7	0.667
7	00:08:00	0.0	0.0834	0.0769	7.7	0.667
8	00:15:00	0.0	0.0834	0.0769	7.7	0.667
9	00:30:00	0.0	0.0834	0.0769	7.7	0.667
10	01:00:00	0.0	0.0835	0.0770	7.7	0.667
11	02:00:00	0.0	0.0835	0.0770	7.7	0.667
12	04:00:00	0.0	0.0835	0.0770	7.7	0.667
13	08:00:00	0.0	0.0836	0.0771	7.7	0.666
14	12:00:00	0.0	0.0836	0.0771	7.7	0.666
15	16:00:00	0.0	0.0836	0.0771	7.7	0.666
16	20:00:00	0.0	0.0836	0.0771	7.7	0.666
17	24:00:00	0.0	0.0837	0.0772	7.7	0.666
18	24:34:52	0.0	0.0837	0.0772	7.7	0.666

Square Root Time [13] 1.000 tsf

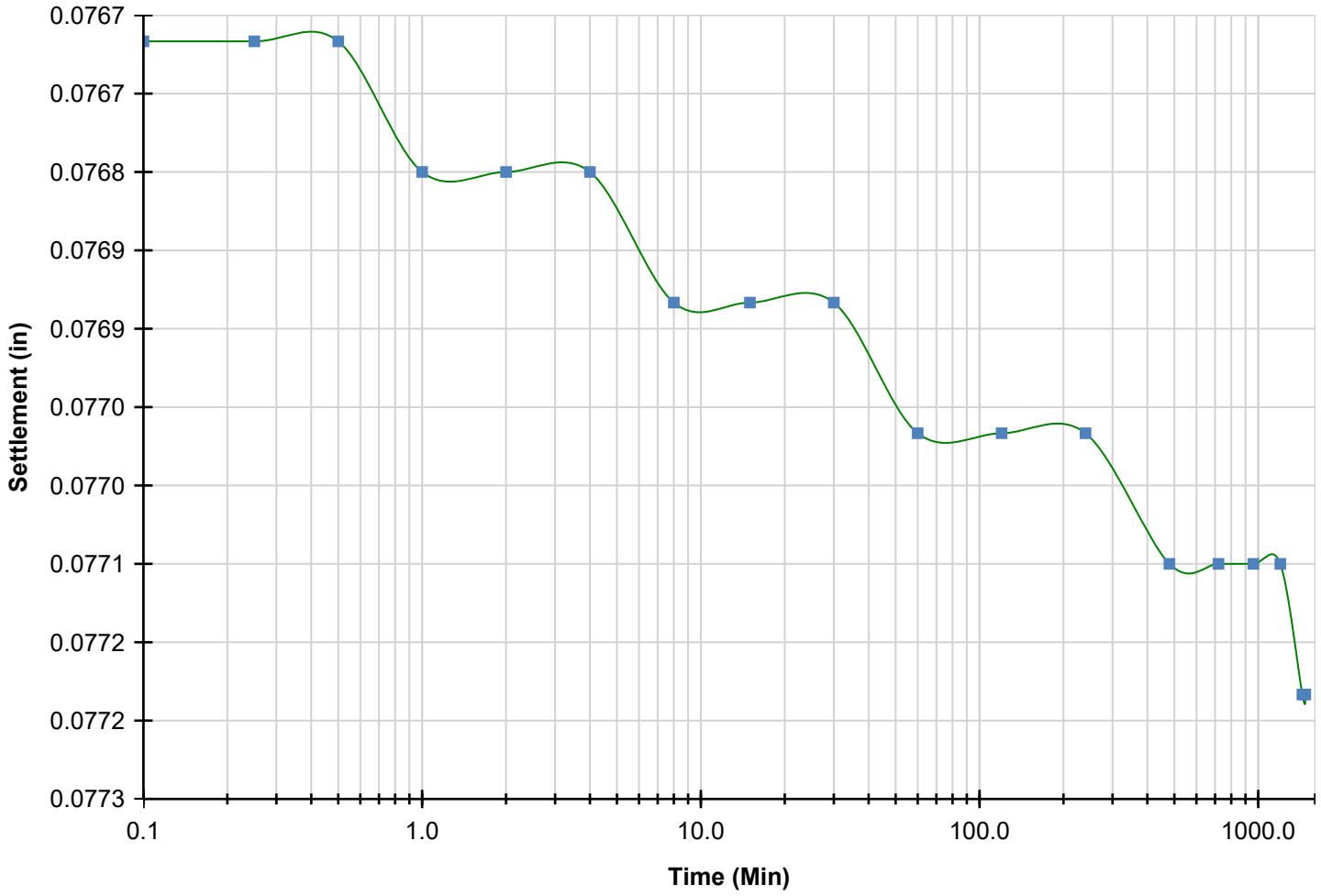
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [13] 1.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 14 - 2.000 tsf

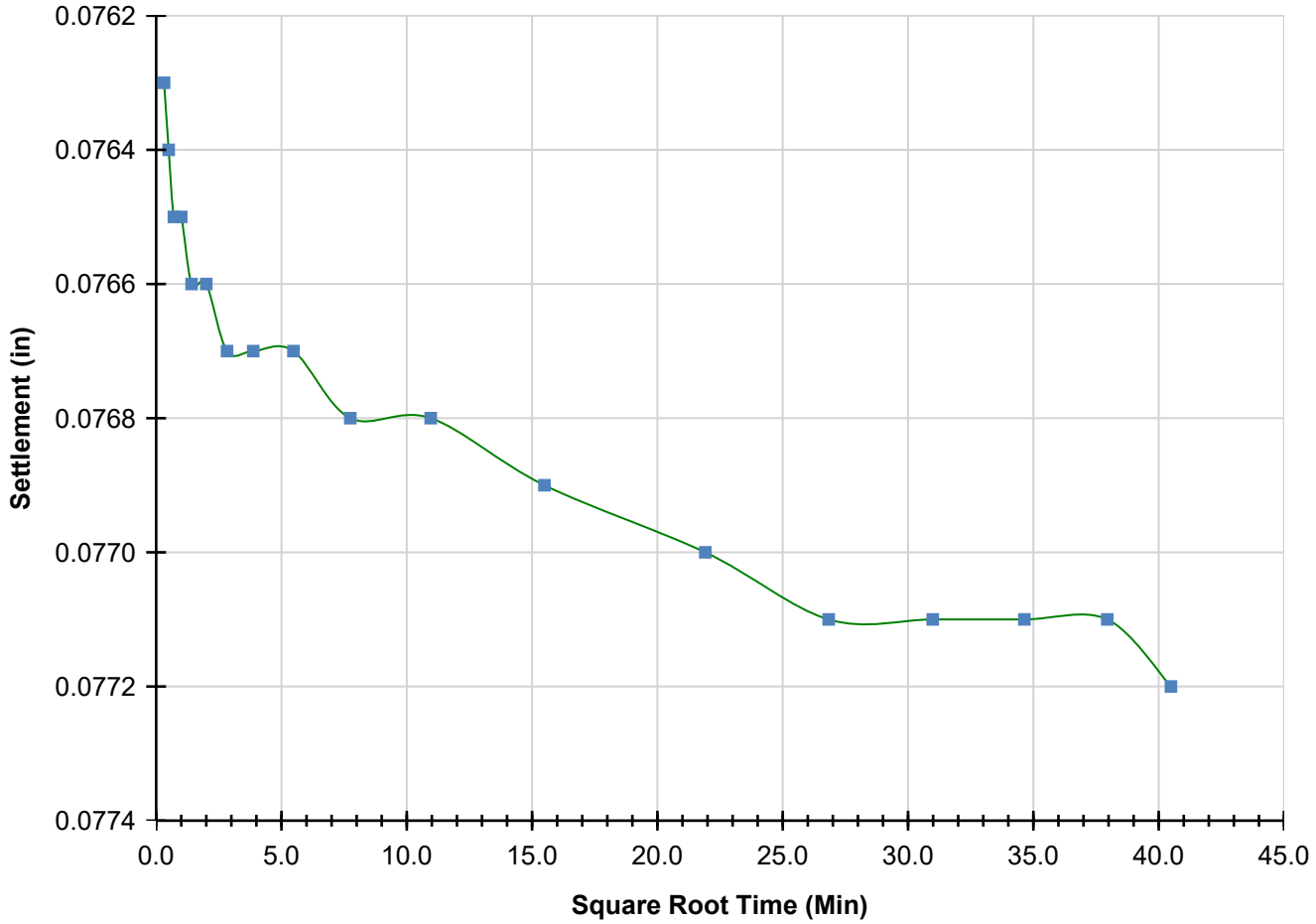
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0837	0.0772	7.7	0.666
1	00:00:06	0.0	0.0852	0.0763	7.6	0.668
2	00:00:15	0.0	0.0853	0.0764	7.6	0.668
3	00:00:30	0.0	0.0854	0.0765	7.7	0.667
4	00:01:00	0.0	0.0854	0.0765	7.7	0.667
5	00:02:00	0.0	0.0855	0.0766	7.7	0.667
6	00:04:00	0.0	0.0855	0.0766	7.7	0.667
7	00:08:00	0.0	0.0856	0.0767	7.7	0.667
8	00:15:00	0.0	0.0856	0.0767	7.7	0.667
9	00:30:00	0.0	0.0856	0.0767	7.7	0.667
10	01:00:00	0.0	0.0857	0.0768	7.7	0.667
11	02:00:00	0.0	0.0857	0.0768	7.7	0.667
12	04:00:00	0.0	0.0858	0.0769	7.7	0.667
13	08:00:00	0.0	0.0859	0.0770	7.7	0.667
14	12:00:00	0.0	0.0860	0.0771	7.7	0.666
15	16:00:00	0.0	0.0860	0.0771	7.7	0.666
16	20:00:00	0.0	0.0860	0.0771	7.7	0.666
17	24:00:00	0.0	0.0860	0.0771	7.7	0.666
18	27:19:17	0.0	0.0861	0.0772	7.7	0.666

Square Root Time [14] 2.000 tsf

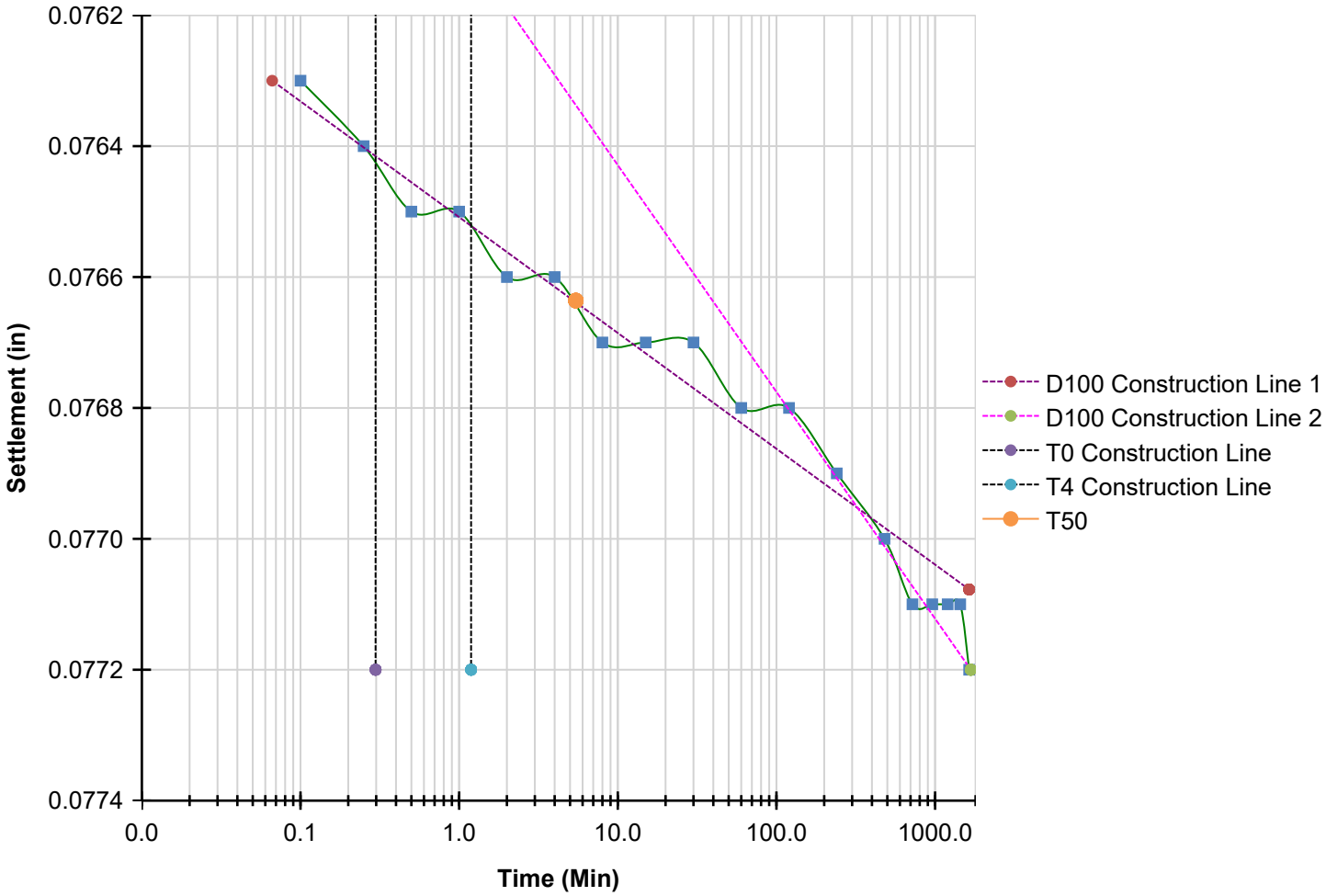
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [14] 2.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	5.441
Cv (in²/Min)	0.0077

Tabulated Data - Load Sequence 15 - 4.000 tsf

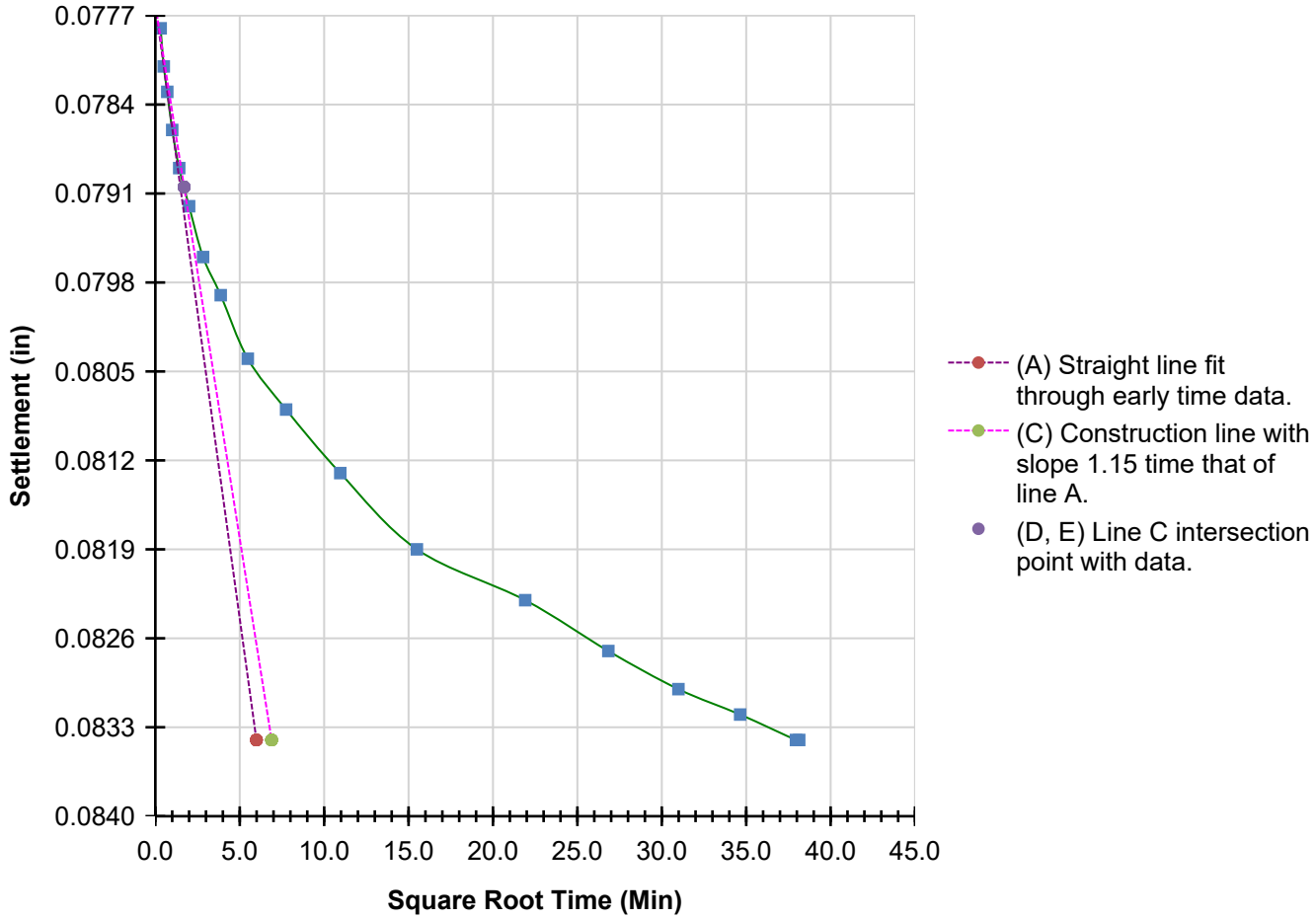
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0861	0.0772	7.7	0.666
1	00:00:06	0.0	0.0891	0.0778	7.8	0.665
2	00:00:15	0.0	0.0894	0.0781	7.8	0.665
3	00:00:30	0.0	0.0896	0.0783	7.8	0.664
4	00:01:00	0.0	0.0899	0.0786	7.9	0.664
5	00:02:00	0.0	0.0902	0.0789	7.9	0.663
6	00:04:00	0.0	0.0905	0.0792	7.9	0.663
7	00:08:00	0.0	0.0909	0.0796	8.0	0.662
8	00:15:00	0.0	0.0912	0.0799	8.0	0.661
9	00:30:00	0.0	0.0917	0.0804	8.0	0.660
10	01:00:00	0.0	0.0921	0.0808	8.1	0.660
11	02:00:00	0.0	0.0926	0.0813	8.1	0.659
12	04:00:00	0.0	0.0932	0.0819	8.2	0.658
13	08:00:00	0.0	0.0936	0.0823	8.2	0.657
14	12:00:00	0.0	0.0940	0.0827	8.3	0.656
15	16:00:00	0.0	0.0943	0.0830	8.3	0.656
16	20:00:00	0.0	0.0945	0.0832	8.3	0.655
17	24:00:00	0.0	0.0947	0.0834	8.3	0.655
18	24:14:30	0.0	0.0947	0.0834	8.3	0.655

Square Root Time [15] 4.000 tsf

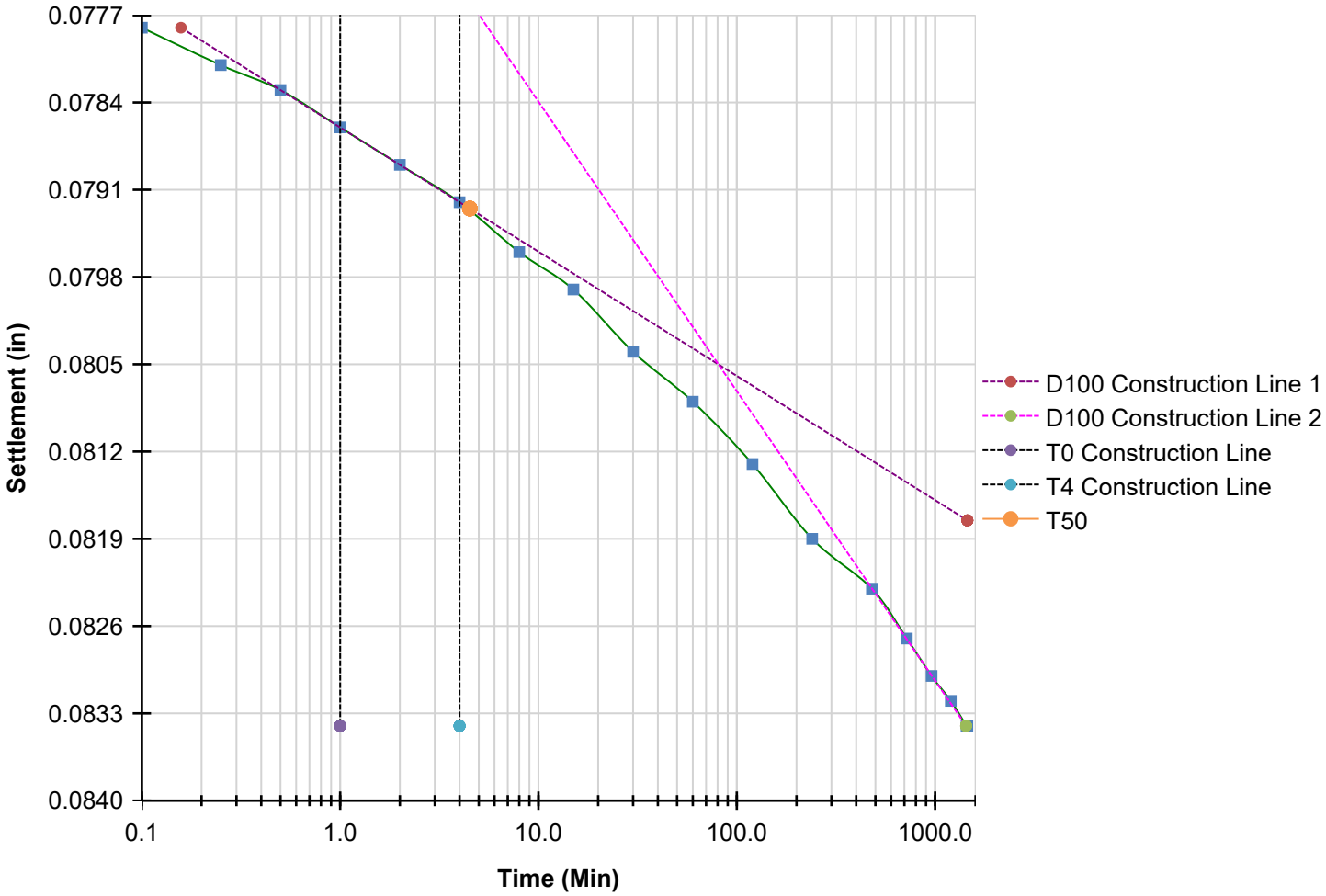
ASTM D2435



Tangent Construction Results	
T90 (Min)	2.908
T50 (Min)	0.667
Cv (in²/Min)	0.0613

Logarithmic Time [15] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	4.506
Cv (in²/Min)	0.0092

Tabulated Data - Load Sequence 16 - 8.000 tsf

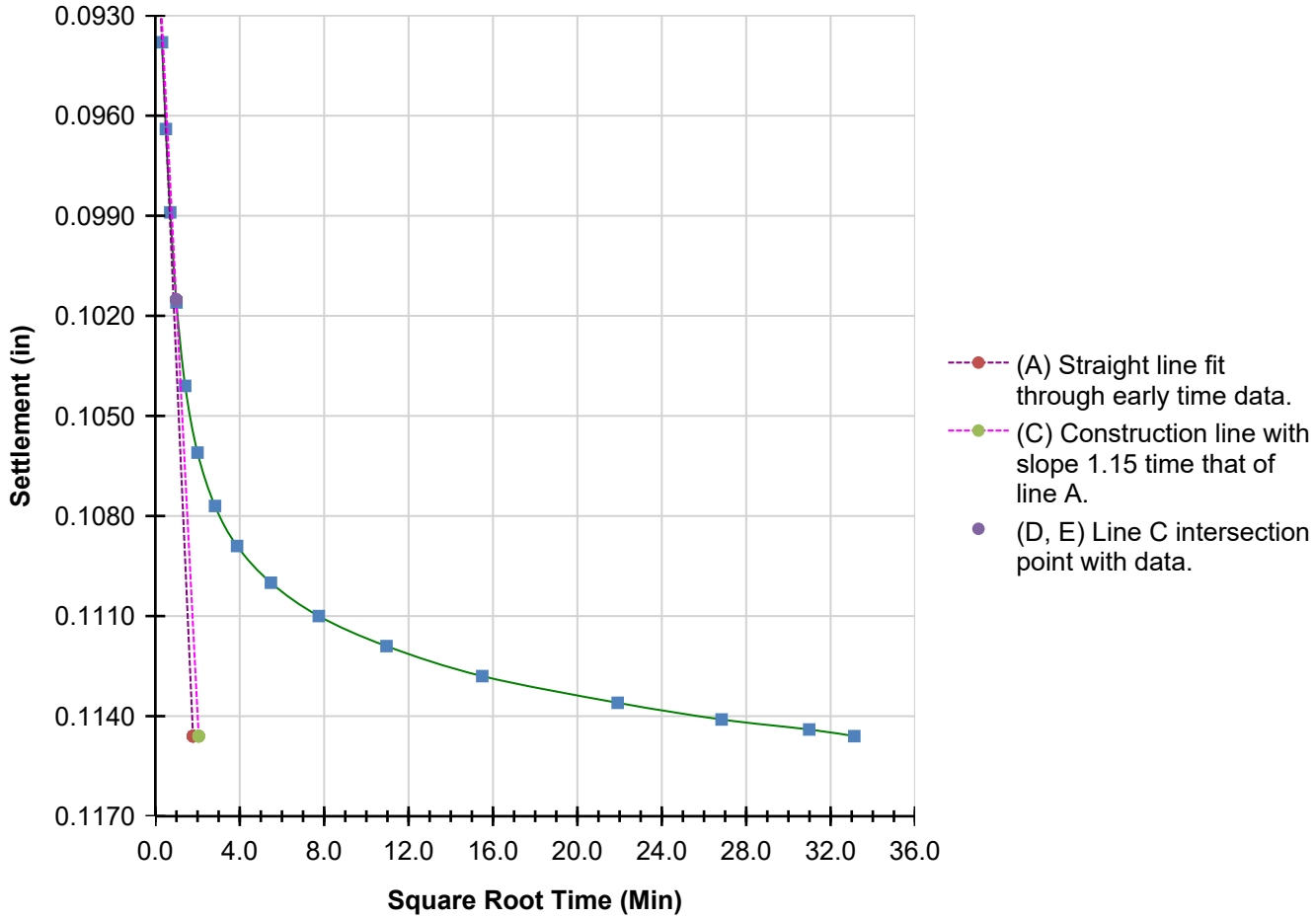
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.0947	0.0834	8.3	0.655
1	00:00:06	0.0	0.1076	0.0938	9.4	0.636
2	00:00:15	0.0	0.1102	0.0964	9.6	0.632
3	00:00:30	0.0	0.1127	0.0989	9.9	0.627
4	00:01:00	0.0	0.1154	0.1016	10.2	0.622
5	00:02:00	0.0	0.1179	0.1041	10.4	0.618
6	00:04:00	0.0	0.1199	0.1061	10.6	0.614
7	00:08:00	0.0	0.1215	0.1077	10.8	0.611
8	00:15:00	0.0	0.1227	0.1089	10.9	0.609
9	00:30:00	0.0	0.1238	0.1100	11.0	0.607
10	01:00:00	0.0	0.1248	0.1110	11.1	0.605
11	02:00:00	0.0	0.1257	0.1119	11.2	0.604
12	04:00:00	0.0	0.1266	0.1128	11.3	0.602
13	08:00:00	0.0	0.1274	0.1136	11.4	0.600
14	12:00:00	0.0	0.1279	0.1141	11.4	0.600
15	16:00:00	0.0	0.1282	0.1144	11.4	0.599
16	18:17:03	0.0	0.1284	0.1146	11.5	0.599

Square Root Time [16] 8.000 tsf

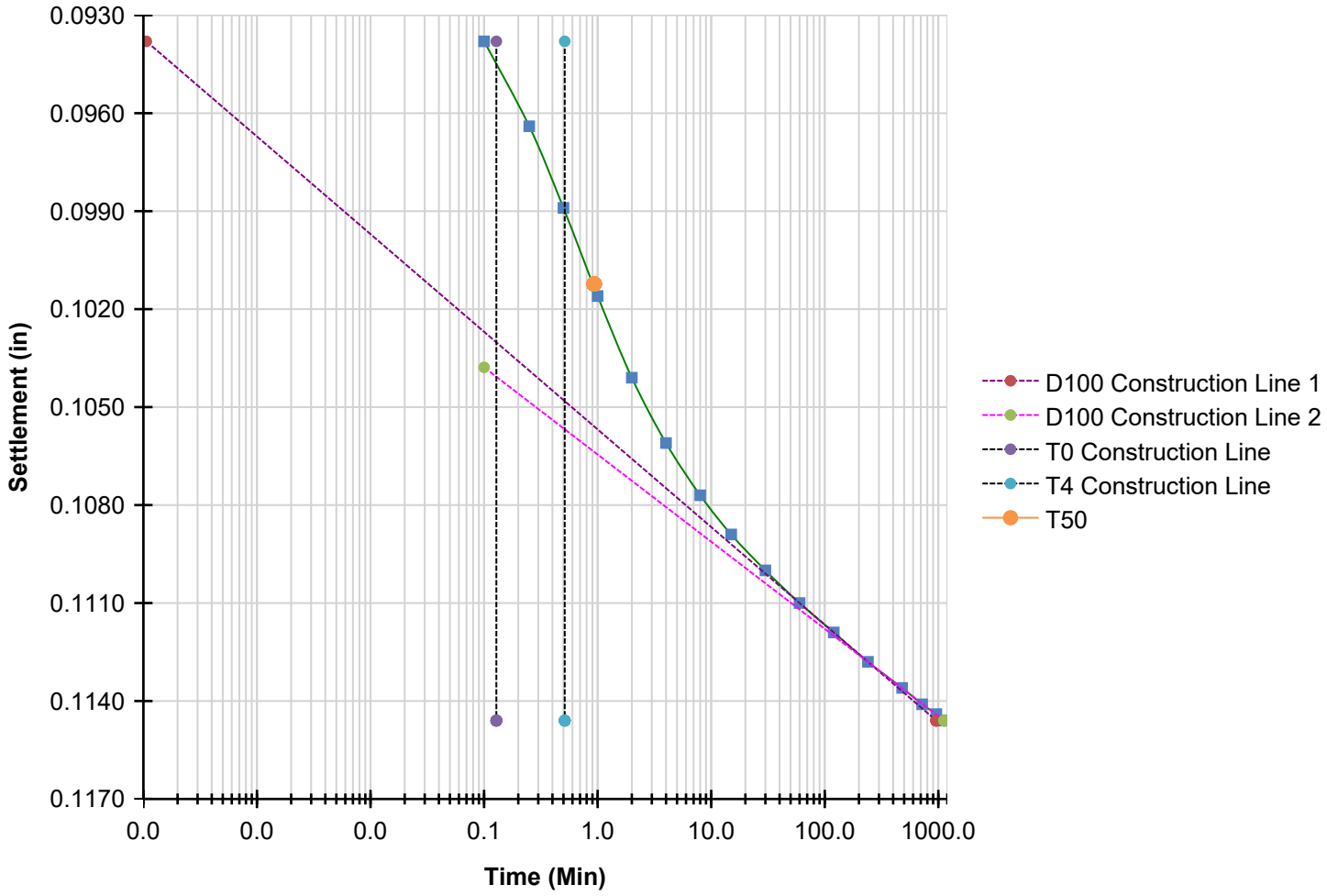
ASTM D2435



Tangent Construction Results	
T90 (Min)	0.982
T50 (Min)	0.227
Cv (in²/Min)	0.1693

Logarithmic Time [16] 8.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	0.931
Cv (in²/Min)	0.0415

Tabulated Data - Load Sequence 17 - 16.000 tsf

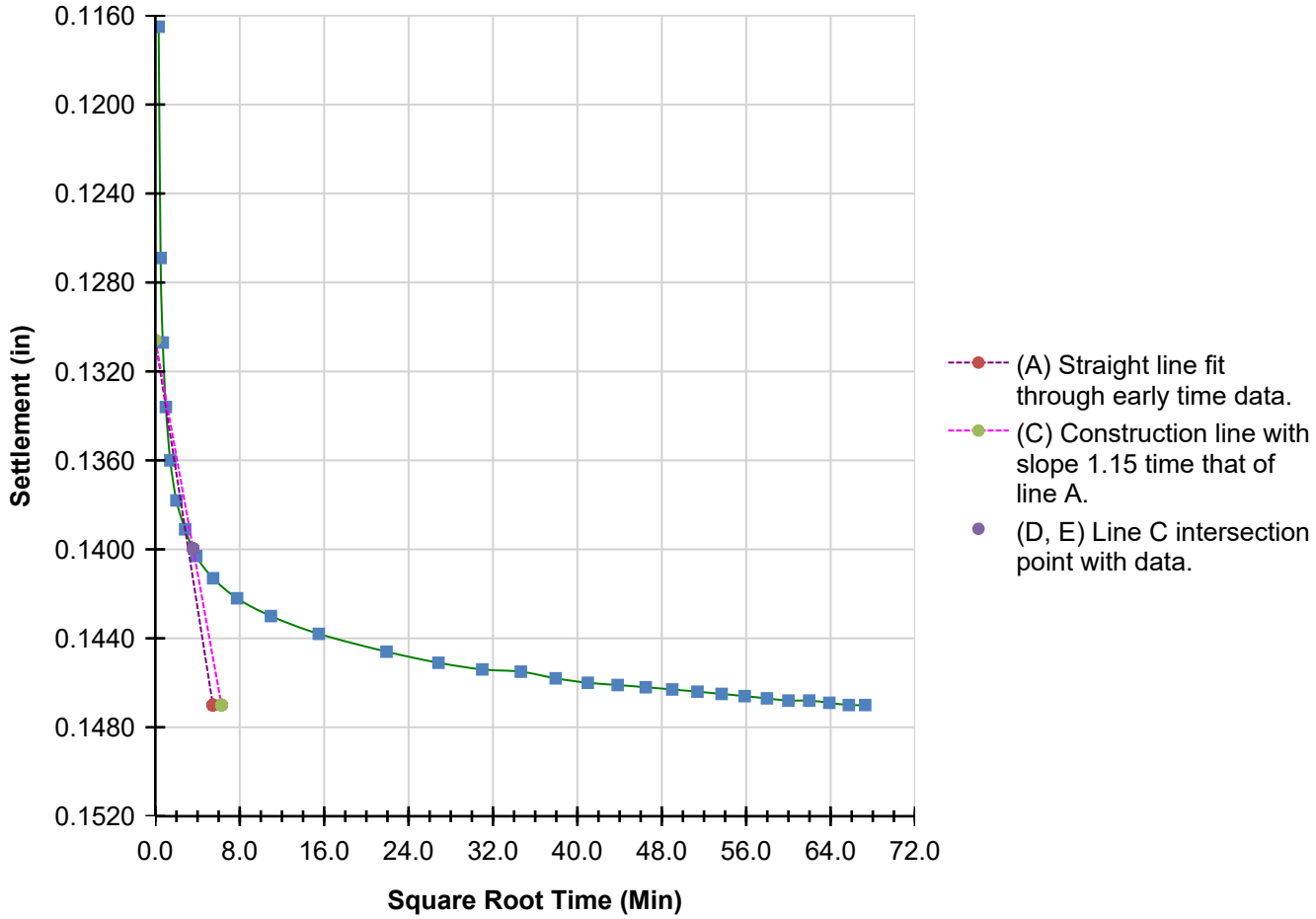
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1284	0.1146	11.5	0.599
1	00:00:06	0.0	0.1334	0.1165	11.7	0.595
2	00:00:15	0.0	0.1438	0.1269	12.7	0.576
3	00:00:30	0.0	0.1476	0.1307	13.1	0.570
4	00:01:00	0.0	0.1505	0.1336	13.4	0.564
5	00:02:00	0.0	0.1529	0.1360	13.6	0.560
6	00:04:00	0.0	0.1547	0.1378	13.8	0.557
7	00:08:00	0.0	0.1560	0.1391	13.9	0.554
8	00:15:00	0.0	0.1572	0.1403	14.0	0.552
9	00:30:00	0.0	0.1582	0.1413	14.1	0.550
10	01:00:00	0.0	0.1591	0.1422	14.2	0.549
11	02:00:00	0.0	0.1599	0.1430	14.3	0.547
12	04:00:00	0.0	0.1607	0.1438	14.4	0.546
13	08:00:00	0.0	0.1615	0.1446	14.5	0.545
14	12:00:00	0.0	0.1620	0.1451	14.5	0.544
15	16:00:00	0.0	0.1623	0.1454	14.5	0.543
16	20:00:00	0.0	0.1624	0.1455	14.6	0.543
17	24:00:00	0.0	0.1627	0.1458	14.6	0.542
18	28:00:00	0.0	0.1629	0.1460	14.6	0.542
19	32:00:00	0.0	0.1630	0.1461	14.6	0.542
20	36:00:00	0.0	0.1631	0.1462	14.6	0.542
21	40:00:00	0.0	0.1632	0.1463	14.6	0.541
22	44:00:00	0.0	0.1633	0.1464	14.6	0.541
23	48:00:00	0.0	0.1634	0.1465	14.7	0.541
24	52:00:00	0.0	0.1635	0.1466	14.7	0.541
25	56:00:00	0.0	0.1636	0.1467	14.7	0.541
26	60:00:00	0.0	0.1637	0.1468	14.7	0.541
27	64:00:00	0.0	0.1637	0.1468	14.7	0.541
28	68:00:00	0.0	0.1638	0.1469	14.7	0.540
29	72:00:00	0.0	0.1639	0.1470	14.7	0.540
30	75:25:48	0.0	0.1639	0.1470	14.7	0.540

Square Root Time [17] 16.000 tsf

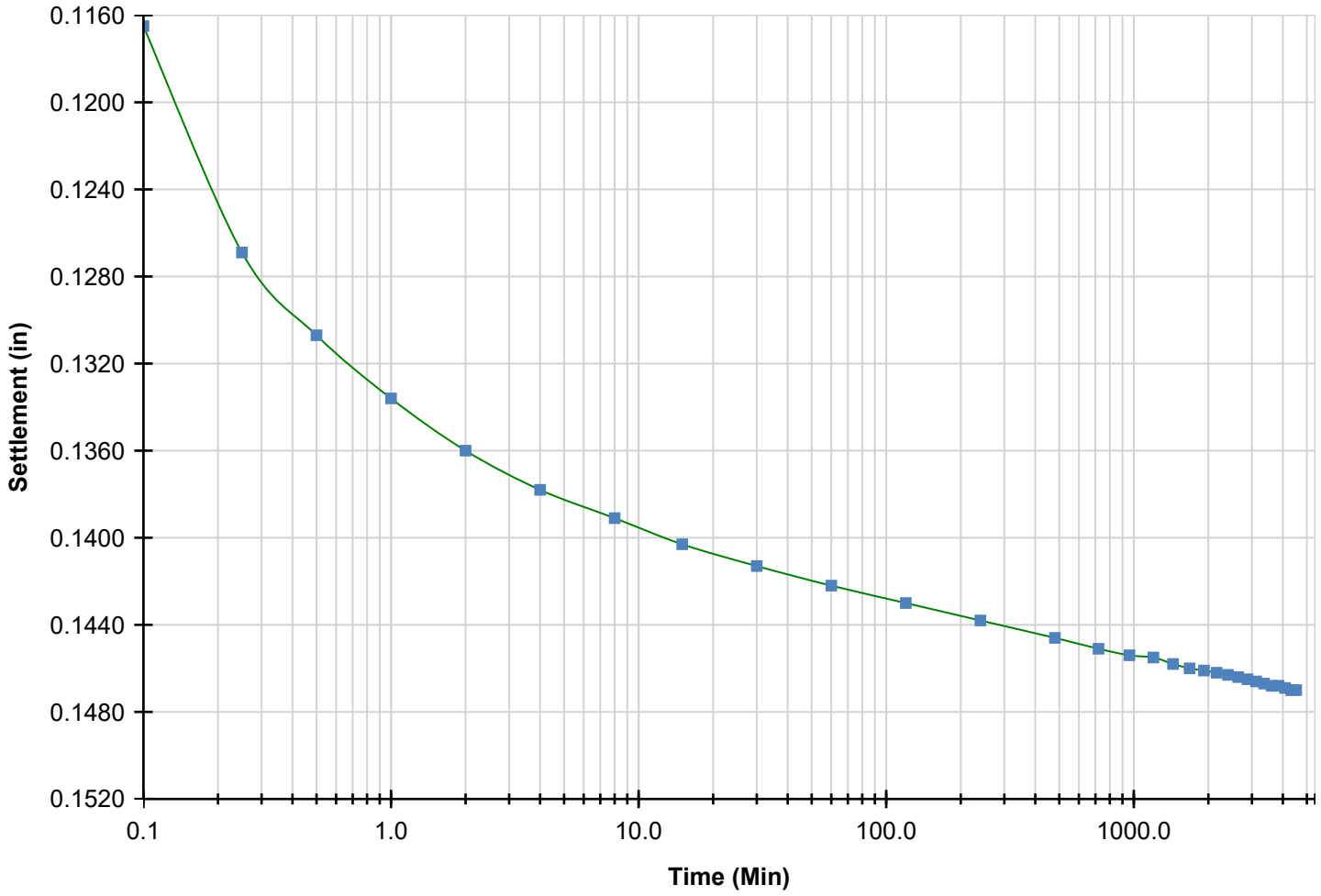
ASTM D2435



Tangent Construction Results	
T90 (Min)	12.852
T50 (Min)	1.904
Cv (in²/Min)	0.0120

Logarithmic Time [17] 16.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 18 - 4.000 tsf

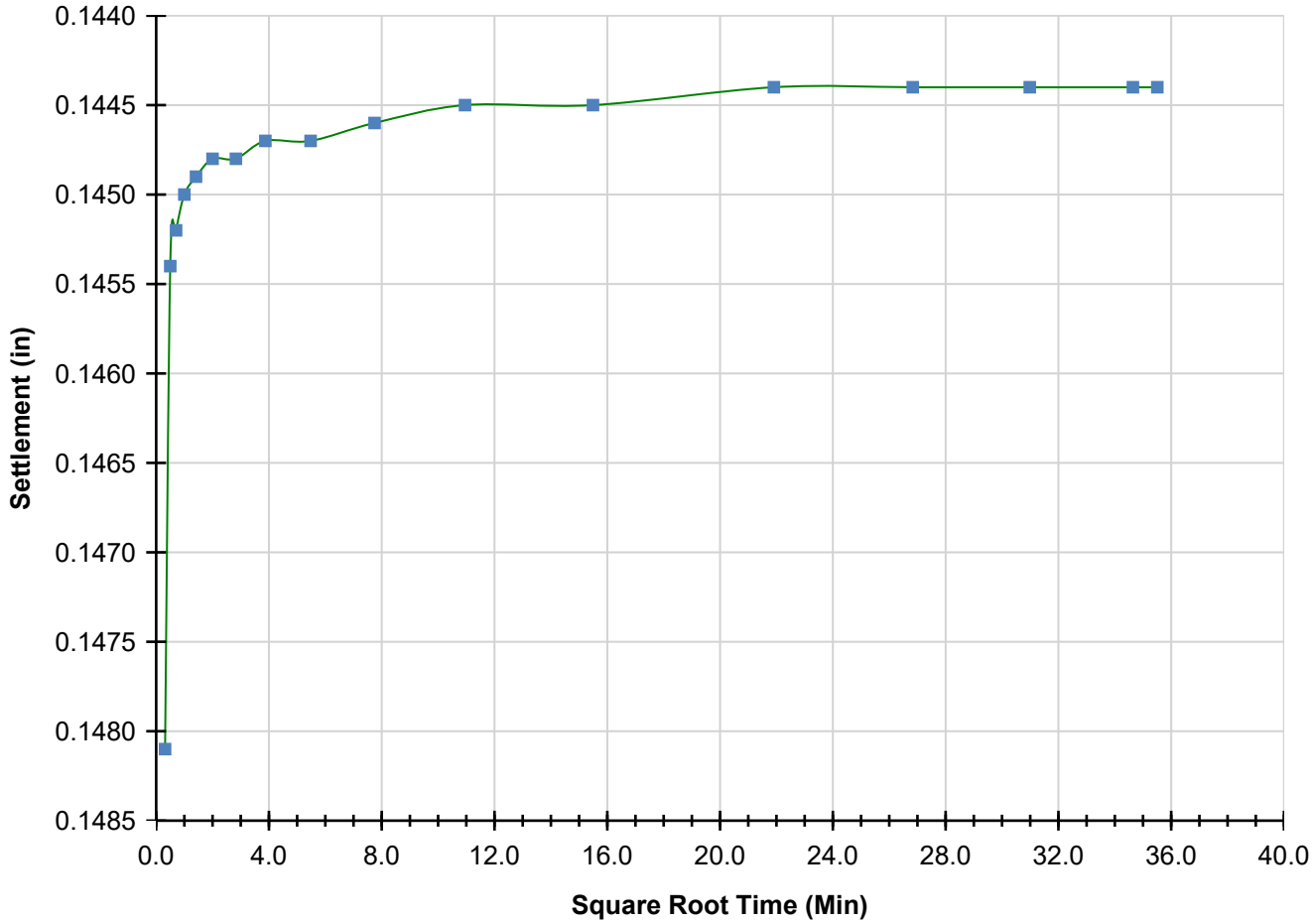
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1639	0.1470	14.7	0.540
1	00:00:06	0.0	0.1617	0.1481	14.8	0.538
2	00:00:15	0.0	0.1590	0.1454	14.5	0.543
3	00:00:30	0.0	0.1588	0.1452	14.5	0.543
4	00:01:00	0.0	0.1586	0.1450	14.5	0.544
5	00:02:00	0.0	0.1585	0.1449	14.5	0.544
6	00:04:00	0.0	0.1584	0.1448	14.5	0.544
7	00:08:00	0.0	0.1584	0.1448	14.5	0.544
8	00:15:00	0.0	0.1583	0.1447	14.5	0.544
9	00:30:00	0.0	0.1583	0.1447	14.5	0.544
10	01:00:00	0.0	0.1582	0.1446	14.5	0.545
11	02:00:00	0.0	0.1581	0.1445	14.5	0.545
12	04:00:00	0.0	0.1581	0.1445	14.5	0.545
13	08:00:00	0.0	0.1580	0.1444	14.4	0.545
14	12:00:00	0.0	0.1580	0.1444	14.4	0.545
15	16:00:00	0.0	0.1580	0.1444	14.4	0.545
16	20:00:00	0.0	0.1580	0.1444	14.4	0.545
17	21:00:43	0.0	0.1580	0.1444	14.4	0.545

Square Root Time [18] 4.000 tsf

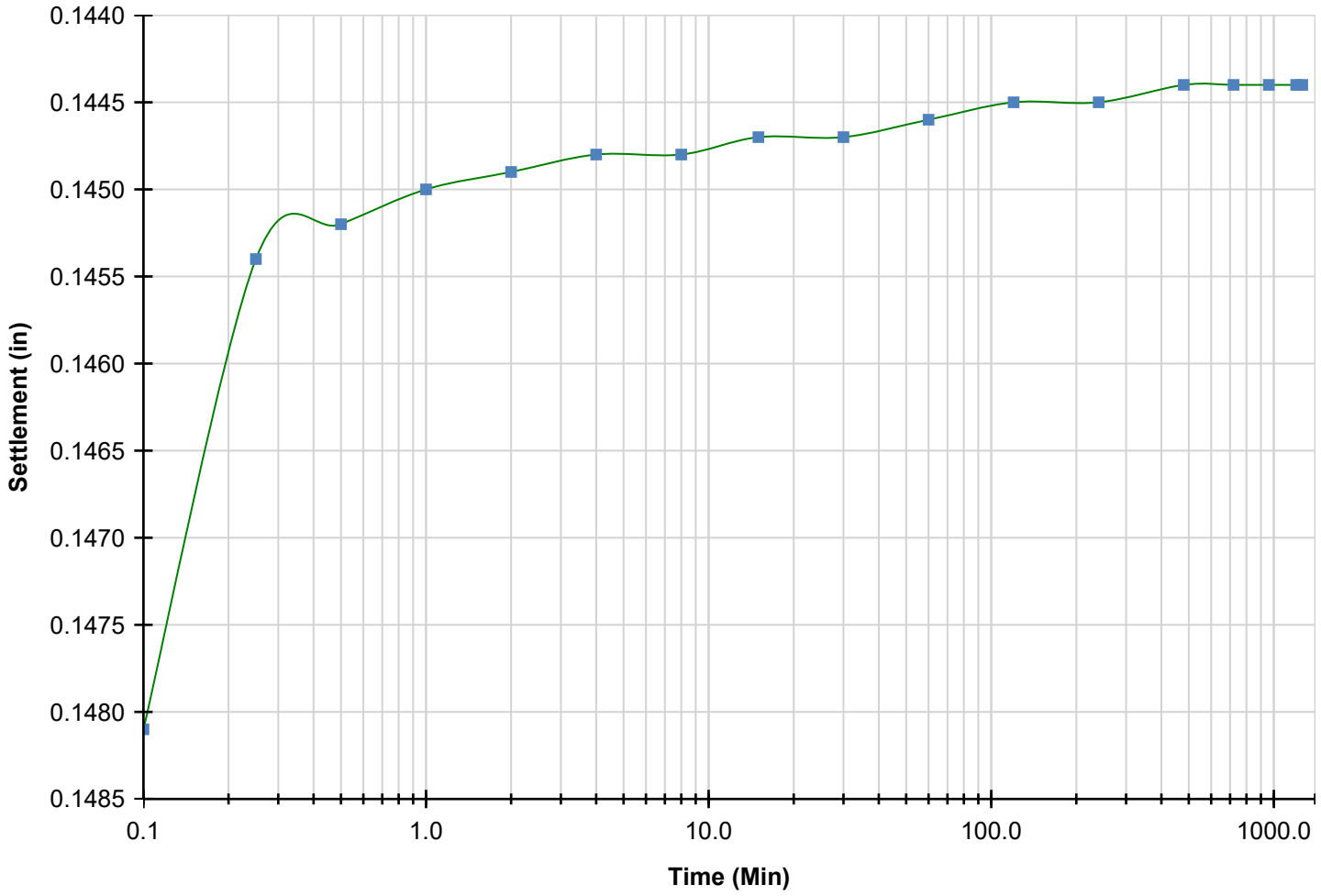
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [18] 4.000 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Tabulated Data - Load Sequence 19 - 0.016 tsf

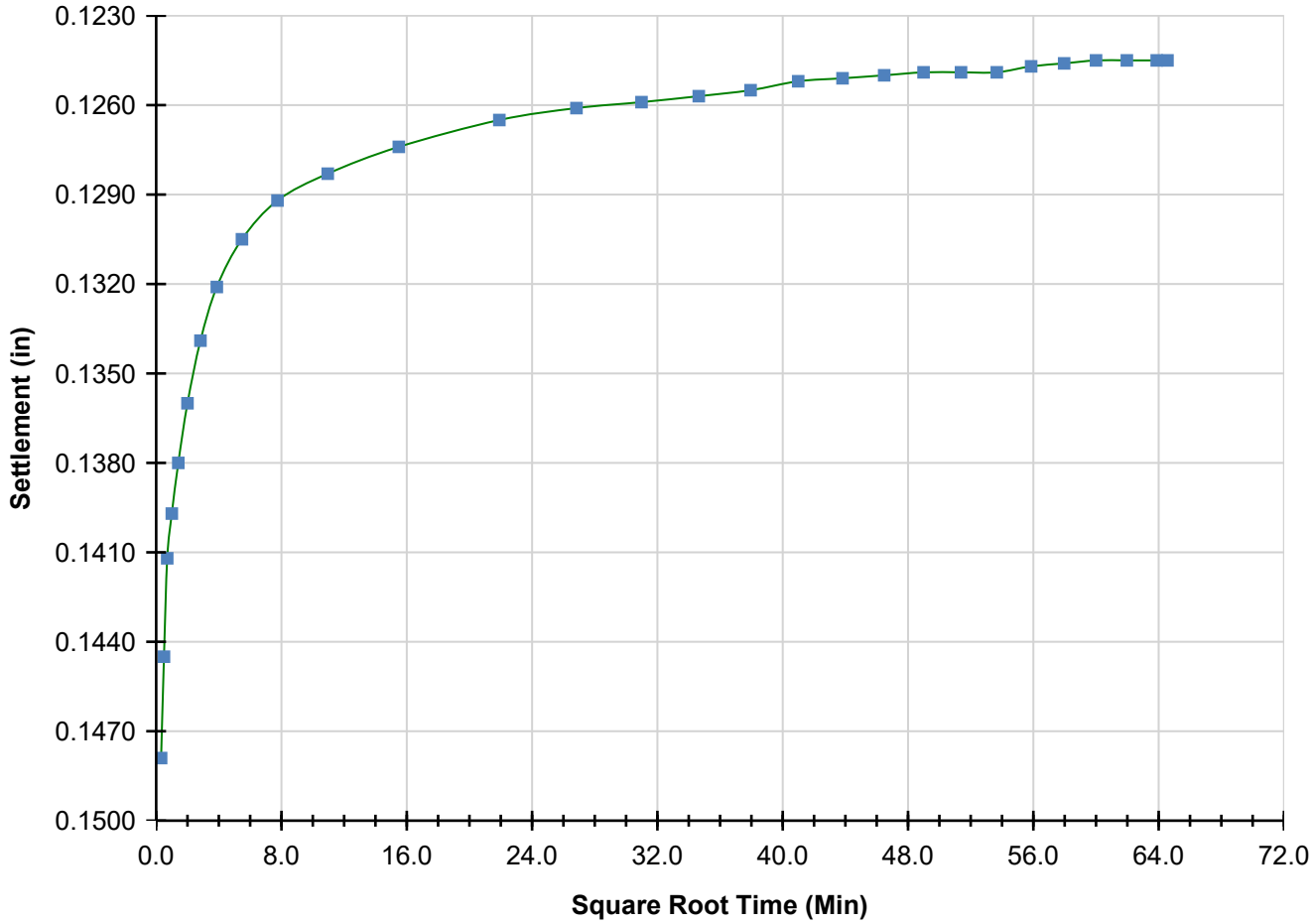
ASTM D2435

Stop Method: 24:00:00 (hh:mm:ss)

Index	Elapsed Time (hh:mm:ss)	Load (Lbf)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0	0.1580	0.1444	14.4	0.545
1	00:00:06	0.0	0.1546	0.1479	14.8	0.539
2	00:00:15	0.0	0.1512	0.1445	14.5	0.545
3	00:00:30	0.0	0.1479	0.1412	14.1	0.551
4	00:01:00	0.0	0.1464	0.1397	14.0	0.553
5	00:02:00	0.0	0.1447	0.1380	13.8	0.556
6	00:04:00	0.0	0.1427	0.1360	13.6	0.560
7	00:08:00	0.0	0.1406	0.1339	13.4	0.564
8	00:15:00	0.0	0.1388	0.1321	13.2	0.567
9	00:30:00	0.0	0.1372	0.1305	13.1	0.570
10	01:00:00	0.0	0.1359	0.1292	12.9	0.572
11	02:00:00	0.0	0.1350	0.1283	12.8	0.574
12	04:00:00	0.0	0.1341	0.1274	12.7	0.576
13	08:00:00	0.0	0.1332	0.1265	12.7	0.577
14	12:00:00	0.0	0.1328	0.1261	12.6	0.578
15	16:00:00	0.0	0.1326	0.1259	12.6	0.578
16	20:00:00	0.0	0.1324	0.1257	12.6	0.579
17	24:00:00	0.0	0.1322	0.1255	12.6	0.579
18	28:00:00	0.0	0.1319	0.1252	12.5	0.580
19	32:00:00	0.0	0.1318	0.1251	12.5	0.580
20	36:00:00	0.0	0.1317	0.1250	12.5	0.580
21	40:00:00	0.0	0.1316	0.1249	12.5	0.580
22	44:00:00	0.0	0.1316	0.1249	12.5	0.580
23	48:00:00	0.0	0.1316	0.1249	12.5	0.580
24	52:00:00	0.0	0.1314	0.1247	12.5	0.580
25	56:00:00	0.0	0.1313	0.1246	12.5	0.581
26	60:00:00	0.0	0.1312	0.1245	12.5	0.581
27	64:00:00	0.0	0.1312	0.1245	12.5	0.581
28	68:00:00	0.0	0.1312	0.1245	12.5	0.581
29	69:28:09	0.0	0.1312	0.1245	12.5	0.581

Square Root Time [19] 0.016 tsf

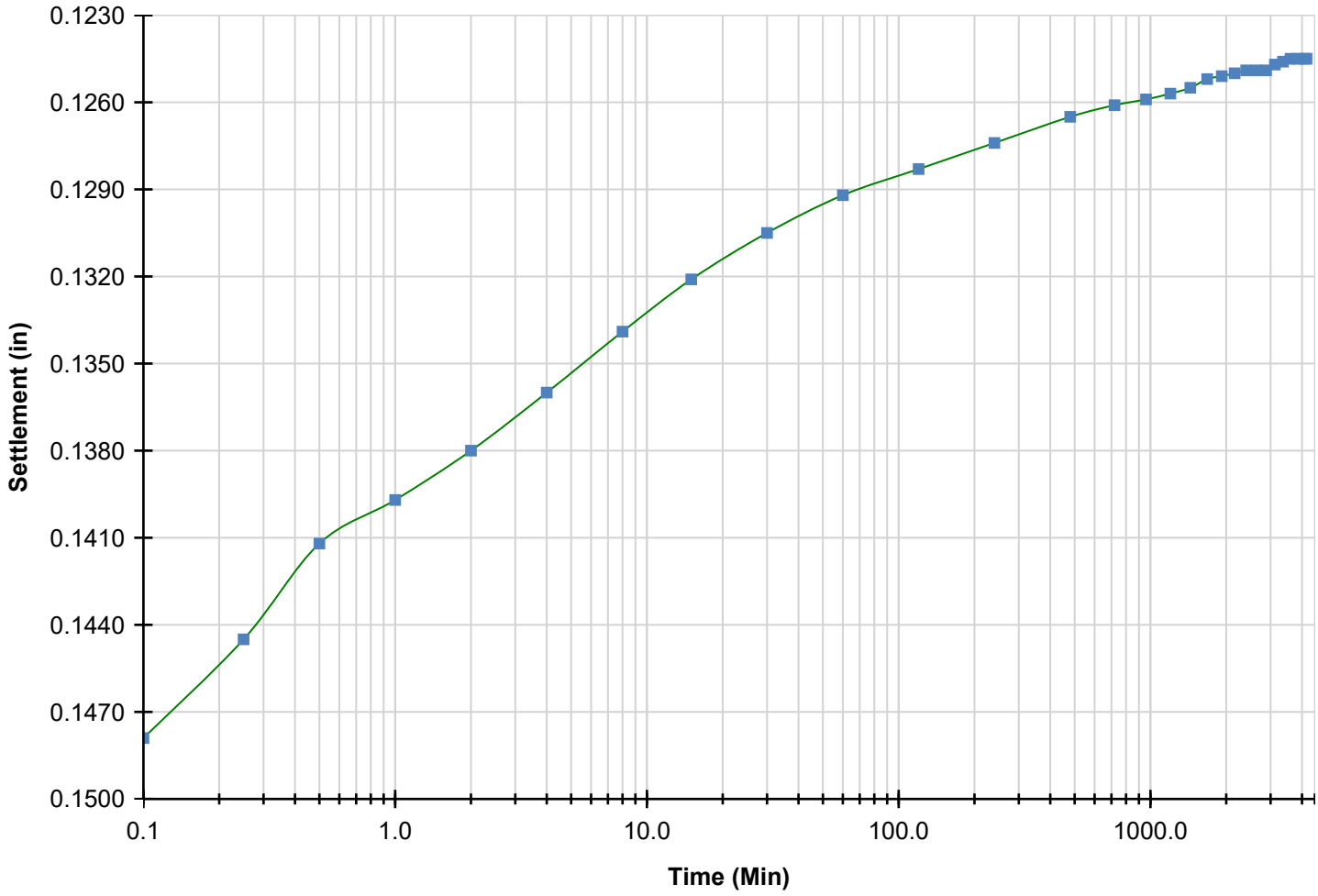
ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA

Logarithmic Time [19] 0.016 tsf

ASTM D2435



Tangent Construction Results	
T90 (Min)	NA
T50 (Min)	NA
Cv (in²/Min)	NA