Figure 1. Results of Erosion Rate Apparatus test for sample 1 at structure 424014600100 on Route SC 146, crossing the Enoree River in Spartanburg County, South Carolina

M & T Form 503

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

T. I. P. No. _____

REPORT ON SAMPLES OF SOILS FOR QUALITY

Project 4.24015E+11 County SPARTANSBURG Owner _____
Date: Sampled 8/9/04 Received 8/18/04 Reported 08/20/04
Sampled from _____ By _____
Submitted by T. ALLEN EFA # 55 1995 Standard Specifications

716421 TO 716421
9/2/04

TEST RESULTS

Proj. Sample No.		1					
Lab. Sample No.		716421					
Retained #4 Sieve	%	-					
Passing #10 Sieve	%	100					
Passing #40 Sieve	%	92					
Passing #200 Sieve	%	27					

MINUS NO. 10 FRACTION

SOIL MORTAR - 100%							
Course Sand Ret - #60	%	25.6					
Fine Sand Ret - #270	%	51.9					
Silt 0.05 - 0.005 mm	%	8.4					
Clay < 0.005 mm	%	14.1					
Passing #40 Sieve	%	-					
Passing #200 Sieve	%	-					

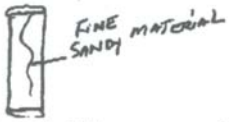
L. L. Liquid Limit	18					
P. I. Plastic Index	NP					
AASHTO Classification	A-2-4(0)					
Station						
Hole No.						
Depth (Ft)						
to						

cc: T. ALLEN
Soils File

#1

Flow Rate 0.5m per sec. Soil Pushed 50mm Time 8min.

Top



Soils Engineer

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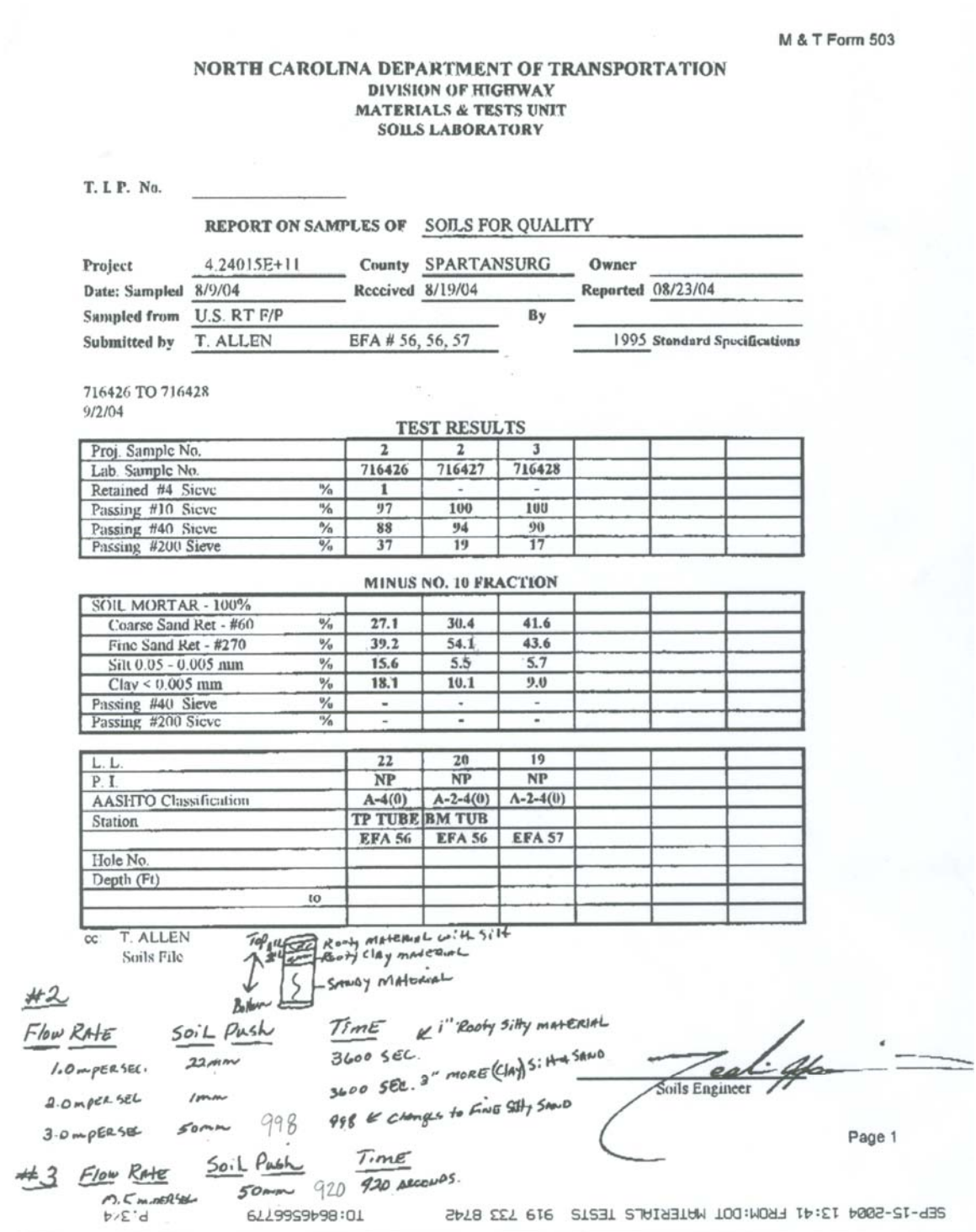
Figure 2. Results of Erosion Rate Apparatus test for samples 2 and 3 at structure 424014600100 on Route SC 146, crossing the Enoree River in Spartanburg County, South Carolina .



M & T Form 503

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

T. I. P. No. _____

REPORT ON SAMPLES OF SOILS FOR QUALITY

Project	4.24015E+11	County	SPARTANSURG	Owner	
Date: Sampled	8/9/04	Received	8/19/04	Reported	08/23/04
Sampled from	U.S. RT F/P		By		
Submitted by	T. ALLEN	EFA # 56, 56, 57		1995	Standard Specifications

716426 TO 716428
9/2/04

TEST RESULTS

Proj. Sample No.		2	2	3			
Lab. Sample No.		716426	716427	716428			
Retained #4 Sieve	%	1	-	-			
Passing #10 Sieve	%	97	100	100			
Passing #40 Sieve	%	88	94	90			
Passing #200 Sieve	%	37	19	17			

MINUS NO. 10 FRACTION

SOIL MORTAR - 100%							
Coarse Sand Ret - #60	%	27.1	30.4	41.6			
Fine Sand Ret - #270	%	39.2	54.1	43.6			
Silt 0.05 - 0.005 mm	%	15.6	5.5	5.7			
Clay < 0.005 mm	%	18.1	10.1	9.0			
Passing #40 Sieve	%	-	-	-			
Passing #200 Sieve	%	-	-	-			

L. L.		22	20	19			
P. I.		NP	NP	NP			
AASHTO Classification		A-4(0)	A-2-4(0)	A-2-4(0)			
Station		TP TUBE	BM TUB				
		EFA 56	EFA 56	EFA 57			
Hole No.							
Depth (Ft)							
to							

cc: T. ALLEN
Soils File

Top Soil
Rooty material with silt
Rooty clay material
Sandy material
Bottom

#2
Flow Rate — Soil Push — Time
1.0 mm per sec. — 22 mm — 3600 SEC.
2.0 mm per sec — 1 mm — 3600 SEC. 3" more (clay) silt and sand
3.0 mm per sec — 50 mm — 998 — 998 ← changes to fine silty sand

#3 Flow Rate — Soil Push — Time
M.C. under tube — 50 mm — 920 — 920 seconds.

1" Rooty silty material

Soils Engineer

Page 1

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Figure 3. Results of Erosion Rate Apparatus test for sample 4 at structure 424014600100 on Route SC 146, crossing the Enoree River in Spartanburg County, South Carolina.

M & T Form 503

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

T. I. P. No. _____

REPORT ON SAMPLES OF SOILS FOR QUALITY

Project	424014600010	County	SPARTANBURG	Owner	
Date: Sampled	8/9/04	Received	8/16/04	Reported	08/18/04
Sampled from	U.S. RT F/P			By	ANDY CALDWELL
Submitted by	TRAVIS ALLEN EFA # 58				1995 Standard Specifications

716350 TO 716351
9/2/04

TEST RESULTS

Proj. Sample No.		4	4				
Lab Sample No.		716350	716351				
Retained #4 Sieve	%	-	-				
Passing #10 Sieve	%	100	100				
Passing #40 Sieve	%	92	70				
Passing #200 Sieve	%	58	7				

MINUS NO. 10 FRACTION

SOIL MORTAR - 100%							
Coarse Sand Ret - #60	%	14.9	71.6				
Fine Sand Ret - #270	%	34.8	22.1				
Silt 0.05 - 0.005 mm	%	23.9	0.2				
Clay < 0.005 mm	%	26.4	6.1				
Passing #40 Sieve	%	-	-				
Passing #200 Sieve	%	-	-				

L. L.		34	21				
P. I.		10	NP				
AASHTO Classification		A-4(4)	A-3(0)				
Station							
		Top	Bottom				
Hole No.							
Depth (Ft)							
	to						

cc: TRAVIS ALLEN
Soils File

#4

Flow Rate	Soil Push	Time
1.0 m per sec	1.0 mm	3600 sec
1.5 m per sec	1.0 mm	3600 sec
2.0 m per sec	50 mm	333 sec

Top

Soils Engineer

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