

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5117	1	6

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

**STRUCTURE**  
**SUBSURFACE INVESTIGATION**

PROJ. REFERENCE NO. 42258.1.1 (B-5117) F.A. PROJ. BRSTP-0210(19)  
COUNTY BLADEN  
PROJECT DESCRIPTION BRIDGE NO. 47 ON NC 210 OVER LAKE  
CREEK AT -L- STA. 26+16

<u>SHEET</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND
3	SITE PLAN
4	PROFILE
5-6	BORE LOGS

**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. NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE 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 MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THIS 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.

PERSONNEL

C.M. WRIKE

J.R. SWARTLEY

R.E. SMITH

INVESTIGATED BY J.L. STONE

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE JULY 2012



**PROJECT: 42258.1.1 ID: B-5117**

DRAWN BY: C.P. TURNER

NOTE - THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS BEING ACCURATE NOR IS IT CONSIDERED TO BE PART OF THE PLANS, SPECIFICATIONS, OR CONTRACT FOR THE PROJECT.

NOTE - 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.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT

PROJECT REFERENCE NO. B-5117  
SHEET NO. 2 OF 6

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table containing sections for SOIL DESCRIPTION, GRADATION, SOIL LEGEND AND AASHTO CLASSIFICATION, ROCK DESCRIPTION, TERMS AND DEFINITIONS, CONSISTENCY OR DENSENESS, MISCELLANEOUS SYMBOLS, TEXTURE OR GRAIN SIZE, SOIL MOISTURE - CORRELATION OF TERMS, PLASTICITY, COLOR, ABBREVIATIONS, EQUIPMENT USED ON SUBJECT PROJECT, FRACTURE SPACING, BEDDING, and INDURATION. Includes various symbols, scales, and classification criteria.





# NCDOT GEOTECHNICAL ENGINEERING UNIT BORELOG REPORT

WBS 42258.1.1    TIP B-5117    COUNTY BLADEN    GEOLOGIST Wrike, C. M.

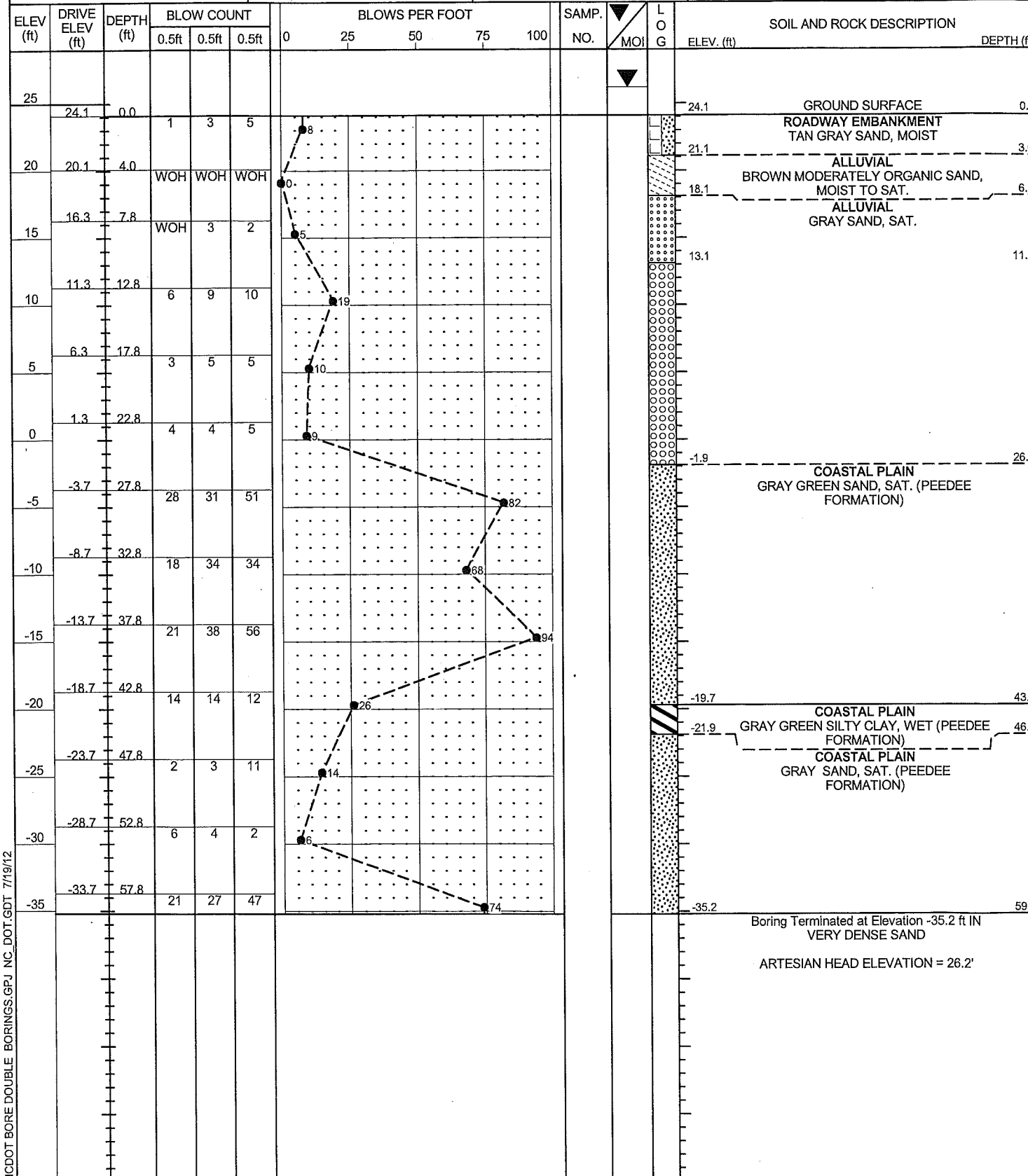
SITE DESCRIPTION BRIDGE NO. 47 ON -L- (NC 210) OVER LAKE CREEK    GROUND WTR (ft)

BORING NO. EB1-B    STATION 25+61    OFFSET 5 ft RT    ALIGNMENT -L-    0 HR. N/A

COLLAR ELEV. 24.1 ft    TOTAL DEPTH 59.3 ft    NORTHING 306,264    EASTING 2,211,376    24 HR. -2.1

DRILL RIG/HAMMER EFF./DATE GFO1042 CME-550 91% 05/23/2012    DRILL METHOD Mud Rotary    HAMMER TYPE Automatic

DRILLER Smith, R. E.    START DATE 07/09/12    COMP. DATE 07/09/12    SURFACE WATER DEPTH N/A



WBS 42258.1.1    TIP B-5117    COUNTY BLADEN    GEOLOGIST Wrike, C. M.

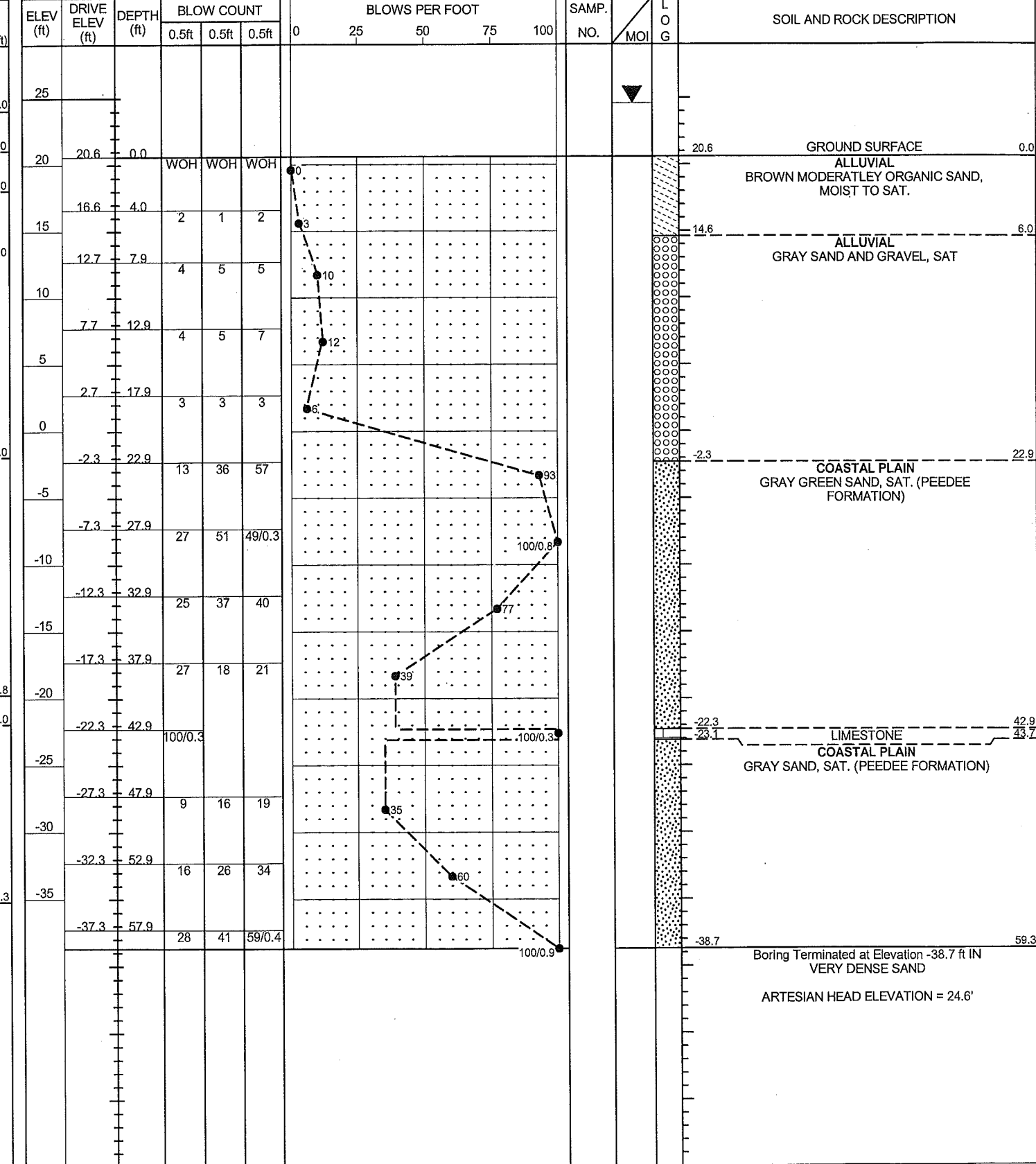
SITE DESCRIPTION BRIDGE NO. 47 ON -L- (NC 210) OVER LAKE CREEK    GROUND WTR (ft)

BORING NO. B1-B    STATION 25+87    OFFSET 6 ft RT    ALIGNMENT -L-    0 HR. N/A

COLLAR ELEV. 20.6 ft    TOTAL DEPTH 59.3 ft    NORTHING 306,286    EASTING 2,211,362    24 HR. -4.0

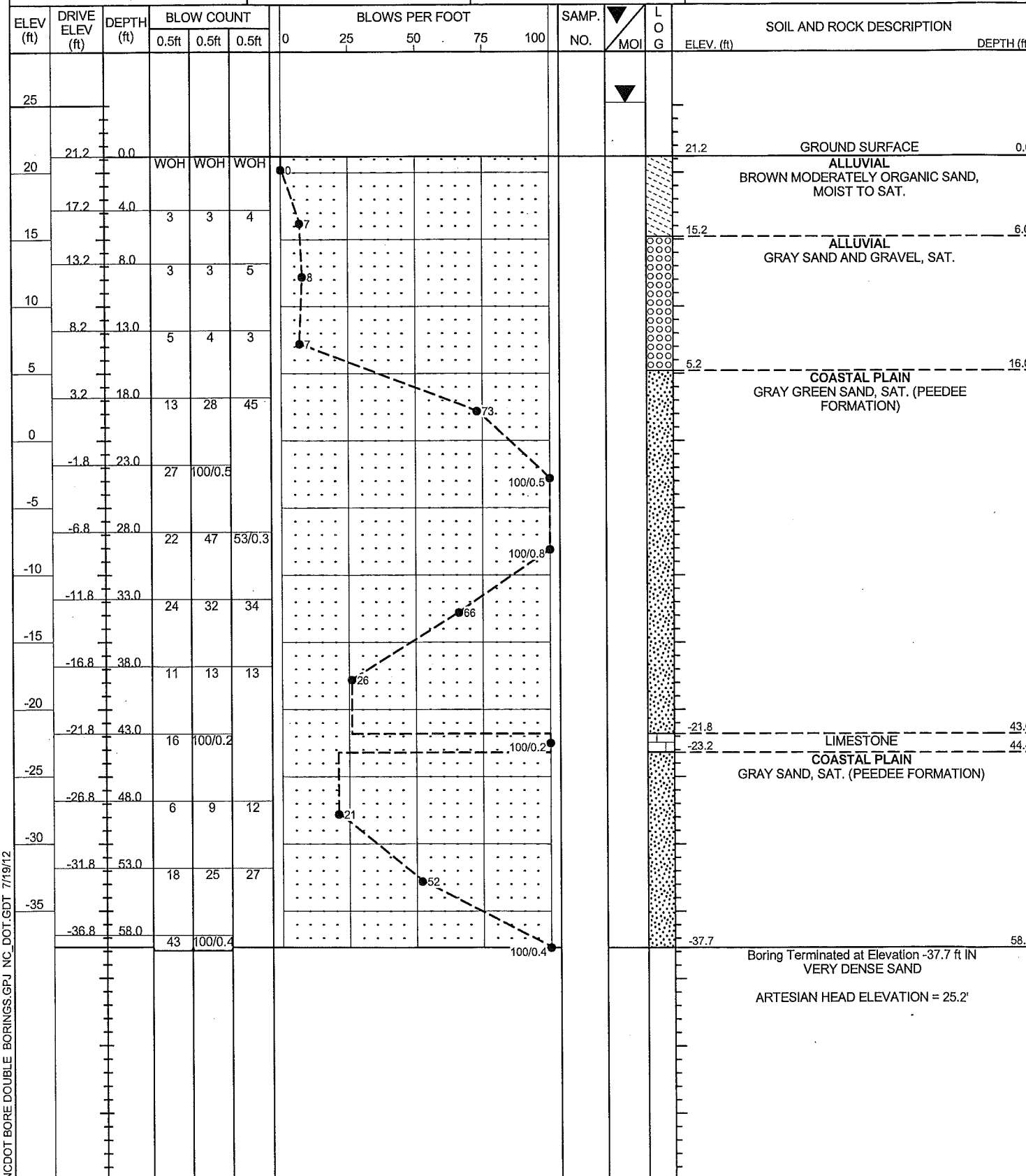
DRILL RIG/HAMMER EFF./DATE GFO1042 CME-550 91% 05/23/2012    DRILL METHOD Mud Rotary    HAMMER TYPE Automatic

DRILLER Smith, R. E.    START DATE 07/10/12    COMP. DATE 07/12/12    SURFACE WATER DEPTH N/A

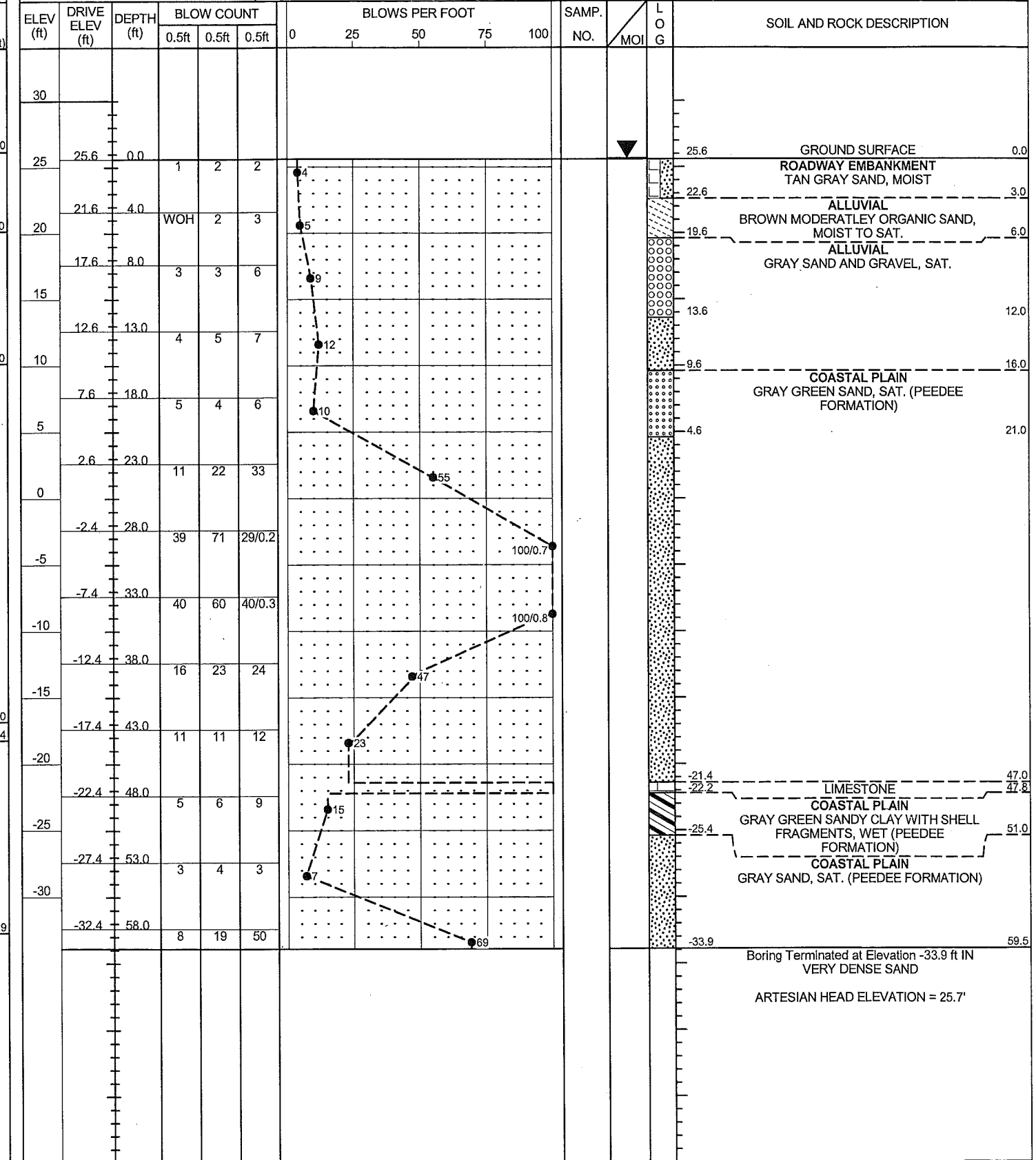


**NCDOT GEOTECHNICAL ENGINEERING UNIT**  
**BORELOG REPORT**

WBS 42258.1.1	TIP B-5117	COUNTY BLADEN	GEOLOGIST Wrike, C. M.	
SITE DESCRIPTION BRIDGE NO. 47 ON -L- (NC 210) OVER LAKE CREEK				GROUND WTR (ft)
BORING NO. B2-B	STATION 26+37	OFFSET 4 ft RT	ALIGNMENT -L-	0 HR. N/A
COLLAR ELEV. 21.2 ft	TOTAL DEPTH 58.9 ft	NORTHING 306,326	EASTING 2,211,331	24 HR. -4.0
DRILL RIG/HAMMER EFF/DATE GFO1042 CME-550 91% 05/23/2012		DRILL METHOD Mud Rotary	HAMMER TYPE Automatic	
DRILLER Smith, R. E.	START DATE 07/10/12	COMP. DATE 07/11/12	SURFACE WATER DEPTH N/A	



WBS 42258.1.1	TIP B-5117	COUNTY BLADEN	GEOLOGIST Wrike, C. M.	
SITE DESCRIPTION BRIDGE NO. 47 ON -L- (NC 210) OVER LAKE CREEK				GROUND WTR (ft)
BORING NO. EB2-A	STATION 26+71	OFFSET 5 ft LT	ALIGNMENT -L-	0 HR. N/A
COLLAR ELEV. 25.6 ft	TOTAL DEPTH 59.5 ft	NORTHING 306,349	EASTING 2,211,305	24 HR. -0.1
DRILL RIG/HAMMER EFF/DATE GFO1042 CME-550 91% 05/23/2012		DRILL METHOD Mud Rotary	HAMMER TYPE Automatic	
DRILLER Smith, R. E.	START DATE 07/11/12	COMP. DATE 07/11/12	SURFACE WATER DEPTH N/A	



NCDOT BORE DOUBLE BORINGS.GPJ NC\_DOT\_GDT 7/19/12