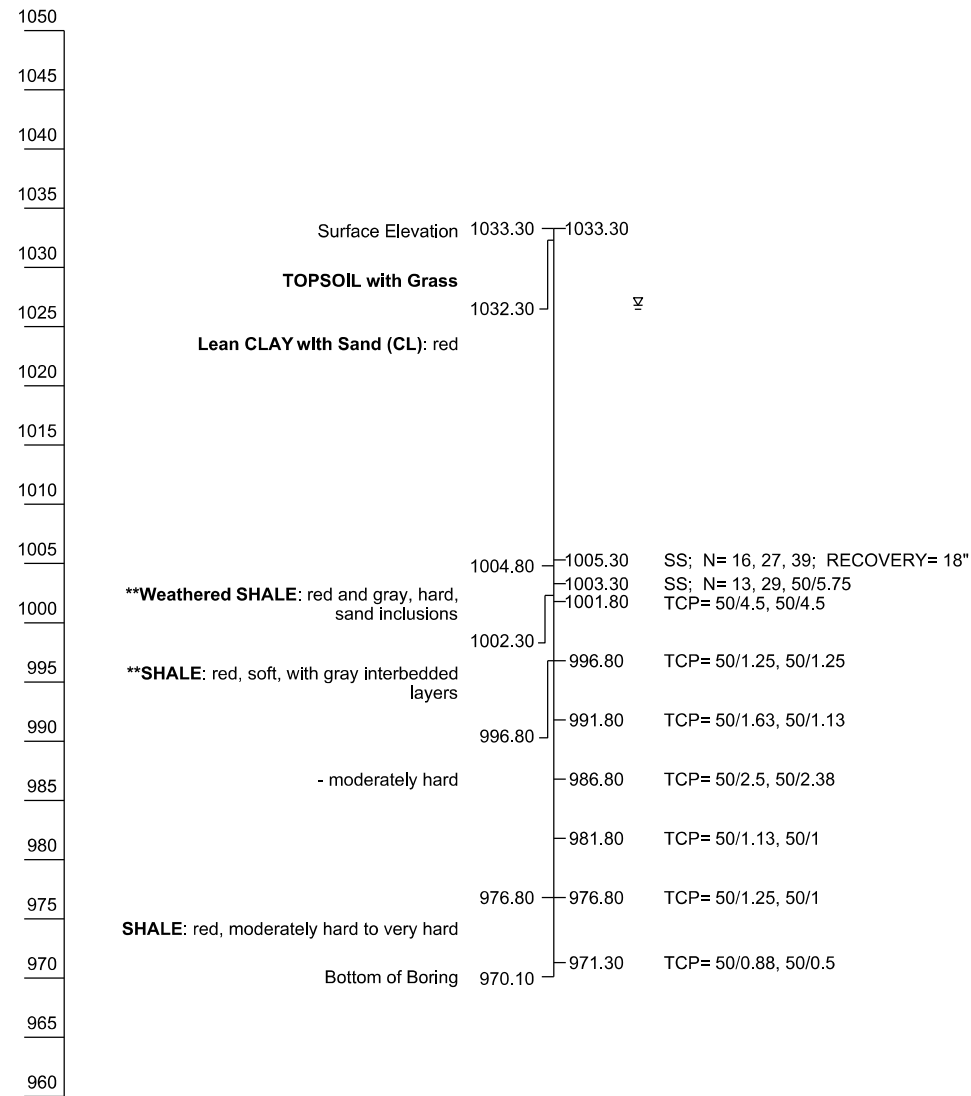


BORING NO. B-3
Sta. 118+90 Offset 43' Lt. of Survey
(Drilled May 19, 2015)



SITE GEOLOGY

ACCORDING TO THE "ENGINEERING CLASSIFICATION OF GEOLOGIC MATERIALS - DIVISION SEVEN" FROM THE OKLAHOMA HIGHWAY DEPARTMENT, 1968, THE BRIDGE LOCATION APPEARS TO BE LOCATED IN AN AREA OF ALLUVIUM (QAS), UNDERLAIN BY THE HENNESSEY UNIT (PHY), DESCRIBED AS FOLLOWS

ALLUVIUM (QAS): THESE ARE DEPOSITS OF SAND, SILT, CLAY, GRAVEL, AND/OR COMBINATIONS OF MATERIALS. ALLUVIUM IS FOUND ALONG THE FLOOD PLAINS (BOTTOM LAND) OF STREAMS AND IS NORMALLY PRESENT AT PLACES ALONG ALL STREAMS.

HENNESSEY UNIT (PHY): THIS UNIT CONSISTS DOMINANTLY OF REDDISH-BROWN PLATY TO BLOCKY CLAY SHALES AND MUDSTONE WITH MINOR AMOUNTS OF SANDSTONE. MUCH OF THE SHALE IS MASSIVE AND BREAKS WITH SHARP-EDGED CONCHOIDAL FRACTURES. THE RED CLAY SHALE OF THE HENNESSEY UNIT IS CHARACTERIZED BY NUMEROUS BANDS OR STREAKS OF WHITE OR LIGHT GREEN COLOR RANGING FROM A FEW INCHES TO FOUR FEET IN THICKNESS. SMALL SPHERES OF LIGHT GREEN COLOR UP TO 10 INCHES IN DIAMETER ALSO OCCUR. LOCALLY, IN STEPHENS COUNTY, THE SHALES ARE MORE GRAY THAN RED. SOFT BUFF MASSIVE SANDSTONES ARE PROMINENT NEAR THE BASE OF THE UNIT IN CARTER AND STEPHENS COUNTIES.

THE TOTAL THICKNESS OF THE UNIT THICKENS BOTH WESTWARD AND NORTHEASTWARD FROM A MINIMUM OF 130 FEET IN CENTRAL STEPHENS COUNTY. IT IS 200 FEET THICK IN THE WESTERN PART OF CADDO COUNTY AND ABOUT 400 FEET THICK IN NORTHEASTERN STEPHENS COUNTY.

IN DIVISION 7, THE HENNESSEY UNIT OUTCROPS IN AN IRREGULAR 3 TO 10 MILE WIDE BAND AROUND THE NOSE OF THE ANADARKO BASIN AND IS ESSENTIALLY PARALLEL TO THE EL RENO UNIT ACROSS STEPHENS COUNTY; THIS UNIT ALSO COVERS SEVERAL SQUARE MILES SURROUNDING THE WICHITA MOUNTAINS IN COMANCHE AND WESTERN CADDO COUNTIES. WITHIN TEN MILES OF THE WICHITA MOUNTAINS, THE STRATA OF THE HENNESSEY AND ADDINGTON UNITS ARE GRADATIONAL INTO THE CONGLOMERATES OF THE POST OAK UNIT. TOPOGRAPHICALLY, THE UNIT IS NEAR LEVEL TO GENTLY ROLLING PRAIRIES.

LEGEND

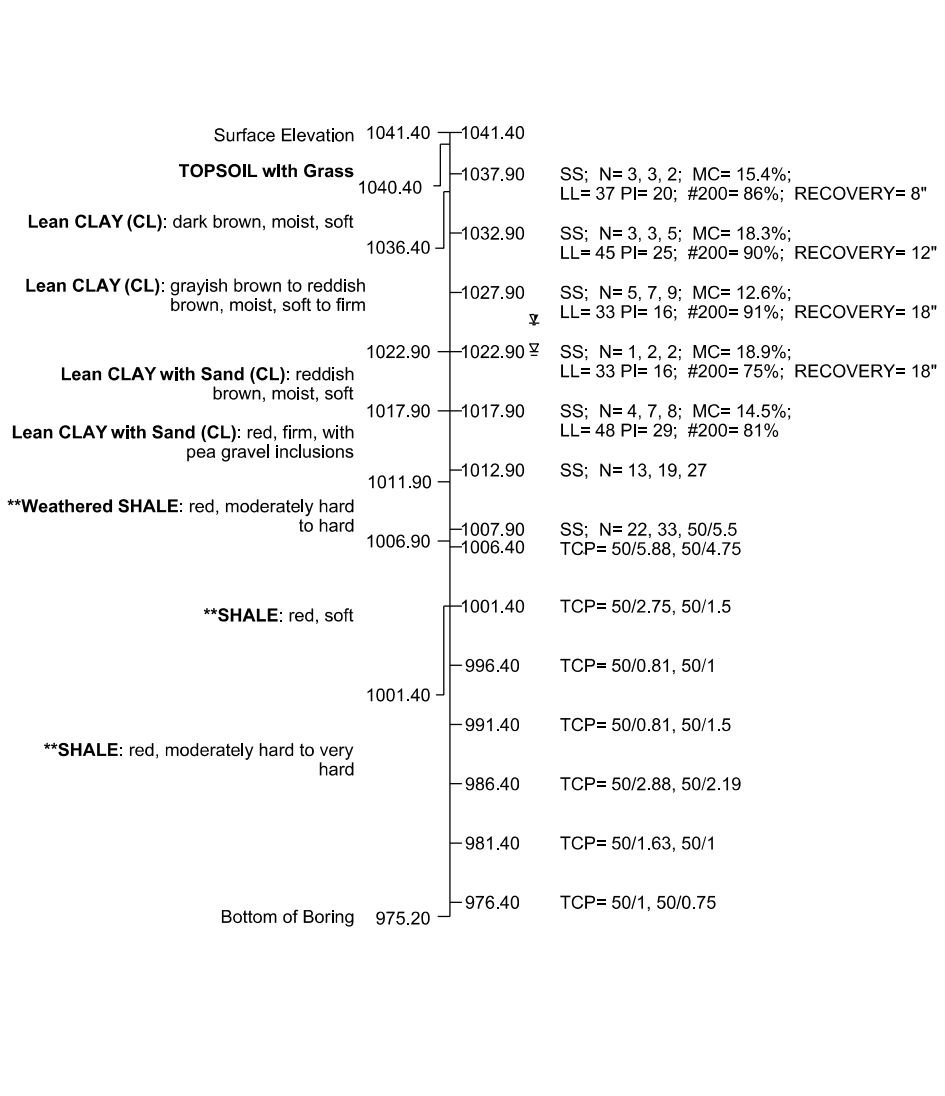
- SS = SPLIT SPOON SAMPLER
- N = NUMBER OF BLOWS PER 12 INCHES
- MC = MOISTURE CONTENT
- LL = LIQUID LIMIT (NV=NO VALUE)
- PI = PLASTICITY INDEX (NP=NO PLASTICITY)
- #200 = PERCENT PASSING #200 SIEVE
- UCS = UNCONFINED COMPRESSIVE STRENGTH
- TCP = TEXAS CONE PENETROMETER
- WCI = WET CAVE IN
- ☐ = WATER LEVEL WHILE DRILLING OR SAMPLING
- ☐ = WATER LEVEL AFTER DRILLING
- ☐ = WATER LEVEL 24 HOURS AFTER DRILLING

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT TIME OF THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHOUT THE YEAR.

NOTE: SS DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84 TCP DENOTES TEXAS CONE PENETRATION TEST.

TO OBTAIN THE COMPLETE GEOTECHNICAL REPORT CONTACT THE BRIDGE DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION AT (405) 521-2606

BORING NO. B-4
Sta. 119+24 Offset 20' Lt. of Survey
(Drilled May 17, 2015)



REV. NO.	DESCRIPTION	DATE

BRIDGE "B" U.S.-277 OVER SNAKE CREEK		COMANCHE COUNTY	Design	-	-
			Detail	-	-
			Check	-	-
			Spec.	-	-
			Log.	-	-
FOUNDATION REPORT					
(SHEET 2 OF 2)					
STATE OF OKLAHOMA	JOB PIECE NO. 27968(04)	DEPARTMENT OF TRANSPORTATION			SHEET NO. B010