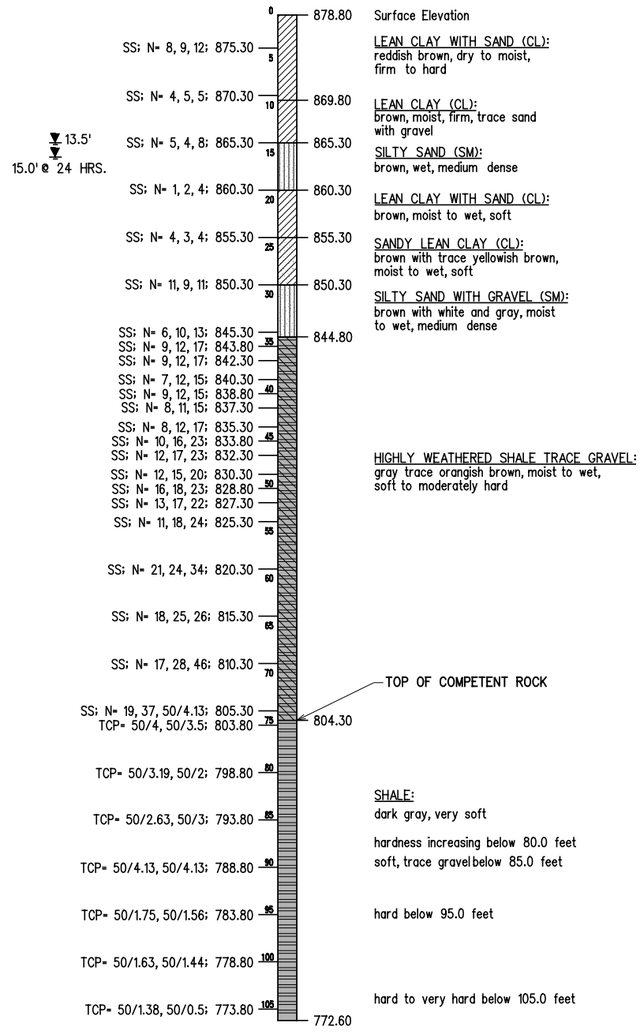
REVISIONS		
REV. NO.	DESCRIPTION	DATE

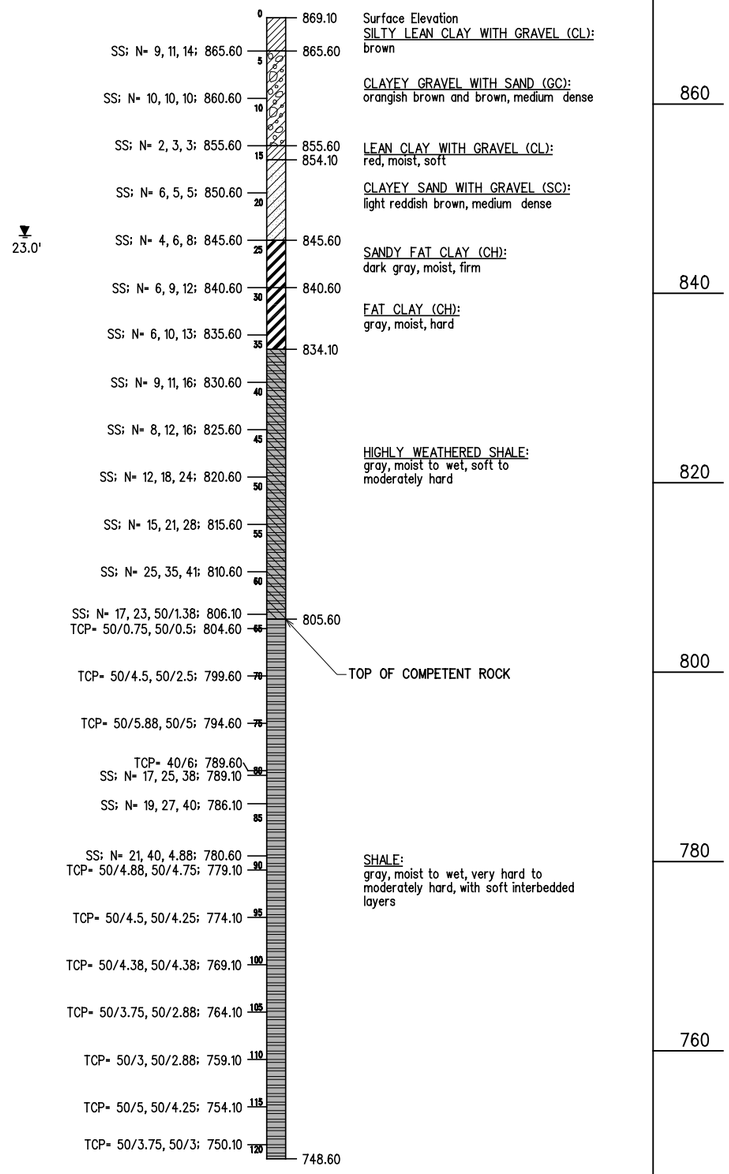
BORING NO. B-1

STA. 25+14.13, 78' RT. CL SURVEY
X = 2,221,089.4867 Y = 421,140.9507
DATE DRILLED: 8-17-2015



BORING NO. B-2

STA. 25+84.42, 51' RT. CL SURVEY
X = 2,221,136.5921 Y = 421,199.6912
DATE DRILLED: 8-31-2015



GEOLOGIC STATEMENT

ACCORDING TO THE "ENGINEERING CLASSIFICATION OF GEOLOGIC MATERIALS - DIVISION SEVEN" FROM THE OKLAHOMA HIGHWAY DEPARTMENT, 1968, THE BRIDGE LOCATION APPEARS TO BE LOCATED WITHIN ALLUVIUM (QAS), THE VANOSS UNIT (IPV), AND THE WOODFORD UNIT (MDW). THE FOLLOWING IS A SUMMARY OF THE INFORMATION PROVIDED IN THE REFERENCED DOCUMENT.

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.

VANOSS UNIT (IPV): THIS UNIT CONSISTS OF ALTERNATING MODERATELY SOFT TO MODERATELY HARD SANDSTONES, CONGLOMERATES, SHALES, AND A FEW THIN LIMESTONES. THE SHALES ARE MULTICOLORED AND RESEMBLE THOSE OF THE UNDERLYING ADA UNIT. IN THE OUTCROP AREA ADJACENT TO THE ARBUCKLE MOUNTAINS AND NORTHWARD TO ABOUT THE MIDDLE OF SEMINOLE COUNTY, THE SANDSTONES AND CONGLOMERATES ARE THICKER AND LOCALLY ARKOSIC. COMMONLY, THE BASE OF THE UNIT IS REFERRED TO AS THE LOWEST OF THE ARKOSIC BEDS, BUT THIS IS ONLY TRUE IN THE SOUTHERN PART OF THE UNIT'S OUTCROP AREA. AS FAR NORTH AS LITTLE RIVER, SEMINOLE COUNTY, THE BASE OF THE VANOSS UNIT IS THE FIRST, PERSISTENT, NON-LIMESTONE CONGLOMERATE BED ABOVE THE BASE OF THE ADA UNIT. NORTH OF LITTLE RIVER, A CONTINUOUS SANDSTONE HORIZON MARKS THE BASE.

A BASAL LIMESTONE CONGLOMERATE MEMBER IS PROMINENT IN MURRAY COUNTY ADJACENT TO THE ARBUCKLE MOUNTAINS. IT IS MAPPED AND DESCRIBED SEPARATELY FROM THE VANOSS UNIT AS THE VANOSS CONGLOMERATE SUBUNIT (IPVC).

NEAR THE ARBUCKLE MOUNTAINS THE TOTAL THICKNESS OF THE VANOSS UNIT IS 1,550 FEET WITH 650 FEET ASSIGNED TO THE CONGLOMERATE SUBUNIT. NORTHWARD, THE UNIT THINS FROM 650 FEET IN SOUTHERN PONTOTOC COUNTY TO 250 FEET NEAR KONOWA, SEMINOLE COUNTY. THE THICKNESS OF THE UNIT IS IRREGULAR IN SEMINOLE COUNTY AND VARIES FROM 140 TO 500 FEET, THICKENING SOUTHWARD.

THE VANOSS UNIT OUTCROPS IN A TWO TO TEN MILE WIDE BAND AROUND THE NORTHERN AND WESTERN LIMITS OF THE ARBUCKLE MOUNTAINS IN MURRAY AND PONTOTOC COUNTIES. FROM HERE, THE UNIT OUTCROPS IN A TWO TO SEVEN MILE WIDE, NORTH-SOUTH, STRIP ACROSS WESTERN PONTOTOC AND SEMINOLE COUNTIES AND THE EASTERN EDGE OF POTTAWATOMIE COUNTY. NORTH OF THE NORTH CANADIAN RIVER, IN OKFUSKEE AND NORTHEASTERN POTTAWATOMIE COUNTIES, THE STRATA OF THE VANOSS UNIT ARE INSEPARABLE FROM STRATA OF THE UNDERLYING ADA UNIT AND CONSEQUENTLY THE TWO ARE MAPPED TOGETHER AS THE VANOSS-ADA UNIT (IPVA).

TOPOGRAPHICALLY, THE UNIT IS GENTLY ROLLING TO ROLLING WITH THE MORE ROLLING TOPOGRAPHY PROMINENT WHERE THE SANDSTONES AND CONGLOMERATES ARE THICKER.

WOODFORD UNIT (MDW): THIS UNIT CONSISTS DOMINANTLY OF THICK, PLATY SILICEOUS SHALES AND SILTSTONE WITH COLORS VARYING FROM WHITE, YELLOW, ORANGE, AND BROWN. THIN BEDS OF CHERT ARE NUMEROUS. THE TOTAL THICKNESS OF THE UNIT VARIES FROM 285 TO 425 FEET.

THIS UNIT IS MAPPED IN THE ARBUCKLE MOUNTAINS IN MURRAY COUNTY OF DIVISION 3 WHERE OUTCROPS ARE BROAD; BUT IN JOHNSTON, COLA, AND PONTOTOC COUNTIES, THE NARROW OUTCROP PATTERN IS MAPPED UNDIFFERENTIATED FROM THE UNDERLYING HUNTON UNIT AS THE WOODFORD-HUNTON UNIT (MDSW).

TOPOGRAPHICALLY, THE UNIT FORMS HUMMOCKS OR MOUNDS WITH THIN GRAVELLY SOILS. OAK, BOIS D'ARC, AND SPARSE GRASS ARE THE MAJOR VEGETATION.

NOTE:

ALL GEOTECHNICAL INFORMATION CONTAINED ON THIS SHEET IS COVERED BY THE ENGINEERING SEAL AFFIXED TO AN ORIGINAL GEOTECHNICAL REPORT THAT HAS BEEN STAMPED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OKLAHOMA. TO OBTAIN A COPY OF THE COMPLETE REPORT, CONTACT THE ODOT OFFICE ENGINEER AT (405) 522-0972. THE CONTRACTOR SHOULD BE FULLY AWARE OF THE SITE CONDITIONS PRIOR TO BEGINNING WORK. ANY ADDITIONAL GEOTECHNICAL INFORMATION WHICH MAY BE DESIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.

NOTE:

SS - DENOTES STANDARD PENETRATION TEST, ASTM D-1586 (N = BLOWS PER FOOT)
TCP - DENOTES TEXAS CONE PENETRATION TEST

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	G/K ENGR.	

ROCK CRUSHER RD. OVER I-35 MURRAY COUNTY
BRIDGE "A"

FOUNDATION REPORT (1 OF 2)

JOB PIECE NO. 30363(04) SHEET NO. 45

X:\Odot\EC-1589B\Struc\Bridge_A\FOUND.dgn
3/2/2017