SP 98-2 PLATE 1 of 3 OKLAHOMA GEOLOGICAL SURVEY Charles J. Mankin, *Director* PLATE 1A. MAP OF KEEFTON, TAMAHA, SPANIARD, SECOR, WAINWRIGHT, WEIR-PITTSBURG, MINERAL, AND CROWEBURG COAL BEDS IN MUSKOGEE COUNTY, OKLAHOMA By LeRoy A. Hemish 1998 GRUBER STATE GAME MANAGEMENT AREA 1 ½ 0 1 2 3 4 MILES CONTOUR INTERVAL 10 FEET DATUM IS MEAN SEA LEVEL Siltstone Coal bed, approximately located; dashed where inferred; queried where doubtful.

Letter symbol indicates coal-bed name: kf, Keefton; 1.2-1.4 Croweburg coal Sandy shale sp, Spaniard Silty shale _____U Chelsea Sandstone Calcareous shale Fault; dashed where approximately located; dotted where concealed; U, Upthrown side; Clay shale D, Downthrown side Black shale _____ Limestone Anticline, showing crestline and direction of plunge; dashed where approximately located; dotted where Shaly limestone concealed Syncline, showing troughline; dashed where approximately located *Tr = Trace Note: For simplicity, the term Member is omitted here and elsewhere in the report. The formal status of members is indicated by capitalization of the lithologic term (e.g., Bluejacket Sandstone); lower case lithologic terms are used for informal units (e.g. Rowe coal) _____1.0 _____ 0.4-0.7 Weir-Pittsburg coal Isopach contour dashed where reconstructed; contour interval 0.2 ft Small abandoned open pit Muskogee County base map from the U. S. Geological Survey 7.5-minute-quadrangle map series Coal drill hole; number corresponds to core-hole log, Appendix 2; unnumbered holes from other studies 0.3-2.4 Wainwright coal Point of exposure; number corresponds to measured section of this report; unnumbered points from other studies; numbers in tenths of ft are coal thickness of isolated exposures Boggy Mined-out area Crekola Sandstone THICKNESS OF OVERBURDEN (Shown for Keefton coal only) Bluejacket Sandstone Tr-0.1 Drywood coal >40 ft to \leq 100ft Tr-0.2 unnamed coal Savanna INDEX MAP OF OKLAHOMA SHOWING AREA OF THIS REPORT Note: Thickness of overburden divisions omitted in some areas where coal is deemed to be noneconomic Sam Creek Limestone
Tr-0.2 Sam Creek coal Keota Sandstone Q.1-0.4 Keota coal Tr-0.3 Stigler Rider coal McAlester Q.2-1.0 Keefton coal
Warner Sandstone 0.2-0.4 Brushy Mtn. coal Geology map 1982-84, updated through 1994; core drilling, 1983-86 and 1988 Hartshorne PLATE 1B. GENERALIZED COLUMNAR SECTION OF COAL-BEARING STRATA, MUSKOGEE COUNTY, OKLAHOMA By LeRoy A. Hemish