



- 175. Clay shale: medium-dark-gray, pyrite nodules, ironstone concretions and laminations; contains a fossil hash bed
- 176. Mudstone: greenish-gray, ironstone concretions
- 177. Siltstone: greenish-gray, shaly, disturbed strata
- 178. Mixed rock: medium-greenish-gray, shale and calcareous siltstone, disturbed strata, fossiliferous at base
- 179. Limestone: medium-gray to light-olive-gray, clayey, fossiliferous; base sharp, erosional
- 180. Mixed rock: Coal and calcareous shale, pyrite nodules and calcareous fracture fillings
- 181. Clayey mudstone: medium-light-gray to light-olive-gray, carbonized plant fragments, rooted zone
- 182. Clay shale: medium-light-gray, some olive-gray mottling, disseminated iron carbonate, carbonaceous fragments, some pyritic laminations and ironstone concretions, disturbed strata in part
- 183. Clay shale: dark-gray, calcareous siltstone laminations (5%), pyritic laminations
- 184. Clay shale: grayish-black, phosphatic nodules
- 185. Coal: calcite-filled fractures
- 186. Siltstone and mixed rock (seat rock): medium-light-gray and greenish-gray, disturbed strata, root zone, pyritic, iron oxide nodules, calcite-filled fractures, carbonized plant fragments
- 187. Mixed rock: medium-dark-gray, clay shale and siltstone, irregular ripple stratification, cut and fill, disturbed beds, local calcareous siltstone laminations
- 188. Clay shale: medium-dark-gray to dark-gray, contains calcareous fossils locally, ironstone and pyritic nodules, slickensided fractures
- 189. Clay shale: dark-gray, siltstone laminations, pyritic laminations
- 190. Clay shale: dark-gray, calcareous, pyritic, ironstone laminations
- 191. Clay shale: dark-gray, calcareous, fossiliferous
- 192. Mudstone: medium-light-gray to light-olive-gray, carbonaceous plant fragments, pyrite nodules, root zone
- 193. Clay shale: medium-dark-gray to dark-gray with some greenish-gray mottling, pyrite laminations and nodules, calcareous, diffuse ironstone laminations, some fossils in lower part
- 194. Mixed rock: medium-dark-gray, calcareous shale and limestone, shale clasts at base; base sharp, erosional
- 195. Mudstone and mixed rock: medium-gray, medium-light-gray, light-olive-gray and moderate-yellowish-gray, mottled, root zones, burrowed, mostly clayey shale and siltstone
- 196. Clay shale: medium-gray to dark-gray with light-greenish-gray mottling, ironstone concretions, pyritic in part, some calcite-filled fractures
- 197. Shale and siltstone: medium-gray and light-olive-gray, nodules (in shale), conglomerate at base with coal spars; base sharp, erosional
- 198. Sandstone: very light-gray with dark-gray and greenish-gray shale laminations and clasts, very fine, strata dip ~3°; carbonaceous fragments, irregular strata, pyrite nodules (in shale), conglomerate at base with coal spars
- 199. Clay shale: medium-dark-gray, ~10% siltstone, burrowed, pyrite nodules, ironstone beds and nodules
- 200. Sandstone: very light-gray with dark-gray shale and siltstone laminations, very fine-grained, burrowed in part; conglomeratic, with ironstone, coal, and shale clasts
- 201. Conglomerate: sandstone matrix, ironstone, shale, and pyritized coal clasts
- 202. Clay shale: medium-dark-gray, soft
- 203. Clay shale: medium-dark-gray, <10% siltstone laminations and lenses, calcareous, pyritic
- 204. Limestone conglomerate: siliceous
- 205. Limestone: medium-gray with medium-dark-gray calcareous shale partings; limestone, fine-grained, dense, nonstratified; some fossils in upper part
- 206. Clay shale: medium-dark-gray

**COLUMNAR SECTION OF CORE FROM KELLY 1 MARATHON, NW¼NE¼SW¼NW¼, Sec. 23, T20N, R14E, ROGERS COUNTY, OKLAHOMA**  
with lithologic descriptions modified from D. R. Baker, Marathon Oil Company, 1965

Stratigraphic interpretations by LeRoy A. Hemish  
Oklahoma Geological Survey  
1997

Note: Plate 2 compiled from columnar section and description of Kelly Section Core 1615C, ALCO Drilling Co., Inc., Kelly 1, NW¼, NE¼, SW¼, NW¼, sec. 23, T. 20 N., R. 14 E., Rogers County, Oklahoma; Marathon Oil Company, Denver Research Center, Project 01 04 16, Geological Framework for Petroleum Evolution in the Cherokee Petroleum Province, unpublished, 1 sheet, 1965.