Oklahoma Geological Survey Oklahoma Coal Database STRATIGRAPHIC HEADER DATA DOCUMENTATION

- Point ID Data point identification number: the system is tied to location and is intended to provide a unique identifier between the stratigraphic sequence data and the point location on the map. The POINT ID number must match those used on the point location map submitted to NCRDS for digitizing. Point ID begins with capital letters (e.g., K = Kansas; O = Oklahoma), followed by 8 numbers (e.g., O15110101 is a record for T15N, R11E, Section 1, entry 1). "NC" suffix designates "No Coal".
- Unit # Numeric code assigned by NCRDS sequentially to identify rock units described -- top to bottom and starting with "1". Maximum number of units is 200. If more are required, contact NCRDS manager.
- Alphabetic code that qualifies or highlights the information **Unit Qualifier** provided for rock unit. One to four codes may be entered for each unit. DO NOT ENTER COMMAS OR SPACES BETWEEN LETTERS. **Qualifiers:** A = analysis run on sample: B = boundary (base or top of group, formation, etc.): enter detail in Comment 2 field (e.g., B BS PENNSYLVANIAN); **C** = coal thickness for resource calculation if different than thickness measurement: enter resource thickness IN INCHES in Comment 2 field (e.g., C 238 in.); **D** = interbedded: see Primary Lithology and Lithology Modifier (enter all interbedded lithologies in Comment 2 field, e.g., D SS SH); **E** = elevation recorded: enter elevation value in feet or decimal feet in Comment 2 field and indicate base or top of unit (e.g., E BS 7387, E TOP 5342 [TCE 4729 = top coal elevation is 4729 feet]); **F** = floor rock; **G** = gradational; **I** = incomplete thickness; **K** = coal burned: therefore may be no thickness measurement; L = change in log type: indicate in Comment 2 field (e.g., L top gamma); **M** = estimated thickness, ±; **N** = interlaminated: see Primary Lithology and Lithology Modifier (enter all interlaminated lithologies in Comment 2 field, e.g., N SS SLST SH); O = no thickness measurement available, and "O" entered in thickness column, but bed is/was present. Mine map shows only location and elevation of coal bed. Drillers log does not reveal thickness of coal. Strip bench. Coal bed outcrop. Resource arcs may be generated from this point; $\mathbf{R} = \text{roof rock}$; $\mathbf{S} = \text{sample has been collected}$; $\mathbf{U} = \text{uncertain}$: refers to name of bed, use in lieu of "?" following bed name; $\mathbf{W} =$ weathering: indicate in Comment 2 field, with weathering code, e.g., W 2; X = extrapolated thickness, not a measured thickness. Resource arcs may be generated from this point, but thickness should not be displayed for public use. May be mine map data with elevation but thickness not revealed. Bed may be x feet below observed marker bed, therefore, both elevation

and thickness are derived. Use for control of isopach or structure contour, not resource calculation; $\mathbf{Z} = \text{zone}$.

ThkFt Numeric information for the thickness of the unit. Data may be entered or retrieved in various combinations of units but are stored in decimal feet to two decimal places. One of three measurement values to be used for the entire log must be circled at the top of the column (decimal feet, feet and inches, or inches). Units must be described in continuous sequence from ground surface downward (i.e., from top to bottom)(e.g., 1.5 feet [entered]; 18.00 inches [stored]). "0" indicates no thickness measurement or incomplete (see unit qualifier column).

County County name in which the stratigraphic data point is located.

Group Geologic Group name (e.g., KREBS).

Formation Geologic Formation name (e.g., MCALESTER).

Member Geologic Member name (e.g., INOLA).

Bed Name of coal bed or name of lithologic horizon (e.g., CROWEBURG). Alpha name of the smallest unit recognized of which the described rock unit is a part. Enter coal bed, marker bed, or other stratigraphic unit name if known. In order to retrieve data for a specific bed for such manipulation as isopaching or resource calculation, the same name must be entered for each unit of that bed including partings. If the bed is uncorrelated but the geologist expects that it will be correlated later, a unique temporary name should be entered. NCRDS has reserved the names temp 1, temp 2, ... temp (n) for this purpose.

Primary Lithology Alphabetic information as to the dominant lithology of the described rock unit. The information may be either written out or abbreviated. Use NCRDS abbreviation list for lithology. Only one lithology is acceptable for computer entry and storage. If there are no data, enter NR (no record, not logged, no data, not available, core loss). For more than one lithology, use "D" or "N" described under Unit Qualifier. Where unit is stratigraphically missing, see Lithology Modifier (e.g., COAL; SLST = siltstone).

Lithology Modifier Alphabetic information to expand upon the dominant lithology of the described rock unit. The information may be written out or abbreviated. Use NCRDS abbreviation list for standard modifiers. No punctuation allowed. Where unit is stratigraphically missing, insert "0" in Thickness, the name of the missing unit in Name, the lithology of the missing unit in Primary Lithology, and enter NP (not present) in Lithology Modifier (i.e., 0 CACHE COAL)(e.g., CARB = carbonaceous; CALC = calcareous).

Color Alphabetic or alphanumeric indicator of the dominant color of the described rock unit. GSA international standard color recommended, colors or abbreviations accepted. If using GSA colors, use dash (-) instead of slash (/), e.g., 10YR7-4. If GSA abbreviations are not available,

- use NCRDS abbreviation list; the only acceptable punctuation is a dash (-) or ampersand (&) (e.g., 10YR8-2 = very pale yellow; LT GR = light gray).
- **Grain Size** Alphabetic indicator of the grain size of rock materials in the described rock unit based on the Wentworth scale (e.g., VF-CRS = very fine to coarse).
- **Grain Shape** Alphabetic abbreviations to describe the grain shape of the rock materials in the described rock unit. Use NCRDS abbreviation list (e.g., ANG = angular).
- **Mineralogy** Alphabetic or numeric information that describes the mineralogy of the rock unit. Use NCRDS abbreviation list (e.g., SiO₂; 50% quartz).
- **Bedding** Alphabetic information that describes the bedding characteristics of the rock unit described. Use NCRDS abbreviation list (e.g., XBD = crossbedded; LEN = lenticular).
- Contact One-character alphabetic code that describes the contact at the base of the rock unit. Codes: S = sharp; G = gradational; U = undulating; I = irregular; N = unconformable; L = slump; O = other (enter specifics in Comment 2 field).
- Fossils One-character alphabetic code that describes the dominant fossil group of the rock unit. Codes: P = plant; I = invertebrate; V = vertebrate; F = freshwater; B = brackish; M = marine; O = other (enter specifics in Comment 2 field).
- Fractures, Joints, Cleats

 One-character alphabetic code that indicate the presence of fractures, joints, or cleats in the described rock unit. Enter one or more of the three letters (F, J, and/or C) in the appropriate column to indicate presence of condition(s) and describe in Comment 2 field. Use the following notation: CF 73 86S for face strike N 73° E, dip 86° S; CB 335 90 for butt strike N 25° W, dip 90°; CB 345 42E for butt strike N 15° W, dip 42° E; CF = cleat face strike and dip; CB = cleat butt strike and dip.
- Comment 2 Alphanumeric information supplemental to any of the elements for the described rock unit. Use NCRDS abbreviation list. Limit punctuation to commas. This field must be used to store wild card definitions. (e.g., CB 345 42E = cleat butt strike N 15° W, dip 42° E; D SH SS SLST = interbedded shale, sands, and siltstone). E TCE indicates "Estimate Top Coal Elevation".