

**Oklahoma Geological Survey  
Oklahoma Coal Database  
ANALYTICAL HEADER TABLE 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 a capital letter (e.g., K = Kansas; O = Oklahoma), followed by 8 numbers (e.g., O15110101 is a record for T15N, R11E, Section 1, entry 1).

**ID Sub2** This modifier indicates either (1) a single sample was collected and analyzed (**0** = one sample for Point ID), or (2) multiple samples having the same Point ID indicating that more than one coal sample was collected from this map location, such as when samples are benched (e.g., **C** = composite data of two or more samples; **1** = upper bench; **2** = middle or lower bench; **3** = lower bench) or more than one coal was encountered in a core hole.

**Field #** Field number assigned by OGS geologist (e.g., 84C1H identifies a coal sample that was collected by L.A. Hemish in 1984).

**Measured Section Ref Number** First two letters refer to coal county report (e.g., CN = Craig Nowata [OGS Bulletin 140]; MM = Muskogee McIntosh [OGS SP 98-2 & 98-6]; OO = Okmulgee Okfuskee [OGS SP 94-3]; RM = Rogers Mayes [OGS Bulletin 144]; TW = Tulsa, Wagoner, Creek and Washington [OGS GM-33]).

**Date Collected** Date sample was collected by geologist (year or month/year).

**Date Received** Date sample was received by analyst (year or month/year).

**Lab Name** Laboratory or organization providing the analytical data (e.g., OGS = Oklahoma Geological Survey; USBM = U.S. Bureau of Mines).

**Lab Code** Code of laboratory that performed the analysis. Contact NCRDS manager if other codes are required. **Codes:** **0** = commercial laboratory (e.g., Standard Laboratories; Williams Brothers); **1** = U.S. Bureau of Mines; **2** = State University; **3** = State Agency; **4** = Coal company; **5** = U.S. Geological Survey; **6** = Geochemical Testing, Somerset, PA; **two-digit** combinations, such as: 15 = USBM and USGS.

**Lab #** Lab Analysis Identification Number. Sample number assigned by laboratory (e.g., 1491 is an OGS Chemistry Laboratory Number).

**Analysis Date** Date chemical analysis was performed (year, month/year, or month/day/year).

**Analysis Type** Numeric analysis type code. **Codes:** **1** = as received; **2** = air dried; **3** = moisture free; **4** = moisture and ash free; **5** = other.

**Sample Type** Numeric sample type code (contact NCRDS manager if other codes are required). **Codes:** **1** = channel; **2** = run of mine; **3** = drill core; **4** = other; **5** = grab. Note: "run of mine" refers to sample in its

natural, unprocessed state; pertaining to coal just as it is mined. Example: sample taken periodically from conveyor belt in mine. "grab" refers to sample in its natural unprocessed state; pertaining to coal extracted from a pile in a mine where origin in the mine is not known.

**Val/Rep** Numeric codes indicating representation of the analytical values. Contact NCRDS manager if other codes are required. **Codes:** **1** = single sample; **2** = average of more than one sample (composite); **3** = range of sample values; **4** = composite USBM individual USGS; **5** = composite USGS individual USBM; **9** = sink/float; **10** = partial bed; **11** = partial upper split (refers to stratigraphic split); **12** = partial lower split (refers to stratigraphic split); **13** = partial middle split (refers to stratigraphic split); **14** = bench; **20** = upper split; **21** = lower split; **22** = middle split.

**Prep Code** Alpha information indicating sample preparation status. "r" = raw; "w" = washed or cleaned. Note: Enter washed float fraction (value of specific gravity wash) or cleaning method in Comments field.

**OPL #** OGS Organic Petrography Laboratory Sample Number.

**System** Geologic System name (e.g., PENNSYLVANIAN).

**Series** Geologic Series name (e.g., DESMOINESIAN).

**Group** Geologic Group name (e.g., CABANISS).

**Formation** Geologic Formation name (e.g., SENORA).

**Bed** Name of coal bed or name of lithologic horizon (e.g., CROWEBURG)

#### **Trade/Local Name of Coal Bed**

**Rank Estimated** Alpha names or abbreviations of the four major ranks of coal and three alternatives where there either is no coal in the stratigraphic record, the rank is undetermined, or several ranks occur in the section. Not a calculated rank, but based on a presumption. Options: ANTH = anthracite; BIT = bituminous coal; SUBBIT = subbituminous coal; LIGNITE = lignite; NOCOAL = no coal recorded in the section; MULTIPLE = more than one rank occurs in the section; UNKNOWN = rank is undetermined. Note: If 'multiple' is used, enter rank from the above list in Comments field for each coal unit.

**Filepointer** Identifies USTRAT records used as a link to stratigraphic data.

**Ustrat Unit #(s)** Unit # assigned to bed in Stratigraphic Data Table. If more than one unit has been combined in the sample, enter units separated by commas. Note: USTRAT unit qualifier field must be updated to include those analyses that may have been performed at a later date. An "A" must be added to insure interface between the data bases.

**Hydrologic Unit Code** An eight-digit numeric code from the USGS 1974 Hydrologic Unit Map, State of Oklahoma (e.g., 11070209 includes parts of Craig and Mayes Counties)

**Geologist** Identification of the agency and individual submitting the data. A four-character alpha code designating the submitting agency precedes the submitter's name (e.g., OKGS-HEMISH L A)

**Ownership** Owner's last name or other information (e.g., ST L-SF RR = St. Louis-San Francisco Railroad)

**Source** Alphanumeric indicator of the primary source of the data. May be either the submitter or a third party (e.g., OKGS; PEABODY COAL CO.; AMAX-BLM; USGS OF 78-960; MATSON&BLUMER, 1976; USGS DRILLING; WVGS COUNTY REPORT, 1917). Note: drill hole numbers and reference page numbers should be entered in Comments field, not Source field.

**Operator** Name of mining company.

**Contracting Company** Name of contractor.

**Mine Name** Name of coal mine.

**Location Type** Alpha indication of the source of the data (e.g., channel sample; drill core; cutbank; surface mine; underground mine).

**Description/Log** Numeric indication of the source of the data. A code to describe the manner in which the stratigraphic information was acquired, either a description of an observed section or a type of log from which the stratigraphic data were extracted. The description and log are mutually exclusive. If a description and a log are available there would be separate records. User must identify either "description" or "log". All descriptions are preceded by "1", and all logs by "2" (e.g., outcrop = 102; coal test = 216). **Codes: I. Description: 101** = roadcut; **102** = outcrop; **103** = underground mine; **104** = surface mine; **105** = prospect pit; **106** = measured section (multiple point locations -- A-Z top to bottom; see Measured Section description for details); **116** = measured section (multiple point locations -- A-Z bottom to top; see Measured Section description for details); **107** = mine mouth; **108** = composite section; **109** = company mine map; **II. Log: 201** = core; **202** = drill hole; **203** = rotary; **204** = drillers log; **205** = electric; **206** = geophysical; **207** = gamma (natural); **208** = density (gamma-gamma); **209** = neutron (activation); **210** = resistivity; **211** = spontaneous potential; **212** = sonic; **213** = laterolog; **214** = seismic; **215** = caliper; **216** = coal test; **217** = oil and gas; **218** = water well; **219** = soil test; **220** = power line hole; **221** = pump hole; **222** = ventilation shaft; **223** = gamma & neutron; **224** = gamma & density; **225** = rotary & core; **230** = multiple: if more than one type of log in vertical sequence, list string of codes in Comments field. See also explanation for Unit Qualifier "L"; **231** = combination: for combination of types for the entire log, enter string of codes in Comments field.

**Sample from (Ft)** Numeric information indicating the depth interval from the surface for the top of the sample. Data are stored in decimal feet. "To" value can be determined when thickness is reported. (e.g., 975.0 = depth from surface is 975 feet).

**Thickness (Ft) Sample** Numeric information indicating the thickness of the sample. Data are stored in decimal feet. (e.g., 1.5 = 1 ft 6 in.).

**Sample Elevation** Numeric indication of the elevation of the sample. Data are stored in decimal feet. Elevation is assumed to be at the top of sample.

**Surface Elevation** Numeric value of the elevation at the ground surface of the data point in reference to the national geodetic vertical datum (in feet) to

one decimal place. Do not enter coal bed surface elevation or Kelly Bushing elevation. (e.g., 790). 0 = not determined.

**Elv Prec** Numeric code for source of the information as an indication of the accuracy of the surface elevation. Use only if surface elevation needs to be qualified. **Codes:** **0** = surface elevation was not provided; **1** = etm  $\pm$  10' (etm = estimated from topographic map); **2** = etm  $\pm$  20'; **3** = etm  $\pm$  50'; **4** = as reported by driller; **5** = adjusted from Kelly Bushing: enter Kelly Bushing elevation in Comments field, e.g., KB 1387, or KB-GL 15 ft; **6** = adjusted from Kelly Bushing  $\pm$  5'; **7** = adjusted from Kelly Bushing  $\pm$  10'; **8** = transit measurement; **9** = hand level measurement; **10** = barometer measurement.

**Nearest Town** City name nearest to the stratigraphic data point location.

**State** State name in which the stratigraphic data point is located

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

**Principal Meridian** Numeric code to indicate the Principal Meridian and Base Line for locating the data point. Enter code according to the Federal Information Processing Standards (FIPS) as shown on Figures 1 and 2.

**Province** Name of coal province that pertains to where the stratigraphic data point is located as shown on Figures 3 and 4.

**Region** Name of coal region that pertains to where the stratigraphic data point is located as shown on Figures 3 and 4.

**Quadrangle Name & Series** Alphanumeric indication of the name of the map quadrangle and the series. The series pertains to the scale of the quadrangle (e.g., HENRYETTA (7.5')).

**Township Number** Land survey subdivision by the U.S. Bureau of Land Management assigning a township number to a square area that is essentially six miles square. Each township is subdivided into 36 sections.

**Township Direction** Land survey subdivision by the U.S. Bureau of Land Management assigning a township direction north or south of a Base Line (a chosen standard parallel of latitude).

**Range Number** Land survey subdivision by the U.S. Bureau of Land Management assigning a township number to a square area that is essentially six miles square.

**Range Direction** Land survey subdivision by the U.S. Bureau of Land Management assigning a township direction east or west of the Indian Meridian in Oklahoma.

**Section** Numeric indicator of the section, the major subdivision of the Township and Range system. The number refers to an approximately one square mile unit numbered from 1 through 36.

**1st Quarter** Alpha information describing the subdivision of the Section. The four subdivisions (based on quartering of the next larger unit) permit the identification of the 2.5-acre quarter in which the data point is located. Information is recorded from the smallest to largest of the subdivisions from left to right. 1st quarter describes the location of the 2.5-acre quarter (if four quarters are listed).

**2nd Quarter** Describes the location of the 10-acre quarter (if four quarters are listed).

**3rd Quarter** Describes the location of the 40-acre quarter (if four quarters are listed).

**4th Quarter** Describes the location of the 160-acre quarter (if four quarters are listed).

**Latitude** Numeric indicator of latitude, in decimals (using NAD 83 as datum).

**Longitude** Numeric indicator of longitude, in decimals (using NAD 83 as datum).

**Strike** Numeric indicator of the direction of strike of the beds in the vicinity of the data point in degrees clockwise from north (E = 90°, S = 180°, W = 270°, N = 360°) (e.g., 350 = N 10° W)

**Dip** Numeric indicator of the direction of beds in the vicinity of the data point in degrees clockwise from north. Measurement should always be 90° from strike (e.g., 260 = S 80° W)

**Angle** Numeric indicator of the angle of dip of the beds in the vicinity of the data point in degrees (e.g., 3).

**Structural Attitude of Coal Bed**

**Weathering** Numeric code indicating the degree of weathering or other alteration of the rock units described. **Codes:** **0** = not determined; **1** = fresh; **2** = slightly weathered; **3** = weathered; **4** = highly weathered; **5** = bloom; **6** = clinkered; **7** = other: enter description in Comments field; **8** = multiple: see also explanation for Unit Qualifier "W" on USTRAT form.

**Trace Elements?**

**Other Tests?**

**Publications**

**Comments** Alphanumeric information supplemental to any of the data items for the analytical section. Include company drill hole number, mine name, page number, and other qualifiers if needed. Additional information on Source should be entered here. Limit punctuation to commas. (e.g., DH 50-1-128; P 147; 31 = 1 5 7 9).