

Oklahoma Geological Survey

Oklahoma Coal Database

STRATIGRAPHIC SECTION DATA DOCUMENTATION

USTRAT Form: The stratigraphic sequence (USTRAT) form allows data to be stored permanently in the USTRAT files of NCRDS, where the data can be retrieved by any field of entry and used for NCRDS programs, e.g., strip log plots, drill hole stratigraphic sections, statistics, contouring, resource calculations, and graphic analysis.

The stratigraphic section point location is identified with a unique data point I.D. number assigned by the geologist. This exact same number must be on the related USTRAT form in the "DATA POINT ID" field. Each point location will provide precise latitude and longitude coordinates. Latitude and longitude values given to at least the nearest second must be filled in on the USTRAT form.

NCRDS abbreviations must be used for all data entry. Not all words need to be abbreviated -- only those that will be used frequently. The personnel filling in USTRAT forms should check the NCRDS abbreviation list before entering data into the appropriate fields. If a term is not on the list, but will be used frequently and is longer than 4 characters (one computer unit of storage), contact NCRDS personnel. New abbreviations can then be distributed to all NCRDS users to maintain consistency of data for more rapid retrieval.

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). "NC" suffix designates "No Coal".

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).

Filepointer Identifies USALYT records used as a link to analytical data.

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).

Measured Section Number Two letter prefix with "H" suffix refers to OKGS coal county reports (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]. Student theses: first two letters refer to OKGS coal county report terminology, followed by year, student initials, and measured

section number (e.g., CN-51-LPC 10 is Craig-Nowata county, 1951, L.P. Chrisman Section 10). 1015 is USGS Bulletin 1015-F.

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 are entered below; reference page numbers should be entered in Comment field, not Source field.

Operator Name of mining company.

Contracting Company Name of contractor.

Mine Name Name of coal 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". In the space that follows, enter code for specifics (e.g., roadcut, gamma log, etc.). Description/Log will be stored as a three-digit code. All descriptions are preceded by "1", and all logs by "2" (e.g., outcrop = 102; coal test = 216). **Codes: I. Description: 01** = roadcut; **02** = outcrop; **03**= underground mine; **04** = surface mine; **05** = prospect pit; **06** = measured section (multiple point locations; A-Z top to bottom); **16** = measured section (multiple point locations; A-Z bottom to top); **07** = mine mouth; **08** = composite section; **09** = company mine map. **II. Log: 01** = core; **02** = drill hole; **03** = rotary; **04** = drillers log; **05** = electric; **06** = geophysical; **07** = gamma (natural); **08** = density (gamma-gamma); **09** = neutron (activation); **10** = resistivity; **11** = spontaneous potential; **12** = sonic; **13** = laterolog; **14** = seismic; **15** = caliper; **16** = coal test; **17** = oil and gas; **18** = water well; **19** = soil test; **20** = power line hole; **21** = pump hole; **22** = ventilation shaft; **23** = gamma & neutron; **24** = gamma & density; **25** = rotary & core; **30** = multiple (if more than one type of log in vertical sequence, list string of codes in Comment field. Also see explanation for Unit Qualifier "L"); **31** = combination (for combination of types for the entire log enter string of codes in Comment field).

Driller Name, company, or agency that contracted drilling (e.g., OKGS; DYCUS JAMES)

Drill Hole Number Alphanumeric identification of drill hole (e.g., PDH 2253).

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" = surface elevation 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 Comment 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.

Total Depth Logged Numeric indication of the total depth of the stratigraphic section described (whether core, drill hole, or outcrop) in decimal feet (e.g., 367.2).

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 north or south of a Base Line (a chosen standard parallel of latitude).

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).

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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

System Geologic System name (e.g., Pennsylvanian).

Series Geologic Series name (e.g., Desmoinesian).

Trade/Local Name of Coal Bed Local name used for coal (e.g., Henryetta).

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; **subbit** = subbituminous; **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 Comment field for each coal unit.

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 COMMENT field; **8** = multiple: see also explanation for Unit Qualifier "W".

Comment Alphanumeric information supplemental to any of the data items for the stratigraphic 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).

Confidential Enter a "1" in the space provided if the data are company confidential.