Oklahoma Geological Survey
Oklahoma Coal Database
ANALYTICAL DATA TABLE DOCUMENTATION

General Guidelines

1. Point ID numbers must be the same for all data from the same observation in all NCRDS database files to assure compatibility.
2. All analytical values must be reported on the same basis (such as “as received”).
3. Data may be reported to two digits to the right of the decimal.
4. Enter numerical data with decimal point where appropriate; do not use commas to indicate thousands.
5. real = decimal value; integer = non-decimal value. Any real values may be qualified using: B = no data available; L = less than value shown; G = greater than value shown; H = not determined due to interference; N = not detected.

Data Items

Point ID Data point identification number: the system is arbitrary for the geologist 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).

ID Sub1 “A” designates analysis only (i.e., not in Stratigraphic Data Table).

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.

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.

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

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

OPL # OGS Organic Petrography Laboratory Number.

Bed Coal bed name, in capital letters.

Rank Major Calculated major rank category if known. ANTH = anthracite; SEMI ANTH = semianthracite; BIT = bituminous; SUBBIT = subbituminous; LIGNITE = lignite). Note: this value is chemically calculated and must be determined by ASTM classification.

Rank Minor Calculated minor rank category if known. For bituminous: lv = low volatile bituminous; mv = medium volatile bituminous; hv = high volatile bituminous; hvA = high volatile A bituminous; hvB = high volatile B bituminous; hvC = high volatile C bituminous. Note: this value is chemically calculated and must be determined by ASTM classification.

BTU/LB Calorific value in British Thermal Units per Pound (ASTM D 2015-91 or D 1989-92)(as received basis)

M MMF BTU/LB Calorific value in British Thermal Units per Pound (ASTM D 2015-91 or D 1989-92)(moist, mineral-matter free basis used in minor rank category determination).

Rank Petrographic Calculated rank category from mean maximum vitrinite-reflectance value. hvC = 0.47-0.57%R_O; hvB = 0.57-0.71%R_O; hvA = 0.71-1.10%R_O; mv = 1.10-1.50%R_O; lv = 1.50-2.05%R_O.

Ro Mean Max Mean maximum vitrinite-reflectance value (ASTM D 388-92, D 2798-91)

Moisture Proximate analysis, as received basis (ASTM D 3173-87 or D 3302-91)

Ash Proximate analysis, as received basis (ASTM D 3174-89)

Volatile Matter Proximate analysis, as received basis (ASTM D 3175-89)

Fixed Carbon Proximate analysis, as received basis (ASTM D 3172-89)

Hydrogen Ultimate analysis (ASTM D 3176-89, D 3178-89)

Carbon Ultimate analysis (ASTM D 3176-89, D 3178-89)

Nitrogen Ultimate analysis (ASTM D 3176-89, D 3179-89)

Oxygen Ultimate analysis (ASTM D 3176-89)

Sulfur Total Sulfur from ultimate analysis (ASTM D 3176-89, D 3177-89 or D 4239-85)

Total Forms of Sulfur Forms of Sulfur Analysis (ASTM D 2492-90)

Pyritic Sulfur Forms of Sulfur Analysis (ASTM D 2492-90)

Sulfate Sulfur Forms of Sulfur Analysis (ASTM D 2492-90)

Organic Sulfur Forms of Sulfur Analysis (ASTM D 2492-90)

Chlorine (ASTM D 2361-91)

Fluorine (ASTM D 3761-91)

FSI Free-Swelling Index (ASTM D 720-91)

Hardgrove Grindability Index (ASTM D 409-92)

Initial Deformation Reducing (Ash) Ash Fusibility Temperatures (ASTM D 1857-87)

Initial Deformation Oxidizing (Ash) Ash Fusibility Temperatures (ASTM D 1857-87)

Softening Reducing (Ash) Ash Fusibility Temperatures (ASTM D 1857-87)

Softening Oxidizing (Ash)	Ash Fusibility Temperatures (ASTM D 1857-87)
Fluidizing Reducing (Ash)	Ash Fusibility Temperatures (ASTM D 1857-87)
Fluidizing Oxidizing (Ash)	Ash Fusibility Temperatures (ASTM D 1857-87)
Vitrinite White Light	
Pseudovitrinite White Light	
Semifusinite White Light	
Semimacrinite White Light	
Fusinite White Light	
Macrinite White Light	
Micrinite White Light	
Inertodetrinite White Light	
Exinite White Light	
Resinite White Light	
Vitrinite Total	
Inertinite Total	
Liptinite Total	
VRo High	
VRo Low	
VRo Range	
VRo Mean Max	
VRo Standard-Deviation	
PVRo High	
PVRo Low	
PVRo Range	
PVRo Mean Max	
PVRo Standard-Deviation	
Ro High	
Ro Low	
Ro Range	
Ro Standard-Deviation	