

CoalLog Modifications v3.0 (April 2020)

CoalLog Version 3.0 includes the following changes to the previous version:

Logging Sheets Specifications.xlsx

For Sample Dispatch data:

- **Sample_Purpose** now has a dictionary lookup from the **Sample_Purpose** category in the dictionary (correction)
- **Laboratory** is now 8 characters wide instead of 4 and now has a dictionary lookup from the **Laboratory** category in the dictionary (modification)

For Point Load data:

- **Sample_Length** now has type Numeric not Character as shown previously and a maximum of 3 places after the decimal point (correction)

Dictionary

The Standard Items dictionary .pdf and .doc files for CoalLog Version 2.0 and 2.1 (CoalLog v2.0 Dictionaries and CoalLog v2.1 Standard Items Dictionaries) contained an erroneous code in the **Min_Fos_Abund** in the Lithology Dictionary where the code for dominant (> 60%) was listed as O when it should be N. This error did not occur in any other files and has been corrected in the .pdf and .docx files CoalLog v3.0 Standard Items Dictionaries.

Header Data

The Reference Items dictionary now includes codes for the most commonly used **Survey_Company**, **Geolog_Organiz** and **Geophys_Company**. As with other items in the Reference Items dictionary, the included list of items will not cover all possibilities. Where a user requires a code for an item that is not in the Reference Items dictionary, they should send an email to coalLog@ausimm.com requesting a new code.

The new list for **Survey_Company** is:

Code	Description
COM	Company Surveyor
DIG	Digitised from plan
PIT	Mine Surveyor
STS	Stewart Surveys

The new list for **Geolog_Organiz** is:

Code	Description
AMB	AMAX/BHP
ACA	Anglo Coal Australia
AGC	Australian Groundwater Consultants
AHV	Armco Hunter Valley
AMC	Anglo American Metallurgical Coal
AQU	Aquila Coal
ARC	Arco Australia
ARU	Arura
ASM	AS Madenicik
AST	Aston Coal
BAC	Blair Athol Coal Project
BCC	Bowen Central Coal
BEC	Bellambi Coal Company
BHP	BHP / Utah
BJV	Boggabri Joint Venture
BKS	BKS Surveys
BMA	BHP Billiton Mitsubishi Alliance
BOC	Bond Corporation
BOG	Boggabri Coal
BOM	Boyd Mining Associates
BPC	BP Coal Exploration
CCM	Capricorn Coal Management
CEC	Carpentaria Exploration Company
CLW	Coalworks Australia
CMA	Comisky & Associates
CQM	Curragh Queensland Mining
CRA	CRA Exploration
CRQ	Coal Resources of Queensland
CSR	CSR Exploration
CZC	Commonwealth Zinc Corp.
ECP	Ellensfield Coal Project
EEX	Enterprise Exploration
GCC	Glennies Creek Coal Management
GEC	GeoConsult
GED	Geodata
GEM	Green Exploration and Mining
GES	Geos Mining
GFE	Griffin Exploration
GOA	Golder Associates
GRD	Groundtest
GSL	Geological Solutions
GSM	GeoSeam
GSN	Geological Survey of New South Wales

Code	Description
GSQ	Geological Survey of Queensland
GTR	GeoTerra
GWC	Gollin Wallsend Coal
HCK	Hail Creek
IBC	Idemitsu Boggabri Coal
ICE	Investigator Coal Exploration
IDC	Indo Carbon Energy
IEM	Integrated Exploration & Mining Services
IES	Integrated Environmental Services Australia
JCB	Joint Coal Board
KCC	Kembla Coal and Coke
MBG	McElroy Bryan Geological Services
MCC	Maules Creek Coal
MEC	AUSMEC
MGC	MGCRA-Coal seam gas
MIM	MIM Coal Division
MOU	Moultrie & Associates
MTZ	Momtaz Eissa
NCC	Newlands Coal Company
NCO	Narrabri Coal Operations
NEB	Nebo Central Coal
NGF	Norton Gold Fields
NHC	New Hope Coal
NOV	Novacoal
NOW	NorWest
OZE	Ozeological
PCO	Pacific Coal
PDU	Powell Duffryn
PKW	Peko Wallsend
PRA	Price Anderson
QEG	Q.E.G.B.
QGE	Qld Geological & Engineering Services
QGS	Queensland Geological Services
QME	QMEC
RES	Resolve Geological
RFO	Richard Forrest
RHB	Roger Buzacott
ROR	Robertson Research
RSA	Ray Slater & Associates
RTA	Rio Tinto Coal Australia
SAS	Southern Aerial Surveys
SBC	South Blackwater Coal
SCT	SCT Operations
SEI	Seisdrill
SGO	Sunshine Gold

Code	Description
SHC	Shell Coal
SVR	Salva Resources
TAC	Tarong Coal
THB	Thiess Bros.
TRS	Triassic Solution
UTA	Utah Development
VGS	Valley Geological Services
VJV	Vickery Joint Venture
WHC	Whitehaven Coal Mining
WHI	White Industries

The new list for **Geophys_Company** is:

Code	Description
ACE	Australian Consolidated Exploration
ACS	ACS Mining Service
ADG	Australian Downhole Geophysics
AGC	Australian Groundwater Consultants
ALS	Australian Logging Services
AUG	Austral United Geophysical
AUS	AusLog Logging Services
BAC	BAC Portalogger
BHW	Borehole Wireline
BPB	BPB Slimline Services
BUD	Budd Contract Exploration
CCC	Collinsville Coal Co.
CEN	Century Geophysical
CFG	Coalfields Geologging
CRQ	Coal Resources of Queensland
CSR	CSR South Blackwater Mines
DUS	Down Under Surveys
GEX	Geoex
GLG	Geolog
GLT	Geophysical Logging Technology
GOA	Golder Associates
GSA	Geoscience Associates Australia
GSA	Groundsearch Australia
GSN	Geological Survey of New South Wales
GSQ	Geological Survey of Queensland
HAL	Halliburton
IES	Intergrated Environmental Services Australia
ILS	Independent Logging Services

Code	Description
JKM	Julius Kruttschmitt Mineral Research Centre
LDU	Logging Down Under
MIM	MIM Holdings Limited
MUR	Murdoch geophysics
NHA	New Hope AusLog Unit
PBG	PB Geophysics
PRE	Precision
RGA	Robertson Geologging Australia
RWS	Reeves Wireline Services
SBC	South Blackwater Coal
SDP	SDP Geophysics
SEI	Seisdrill
SIE	Geosource SIE Potalogger
SUR	Surtron
SWG	Southwest Geophysical
TCA	Tarong Coal Auslog Unit
THB	Thiess Bros
UTA	Utah Development Co
WEA	Weatherford Logging Services
WSV	Wellserve
WWS	Westlog Wireline Services
WYW	Wyoming Wireline

Sample Dispatch Data

- **Samp_From_Depth, Samp_To_Depth**

Fields have been added for storing the From and To depths of each sample.
(addition)

- **Laboratory**

Laboratory field renamed to **Lab_Name** (modification)

RMU & Defect Data

- **Defect Depth**

defect depth must be measured at the middle of the defect. Previous version also allowed it to be measured at the base of the defect provided that the user clearly stated which convention has been used and was consistent across their entire data set. (modification)

- **Bed Angle, Defect Dip Angle, Minimum and Maximum Defect Dip Angle for Broken Zone**

may now be measured relative to the core axis instead of relative to the perpendicular to the core axis. Both conventions are now acceptable, however, it must be clearly stated which convention has been used and there must be consistency across the user's entire data set. (modification)

Las File Metadata

Las file metadata, that is items like bit size, casing depth, fluid level, logging engineer etc can be included in the Parameters (~P) and/or Other (~O) sections of the Las file header, however, there is no convention as to what data should be included and how this information should be formatted in the file. LogCheck v3.0 provides a list of the data that should be included and how they should be formatted. More details regarding these can be found in *CoalLog v3.0 Manual.pdf*.

Coal Quality Data

Unlike previous versions of CoalLog, Version 3.0 includes a set of data formats for the passing of coal quality results between analytical laboratories and their clients. This includes formats for:

- **Coal Quality Results** for reporting all analyses except Reflectance. It can be used for reporting on ply or composite data and for particular float and sizing fractions.
- **Reflectance Results.**
- **Composite Constituents**, for listing the sample number of all the individual ply or composite samples that have been included in each composite.
- **Clean Coal Composite Ingredients**, for listing the parameters such as size fractions and density cut-points that have been included in a Clean Coal Composite (CCC).
- **Test Details**, for listing each test as identified by its Report Number and the name of the variable being tested:

More details regarding these can be found in *CoalLog v3.0 Manual.pdf*, *CoalLog v3.0 Data Table Specifications.xlsx* and the various CoalLog v3.0 Dictionary files. All these can be downloaded from the CoalLog website.

LithoType Plotting

CoalLog v3.0 includes a set of recommended colours for plotting **Litho_Type**. These colours are quite broadbrush with each colour covering a group of **Litho_Types**. The RGB and AutoCAD colour number is provided for each of the suggested colours. More details regarding the **Litho_Type** colours can be found in *CoalLog v3.0 Manual.pdf*.

A set of graphic tiles in .dxf and .jpg format for each of the **Litho_Types** and **Litho_Type + Litho_Quals** can be downloaded from the CoalLog website. Previously each tile was 20mm wide and 15mm high. In CoalLog V3.0, the tiles have been regenerated but the size of each tile is a multiple of its repeat width and height.

CoalLog Modifications v2.1 (October 2018)

CoalLog Version 2.1 includes the following changes to the previous version:

Logging Sheets Specifications.xlsx

A Units column has been added to all the specification worksheets showing the units for all numeric variables.

The maximum length for a Field Name has been extended from 15 characters to 20 characters.

(modification)

The field **Hole_Name** that occurs in every data type has been renamed **Borehole_Name**.

(modification)

The field **From_Depth** has been added to the specifications for every data type that has a **To_Depth** field.

(addition)

For Header data the following Field Names have been renamed:

- **Hole_Type** to **Borehole_Type** (modification)
- **Hole_Purpose_1**, **Hole_Purpose_2**, **Hole_Purpose_3** and **Hole_Purpose_4** to **Borehole_Purpose_1**, **Borehole_Purpose_2**, **Borehole_Purpose_3** and **Borehole_Purpose_4** (modification)
- **Hole_Redrilled** to **Borehole_Redrilled** (modification)
- **Hole_Status_1** and **Hole_Status_2** to **Borehole_Status_1** and **Borehole_Status_2** (modification)

Dictionary

There are now two dictionaries. The first called the Standard Items Dictionary is essentially the standard CoalLog dictionary as specified in earlier versions of CoalLog. The second called the Reference Items Dictionary includes an extensive list of items of which only a small number will be relevant to any particular site. It includes items for Basin in Header data, Drilling Company and Rig Type in Drilling data and Seams, Strats and Horizons in Lithological data. For data to be CoalLog compliant, for categories in the Standard Dictionary only the codes shown in the dictionary can be used. For categories in the Reference Dictionary, the codes for Basin are mandatory but the code lists for other categories are recommended but not mandatory. The user may create other codes for these categories, however, a dictionary of the user's codes for these categories should accompany any data that uses codes not in the Reference Items Dictionary.

The maximum length for the dictionary category name has been increased from 15 characters to 16 characters.

(modification)

The following dictionary categories have been renamed:

- **Hole_Type** to **Borehole_Type** (modification)
- **Hole_Purpose** to **Borehole_Purpose** (modification)
- **Hole_Status** to **Borehole_Status** (modification)
- **Sample_Type** to **Sample_Purpose** (modification)

Header Data

- **Sedimentary Basin** QKA Karin Basin in Queensland (addition)
- **Borehole Purpose** CC Coal Quality – Spontaneous Combustion Testing (addition)

Casing Data

- **Casing Material** NR not recorded (addition)
UC uncased (addition)
- **Casing Type** has a Recommended and Maximum Field Length of 1, these were incorrectly listed in the previous specification file as length 3 (clarification)
- **Casing Name** has a Maximum Field Length of 4, this was incorrectly listed in the previous specification file as length 0 (clarification)
- **Casing Grout** BE bentonite (addition)
GY gypsum (addition)
GV washed gravel (addition)
SO soil (addition)

Drilling Data

Even though it is recommended that drilling data be stored and transferred electronically in a single table, for recording on paper sheets it may be necessary to break the data up into a number of sheets due to the length of each row of data. It may also be necessary to record the drillers name by their initials on the paper sheets but according to the standard their actual name should be recorded in the database and in data transfer files.

Version 2.0 included three recommended Field Logging sheets for Drilling data: Drill Details, Drill Depths and Drill Runs, but no formal database specifications and dictionary entries only for Bit Type. Version 2.1 has reduced the Field Logging Sheets down to two by combining the Drill Details and Drill Depths data on the one sheet called Drill Details. The following changes have thus been made:

Depth Details Logging Sheet

- **Kelly Length** added (addition)
- **Length of Rods** added (addition)
- **Barrel Length** added (addition)
- **Length of Bits+Subs etc** added (addition)
- **Other Lengths** added (addition)
- **Table Height** added (addition)
- **Stickup Length** added (addition)
- **To_Depth** is used for Driller To Depth rather than Geologists To Depth (modification)
- **Drilling Company** dictionary codes added (addition)

Code	Desc
ACE	Australian Consolidated Exploration (ACE) Drilling
ACM	A.C.M. Exploration
ADD	Associated Diamond Drillers
AFR	Afrac
AQD	Aquadrill
ARA	Araillam
ATL	Atlas Drilling
AUS	Austral Drilling
BAG	Bagshot Drilling
BED	Bedrock Drilling
BEL	Belldale
BLC	Blechnyd
BLV	Belvadere Drilling
BLY	Boart Longyear
BOY	Boyd Mining Associates
BRI	Bridsen
BUD	Budd Contract Exploration
BUN	Bunbury Boring
BUR	Burnett Drilling
CAP	Capricorn Drilling
CCD	Coal City Drilling
CLB	Colby Drilling
CLL	Collie Drilling
CMD	Camdrill
COL	Cole Drilling
CQE	CQ Exploration
CRQ	Coal Resources of Queensland
CRS	Craster
CSG	CSG Drilling
CWD	Capricorn-Weston Drilling Group
DAG	Drilling and Grouting Services
DAV	Davies Drilling
DED	Deadline
DEE	Deepcore Drilling
DEP	Depco Drilling
DEV	Deveth
DFC	Down Force Drilling
DLB	Daly Brothers
DLT	Delta
DLX	Drillex Drilling Company
DON	Donovan
DOW	Downs Drilling
DYR	Dyer
EVA	Evans Drilling
EWD	East-West Drilling

Code	Desc
FGD	Future Generation Drilling
FOR	Foremost Drilling
GDE	General Drilling & Exploration
GEO	GEO Drilling
GIB	Gibson Drilling
GLD	Gladstone
GLO	Global Drilling
GRL	Grill
GSD	Great Southern Drilling
GSQ	Geological Survey of Queensland
HAN	Hancock Drilling
HDC	Hellyer Drilling Company
HDS	HDS-Moolarben
HEN	Henderson Drilling
HGD	Hillgrove Drilling Contractors
HLD	Harry Latham Drilling
HOD	Hodge Drilling Company
HOU	Houben Drilling
HUG	Hughes Drilling
HUN	Hunter Drilling Services
IES	Intergrated Environmental Services Australia
IMD	Ian Mackie Drilling
IMP	Impax Group
IRA	Ingersoll Rand
JDD	JD Drilling Services
JMA	John Moultrie and Associates
JMD	John McCorry Drilling
KDS	Kowaltzke Drilling Services
KEN	Kent
L2D	L2 Drilling Company
LAN	Landridge
LCK	Little Creek
LCT	Lucas Coal Technology
LEN	Lennards
LUC	Lucas Group
LYR	Longyear
M&J	Malcolm & Johnson Drilling
MAC	MAC Drilling
MAJ	Major Drilling
MAN	Mannion Drilling
MAQ	Macquarie Drilling
MCC	McCarthy
MCD	McDermott Drilling
MCH	McHugh Drilling
MDM	MD-Moolarben

Code	Desc
MIT	Mitchell Drilling Contractors
MMX	Mimex
MON	Montague
MSL	Mosslake Drilling Services
MVS	Merv Stark
NGD	National Geophysical Drilling
NHD	New Hope
NIT	Nitro Drilling
ORB	Orbit Drilling
PHX	Phoenix Drilling Services
PIO	Pioneer
PON	Pontil
POZ	Pozitif Drilling
PRA	Price Anderson
QDM	Queensland Mines Department
QGS	Queensland Geological Services
RES	Resource Drilling
ROC	Rockdril Contractors
SAR	Sarina Drilling
SCI	Silver City Drilling
SCO	Scott Drilling
SEI	Seisdrill
SID	W.L.Sides and Son
SKR	S & K Reynolds Drilling
STA	Stanley Drilling Company
STR	Strats Drilling
SWI	Swick
TDM	Thiess Dampier Mitsui Coal
THO	Thompson Drilling
TOT	Total Drilling
TWM	Twister Mining Services
UDD	Underground Diamond Drilling
VER	Verney
WAT	Watson Drilling
WEB	Webber
WEL	Wellmasters
WES	Weston Drilling
WIZ	Wizard
WLL	Wallis Drilling
WLS	Walsh
WRC	Waters and Rivers Commission
WTP	Westphal

- **Rig Number** size changed from 5 to 3 characters (modification)
- **Rig Type** size changed from 3 to 4 characters (modification)

dictionary codes added

(addition)

Code	Desc
AD20	AD200
AD35	AD350
AT50	Antero DT500
B100	Bourne 1000
B125	Bourne 1250
B140	Bourne 1400
B150	Bourne 1500
BTHD	Bourne 700 Top Head Drive
CH10	Christensen 1000
ED60	Edson 6000
ED80	Edson 8000
ED26	Edson MRA260
FOX	Fox
GD10	GD 1000R
GD14	GD 1400
INGS	Ingersoll
IRT4	Ingersoll Rand T4
J150	Jacro 150
J175	Jacro 175
J200	Jacro 200
KL60	KL-600
LY28	Longyear 28
LY38	Longyear 38
LY44	Longyear 44
LY90	Longyear 90
LY60	Longyear HD 600
LY70	Longyear LF70
MX20	Maxi 200 Rig
MXDR	Maxi Drill
MAYH	Mayhew
MC80	McCulloch DR800
MC95	McCulloch DR950
MIDW	Midway
MINM	Minuteman
NK10	NKW 100
PION	Pioneer
PORT	Portadrill
POWR	Power rig
RB37	RB37 Rig
RX50	Rex 500
RF10	RFW 1000
SV88	Sandvik DE880
SCHR	Schramm

Code	Desc
S100	Schramm 1000
S685	Schramm 685
S660	Schramm T660
SOIL	Soilmec
SPST	Speed Star
U100	UDR 1000
U120	UDR 1200
U150	UDR 1500
U650	UDR 650
VD20	Versadrill 2000
WM10	Warman 1000

- **Bit Type** increased from 1 character to 2 characters with the new codes:

Non-Coring Bits

Auger changed from A to AG	(modification)
Blade changed from B to BL (Blade / Drag Blade)	(modification)
Dragblade changed from D to BL (Blade / Drag Blade)	(modification)
Hammer changed from H to HA	(modification)
Hole Opener O removed	(modification)
Mill Claw changed from M to MC	(modification)
Poly Crystalline Diamond Open changed from P to PO	(modification)
Reamer R removed	(modification)
Rock Roller changed from K to TR (Rock Roller / Tricone)	(modification)
Rotex X removed	(modification)
Surface / Wing SF	(addition)
Tricone changed from T to TR (Rock Roller / Tricone)	(modification)
Unknown changed from U to UN	(modification)

Cored Bits

Diamond Core (Wireline) changed from W to DW	(modification)
Poly Crystalline Diamond Core (Conventional) changed from P to PC	(modification)
Poly Crystalline Diamond Core (Wireline) changed from P to PW	(modification)
Tungsten Carbide Core (Conventional) changed from C to TC	(modification)

- **Fluid dictionary** codes added (addition)

Code	Desc
A	Air
M	Bentonitic Mud
P	Polymer
S	Soluble Oil
W	Water
I	Water Injection

- **Drill Size Name** changed from 5 to 4 characters (modification)
dictionary codes added (addition)

Wireline Barrel

Code	Name	Nominal Core Diameter (mm)	Nominal Hole Diameter (mm)
NQ	NQ	48	76
HQ	HQ	64	96
PQ	PQ	85	123
NQ3	NQ3 triple tube	45	76
HQ3	HQ3 triple tube	61	96
PQ3	PQ3 triple tube	83	123

Conventional Barrel

Code	Name	Nominal Core Diameter (mm)	Nominal Hole Diameter (mm)
NMLC	NMLC triple tube	52	76
HMLC	HMLC triple tube	64	99
PMLC	PMLC triple tube		
3C	3" conventional	76	111
4C	4" conventional	102	140
5C	5" conventional	146	197
6C	6" conventional		
8C	8" conventional	203	260
10C	10" conventional		
12C	12" conventional	305	

- **Cored** removed (modification)
- **Run No.** size decreased from 4 characters to 3 characters (modification)
- **Geologist's From Depth** and **Geologist's To Depth** added (addition)
- **Time at Start of Run** and **Time at Completion of Run** in format hhmm added (addition)
- **Run Photographed** flag added (addition)
- Calculated fields **Driller's Run Length**, **Run Loss/Gain** and **Cumulative Loss/Gain** added (addition)

Lithology Data

- **Horizon** THBA Top of Basement (addition)
- **Sample Type** field renamed to **Sample Purpose** (modification)

- **Lithology Percentage** field length has been increased from 2 to 3 characters (modification)
field needs to be filled in for every row where a Lithology is specified including
where there is only one lithology in the unit (clarification)
- **Lithology**
 - BW Burnt Wood / Charcoal (addition)
 - CW Weathered Coal (addition)
 - LC Lost Coal (from geophysics) (addition)
- **Lithology Qualifiers** WE weathered and EW extremely weathered removed as qualifiers for coal.
Instead use a Lithology of CW and indicate the degree of weathering in the
weathering column (modification)
 - S1 removed, instead use VV (modification)
 - S2 removed, instead use FF (modification)
 - S3 removed, instead use FM (modification)
 - S4 removed, instead use MM (modification)
 - S5 removed, instead use CX (modification)
 - S6 removed, instead replace with two separate SS lines one with FF and the
other with CC (modification)
 - S7 removed, instead use MC (modification)
 - S8 removed, instead use CC (modification)
 - S9 removed. Instead use XX (modification)
 - C1 removed, instead use BR (modification)
 - C2 removed, instead use BB (modification)
 - C3 removed, instead use BD (modification)
 - C4 removed, instead use DB (modification)
 - C5 removed, instead use DM (modification)
 - C6 removed, instead use DD (modification)
- **Adjectives**
 - CX coal stringers (addition)
 - GV gravelly (addition)
 - PR partially (addition)
- **Lithology Interrelationship**

The CoalLog standard states that “For units with multiple lithologies,
Interrelationship is required on every line with a Lithology that is followed by
another Lithology”. As historical data may not include such information it is
acceptable for this to be missing in historical data. (clarification)

 - CB coarsely interbedded (> 200mm) with (addition)
 - GD grading into
this code is only for historical data as future logging should be more specific
and use FU for fining up to or CU for coarsening up to (addition)
 - TB thinly interbedded (60-200mm) with (addition)
 - IL interlaminated with changed to interlaminated (<60mm) with
(clarification)

- **Mechanical State** FT fretted (addition)
- **Basal Contact** A adheres at base (addition)

Sample Dispatch Data

- **Sample Type** field renamed to **Sample Purpose** (modification)
- **Sample Mass** changed from incorrect name of Sample_State and type of C to name of Sample_Mass and type of N in specification file (clarification)

Water Observation Data

- **Sample Type** remove field as it will always be Water Observation (modification)

Point Load Data

- **From Depth** should be specified on every line (clarification)
- **To Depth** should be specified on every line (clarification)
- **Sample Type** remove field as it will always be point load (modification)
- **Sample Length** must be blank on continuation lines (clarification)
- **Sample State** must be blank on continuation lines (clarification)
- **Sample Number** must be blank on continuation lines (clarification)
- **Failure Mode** V valid only for historical data shown in grey (addition)

Data Transfer File

- The data type occurring in a data transfer file, previously was denoted by which of the following occurred following the last blank in the filename: Headers, Geologists, Casing, Cementing, Drilling, Litho, WaterObservations, Defects or PointLoads. It is now a little more flexible as it now determines the data type from the first four characters after the last blank or underscore in the filename and is not case sensitive, therefore, the required characters are:

Data Table Name	First Four Characters after last Blank or Underscore in Data Transfer Filenames (not case sensitive)
Header	Head
Geologists	Geol
Casing	Casi
Cementing	Ceme
Drilling	Dril
Lithology	Lith
Water Observations	Wate
RMU & Defects	Defe
Point Load	Poin

- Checks of codes in the data transfer file against the dictionary are no longer case sensitive, that is dictionary codes can be entered in lower case. (modification)
- The data within each hole within a data transfer file must be sorted, that is From_Depth and To_Depth must increase down the file and for each lithological unit in the Lithology data, the Record_Seq_Flag must increase down the file. (modification)

CoalLog Modifications v2.0 (March 2015)

CoalLog Version 2.0 includes the following changes to the previous version:

All forms, fields and code descriptions

Change **Hole** to **Borehole** (clarification)

Dictionaries.doc and Dictionaries Descriptions.xlsx files

Codes have been reordered to be consistent order of grain size or %

Header Data

Field **Basin** added (3 characters) (addition)

- Basin Nxx NSW (xx for basin; see list in Manual) (addition)
- Qxx Qld (xx for basin; see list in Manual) (addition)
- Sxx SA (xx for basin; see list in Manual) (addition)
- Txx Tas (xx for basin; see list in Manual) (addition)
- Vxx Vic (xx for basin; see list in Manual) (addition)
- Wxx WA (xx for basin; see list in Manual) (addition)

Field **Borehole Purpose**; 2 extra fields available (addition)

- Borehole Purpose BH Blasthole (addition)
- CL Large Diameter (addition)
- CS Slim Core Testing (addition)
- EA Acid Leachate Testing (addition)
- ES Stygofauna monitoring (addition)
- GC Compliance Gas Testing (addition)
- GD Gas Drainage Undiff. (addition)
- GE End of Hole Well (addition)
- GG Goaf Drainage (addition)
- GI Surface to In-seam Well (addition)
- GL Controlled Pressure Well (addition)
- GR Ranging Well (addition)
- GU Underground in Seam Gas-Riser (addition)
- GV Virgin Gas Testing (addition)
- GZ Vertical Production Well (addition)
- HM Multi-channel Vibrating Wire Piezometer (addition)
- HN Nested Standpipe Piezometer (addition)
- HS Standpipe Piezometer (addition)
- HV Vibrating Wire Piezometer (addition)

HW Production Water Bore	(addition)
SB Ballast	(addition)
SC Cement	(addition)
SD Stone Dust	(addition)
SE Electricity	(addition)
SN Nitrogen	(addition)
SR Refuge	(addition)
SP Plug	(addition)
SF Fault Delineation	(addition)
SI Intrusion Delineation	(addition)
TG Geotech; changed from GT	(modification)
TE Extensometer	(addition)
TF Primary Hydraulic Fracturing	(addition)
TL Tiltmeter	(addition)
TP Penetrometer	(addition)
TR Geotechnical Properties	(addition)
TX Stress Test Cell/Stress overcore	(addition)

Field description of **Date** changed to **Date Surveyed** (clarification)

Field **Borehole Status**; 1 extra field available (addition)

- Borehole Status

H Hazard in borehole	(addition)
U Unknown	(addition)

Geologists Data

Field description of **To Depth** changed to **Log To Depth** (clarification)

Casing Data

Field **Casing From Depth** added (6.2) (addition)

Field description of **To Depth** changed to **Casing To Depth** (clarification)

Field **Casing Material** added (addition)

- Casing Material

FB fibreglass	(addition)
PV PVC	(addition)
SS stainless steel	(addition)
ST steel	(addition)

Field **Casing Type** size changed from 3 to 1 characters (modification)

- Casing Type

P perforated	(addition)
S slotted	(addition)
T threaded	(addition)

Field **Casing Name** added (4 characters) (addition)

- Casing Name HWT HWT thread class (addition)
- OZCO Ozcon casing (addition)
- PN06 PN06 class UPVC (addition)
- PN09 PN09 class UPVC (addition)
- PN12 PN12 class UPVC (addition)
- PN18 PN18 class UPVC (addition)
- SFJ SFJ thread class (addition)

Field **OD** (= Outside Diameter) added (3 characters, mm) (addition)

Field description of **Size** changed to **ID** (= Inside Diameter) (clarification)

Field **Casing Grout** added (2 characters) (addition)

- Casing Grout AG concrete aggregate (addition)
- CS cement slurry (addition)
- CT cuttings (addition)
- FO two pack foam (addition)
- PG pressure grouted slurry (addition)

Cementing Data

Field description of **From Depth** changed to **Cement From Depth** (clarification)

Field description of **To Depth** changed to **Cement To Depth** (clarification)

Field description of **Date** changed to **Cement Date** (clarification)

Field **Method** added (2 characters) (addition)

- Cement Method FS from surface (addition)
- PR poly reel (addition)
- SP sacrifice poly (addition)
- TR through drill rods (addition)

Drilling Data

Drilling Data split into 3 sheets (Drill Details, Drill Depth, Drill Run) to accommodate extra fields.

Field **Rig No.** size changed from 5 to 3 characters (modification)

Field **Rig Type** size changed from 3 to 6 characters (modification)

Field description of **Date** changed to **Drilled Date** (clarification)

Field **Size Record** added (4 characters) (addition)

Field **Drill Size Depth** added (7.3) (addition)

Field **Cored** added (Y/N option) (addition)

Field **Depth Record** added (4 characters) (addition)

Field **Kelly** added (5.3) (addition)

Field **Rods** added (6.3) (addition)

Field **Barrel** added (5.3) (addition)

Field **Bits+Subs etc** added (5.3) (addition)

Field Other added (5.3)	(addition)
Field Table Height added (5.3)	(addition)
Field Stickup added (5.3)	(addition)
Field Manual Calc To Depth added (6.3)	(addition)
Calculated Field Drilled Depth added (7.3)	(addition)
Calculated Field Drilled Length added (5.3)	(addition)
Calculated Field Core Loss/Gain (Run) added (5.3)	(addition)
Calculated Field Core Loss/Gain (Cumulative) added (5.3)	(addition)
Field Time (24hr) Completed added (4 characters)	(addition)
Field Photo added (1 character)	(addition)
Field Driller's Run Length added (5.3)	(addition)
Field Manual Loss/Gain (Run) added (5.3)	(addition)
Field Loss/Gain (Cumulative) added (5.3)	(addition)
<ul style="list-style-type: none"> • Bit Type <ul style="list-style-type: none"> A Auger (addition) B Blades (addition) C Core (Conventional) (addition) D Dragblade (addition) H Hammer (addition) K Rock Roller (addition) M Mill Claw (addition) O Hole Opener (addition) P PCD (addition) R Reamer (addition) T Tricone (addition) U Unknown (addition) W Core (Wireline) (addition) X Rotex (addition) 	

Lithology Data

Codes added for Seam and Horizon	(addition)
Field description of To Depth changed to Lithology To Depth	(clarification)
Field description of Sample Type changed to Lithology Sample Type	(clarification)
Field description of Sample Number changed to Lithology Sample Number	(clarification)
<ul style="list-style-type: none"> • Sample Type <ul style="list-style-type: none"> AD Age Dating (addition) PN Palynology (addition) PE Petrology (addition) • Lithologies <ul style="list-style-type: none"> MR Missing Record; greyed out (addition) Item definition changed from Acid ... to Acid/Felsic (clarification) Item definition changed from Basic ... to Basic/Mafic (clarification) Order of lithologies changed to better reflect "Geological" order 	

- Lithology Qualifiers CT cannel; greyed out (clarification)
SP sapropelic; definition changed to include cannel coal, torbanite, and boghead coal (clarification)
- Adjectives PN penny bands (<2mm); moved from Sed Features (modification)
LM laminae (2-20mm) (clarification)
- Textures CS clast supported (clarification)
MS matrix supported (clarification)
- Sedimentary Features PB penny bands; moved to Adjectives (modification)
Order of Shape items changed to be consistent

Sample Dispatch Data (addition)

New data type added which includes:

- Field **Sample Type** added (addition)
- Field **Sample Number** added (addition)
- Field **Field Sample Mass** added (addition)
- Field **Laboratory** added (addition)
- Field **Dispatch Date** added (addition)

Water Observation Data

- Field size of **Borehole** field changed from 17 to 16 spaces (clarification)
- Field description of **Depth** changed to **Water Test Depth** (clarification)
- Field description of **Date** changed to **Water Test Date** (clarification)
- Field description of **Sample Type** changed to **Water Sample Type** (clarification)
- Field description of **Sample Number** changed to **Water Sample Number** (clarification)
- Field description of **Flow Test Type** changed to **Water Test Type** (clarification)
 - Water Test Type D Dry (added)
 - M Observed Damp (added)
 - W Observed Wet (clarification)
 - I Driller injected, changed from D (modification)

RMU & Defect Data

- Field description of **To Depth** changed to **RMU To Depth** (clarification)
- Field description of **Length** changed to **Defect Length** (clarification)
- Field description of **Orientation** changed to **Defect Orientation** (clarification)

Point Load Data

- Field description of **To Depth** changed to **Point Load To Depth** (clarification)
- Field description of **Sample Type** changed to **Point Load Sample Type** (clarification)
- Field description of **Sample Number** changed to **Point Load Sample Number** (clarification)

Field description of **Test Type** changed to **PL Test Type**

(clarification)

- Failure Mode | invalid

(added)

Corrections to CoalLog Documents

A number of inconsistencies in the v1.2 and earlier documents have been corrected.

Dictionaries Descriptions File.xlsx

MD matrix supported and CP clast supported, are in Textures not in Sed Features as shown in v1.2 Dictionary Descriptions file

(clarification)

Dictionaries Work File.xls and Dictionaries.csv

Lithotype Cobbles added

CoalLog Modifications v1.2 (November 2013)

CoalLog Version 1.2 includes the following changes to the previous version:

Geologists Data

Field description of **Base Depth** changed to **To Depth** (clarification)

Casing Data

Field description of **Base Depth** changed to **To Depth** (clarification)

Drilling Data

Field description of **Geologist Base Depth** changed to **Geologist To Depth** (clarification)

Field description of **Driller Base Depth** changed to **Driller To Depth** (clarification)

Lithology Data

Field description of **Base Depth** changed to **To Depth** (clarification)

- Lithology
 - DI Diamictite (addition)
 - M1 Conglomerate (>65% matrix) (addition)
 - M2 Conglomerate (35-65% matrix) (addition)
 - M3 Conglomerate (<35% matrix) (addition)
 - MY Mylonite (addition)
 - PC Pellet Claystone (addition)
 - VB Volcanic Breccia (addition)

- Hue
 - X off-whitish (addition)

- Colour
 - M multi-coloured (addition)
 - X off-white (addition)

- Lithological Adjectives
 - AB abundant, range of 30-60% added to description (clarification)
 - CG conglomeratic instead of conglomeritic (correction)
 - CM common (15-30%) (addition)
 - CS claystone (addition)
 - DO dominant (>60%) (addition)
 - FU fusainous (addition)
 - GG granules (modification)
 - MN minor, range of 1-15% added to description (clarification)
 - MS mudstone (addition)

OC	occasional, removed; replace occurrences with MN	(modification)
RA	rare, range of <1% added to description	(clarification)
SE	sparse removed, replace occurrences with RA	(correction)
SP	sporadic, removed; replace occurrences with MN	(modification)
SS	sandstone	(addition)
ST	siltstone	(addition)

MO moderately, should not be used as an abundance (use CM common, instead).

FU fusainous, also appears in the Coal Lithology Qualifiers. The lithological adjective of FU should only be used where the Lithology Qualifier field is already occupied by other information about the coal.

Lithologies such as CS claystone, MS mudstone, SS sandstone and ST siltstone should only be used in the Lithological Adjectives to describe components of the unit that make up less than 10% of the unit.

- Lithology Interrelationships

GG	with granules of	(modification)
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- Weathering

W	weathered, greyed out; i.e. it is retained for historical data and discouraged from future use	(clarification)
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- Mechanical State

BK	blocky	(addition)
FG	flaggy	(addition)
SL	slabby	(addition)

- Texture

CS	clast supported	(addition)
FG	flaggy, moved to Mechanical State	(modification)
MS	matrix supported	(addition)

- Abundances

A	abundant, range of 30-60% added to description	(clarification)
C	common (15-30%)	(addition)
N	dominant (>60%)	(addition)
M	minor, range of 1-15% added to description	(clarification)
R	rare, range of <1% added to description	(clarification)
P	sporadic, removed - replace occurrences with M	(correction)

- Minerals/Fossils

UN	unidentified mineral	(addition)
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- Mineral/Fossil Assoc

AG	in amygdules	(addition)
GD	glendonites	(addition)

Geotech Data

Field description of **Base Depth** for RMU changed to **To Depth** (clarification)

- Weathering W weathered, greyed out; i.e. it is retained for historical data and discouraged from future use (clarification)

Point Load Data

Field description of **Base Depth** changed to **To Depth** (clarification)

Recommended Logging Sheets Data Entry Template

Driller To Depth field added to Drilling Sheet (correction)

CoalLog Modifications v1.1 (September 2012)

CoalLog Version 1.1 includes the following changes to the previous version:

Header Data

- Site Id maximum length increased from 8 to 16 characters. Recommended field length unchanged at 8 characters. (correction)
- Location Accuracy **Accuracy** changed to **Location Accuracy** to distinguish from accuracy in the vertical direction. Field name and dictionary category changed from Survey_Accuracy to Location_Acc (clarification)
D digitised (addition)
- Survey Co. add to header as a 3 character field with field name of Survey_Company (addition)
- Survey Date add to header as a date field with field name of Survey_Date (addition)
- Logs Run X log of X-Ray added (addition)
- Hole Status N cemented (in some V1.0 files cemented was incorrectly denoted as M) (correction)

Drilling Data

- Geologist Base Depth rename **Base Depth** to **Geologist Base Depth** in Drilling Sheet. Renamed Geologist Base Depth in field description. Field name remains To_Depth. (clarification)
- Driller Base Depth **Driller Base Depth** field added to maximum Drilling Sheet. This new field has a recommended field size of 7.2 and maximum of 8.3. It has the field name Drill_To_Depth (addition)
- Recovered Thickness change field description of Recovered Thickness to Recovered Length. Field name changes to Recov_Length (clarification)

Lithology Data

- Lithologies TT tuffite (addition)
- Lithology Qualifiers the Lithology Qualifiers for sandstone (SS) also apply to:
 - carbonaceous sandstone (XS)
 - coaly sandstone (ZS)
 - gravel (GV)
 - sand (SA) (clarification)for Tuff/Tuffite the following codes have been added:
 - CS clay sized (addition)

- MS mud sized (addition)
- TS silt sized (addition)
- SS sand sized (addition)
- Lithological Adjectives
 - XC coarser (<10% of unit) (addition)
 - FF finer (<10% of unit) (addition)
- Core State
 - K cuttings (addition)
- Sedimentary Feature
 - the following Laminations descriptions had their scales changed to be consistent with the thickness units in AS1289:
 - LL large scale cross laminations changed from >1m to >2m (correction)
 - ML medium scale cross laminations changed from 100-1000mm to 200mm to 2m (correction)
 - SL small scale cross laminations changed from <100mm to <200mm (correction)
- Mineral Associations
 - MF microflakes (addition)
- Gas
 - the units for gas volumes changed to match common use:
 - T trace changed from <10m³/m² to <1m³/t (correction)
 - L low gas present changed from 10-25m³/m² to 1-5m³/t (correction)
 - M moderate gas present changed from 25-70m³/m² to 5-10m³/t (correction)
 - A abundant gas present (removed)
 - H high gas present (10-15m³/t) (addition)
 - V very high gas present (>15m³/t) (addition)

Water Observation Data

- Water Flow Sheet renamed to Water Observation Sheet to better reflect the information being collected (clarification)
- Flow Test Type
 - W observed wet (added)
 - D driller injected water (added)
- Total Dissolved Solids
 - recommended length remains 5 characters but without decimals. Maximum length 6 characters also without any decimals (correction)
- Electrical Conductivity
 - recommended length remains 5 characters but without any decimals. Maximum length 6 characters also without any decimals (correction)

Geotechnical Dictionary

- Dip Orientation Method in some v1.0 dictionary files the Dip Orientation Method category had the name Dip_Dir_Meth instead of Dip_Orient_Meth (correction)

Geotechnical Data

- RMU Type
 - heading on Logging Sheet changed from Type to RMU Type

(clarification)

- Defect Type heading on Logging Sheet changed to from Type to Defect Type (clarification)

- Dip Orientation in some v1.0 files this was referred to as Dip Direction instead of Dip Orientation and had the field name Defect_Dir instead of Dip_Orient (correction)

- Dip Orientation Method in some v1.0 files this was referred to as Dip Direction Method instead of Dip Orientation Method and had the field name Defect_Dir_Meth instead of Dip_Orient_Meth (correction)

Data Transfer Format

Any non CoalLog fields present in a CoalLog data transfer file should have a column name starting with "Custom_"

Test Data Files

The file CoalLog Test RMU and Defect Data.csv had an error in it. The RMU To_Depth and From_Depth of 231.04:

5	AVC031C	148	228.04	O	F		R4			
6	AVC031C	228.04	231.16	U	F		R4	MB	5	
7	AVC031C	231.16	231.04	U	F		R3	MB	5	
8	AVC031C	231.04	232.39	U	F		R4			

should have been 231.40:

5	AVC031C	148	228.04	O	F		R4			
6	AVC031C	228.04	231.16	U	F		R4	MB	5	
7	AVC031C	231.16	231.4	U	F		R3	MB	5	
8	AVC031C	231.4	232.39	U	F		R4			