Column ID, Explanation, Status

COLUMN	DBASE COLUMN HEADER	COLUMN CONTENTS	EXPLANATION/CONSIDERATION	STATUS (November 2020)
A	STA_NAME	Station Name	Station name from PEGASIS as primary source. Some locations have information for database purposes such as MW's that were originally logged with different name ID. TVA locations are hyphenated to comply with rules from modeling programs and hence do not match PEGASIS records 1:1. IGS location names are equivalent to API numbers per IGS-API#. Some AH- borings from recent years PEGASIS postings were originally entered as JQ- numbers to correspond to Geologic Quadrangle location identifiers. Point locations from surrounding geologic quadrangle maps are identified by Quadrangle plus number identifiers.	Recently updated and checked by record matching recent PEGASIS updates
B	X_SPLANE_E_ft	KY State Plane South Coordinates (ft.) northing	PGDP location data obtained from PEGASIS in NAD 83 KY State Plane South (1602) feet coordinates. Other locations converted from various coordinate systems/projections using KGS Coordinate Conversion tool. Location from Geologic Quadrangle maps were digitized utilizing geo-referenced GQ's in ARCMap.	Recently updated and checked by column matching PEGASIS update xy data including apparent tweaks to coordinate system and/or datum. Locations based on GQ data upated recently with geo-referenced GQ's. Number of AH- and TVAF- borings in PEGASIS do not plot on USGS locations identified by symbol on GQ's. TVAF- and some AH- boring location data recently updated. Needs further evaluation including ID of geo-reference transformations and ID of plotted Coordinate System details in PEGASIS.
C	Y_SPLANE_N_ft	KY State Plane South Coordinates (ft.) easting	PGDP location data obtained from PEGASIS in NAD 83 KY State Plane South (1602) feet coordinates. Other locations converted from various coordinate systems/projections using KGS Single and Multiple Point Coordinate Conversion tool. Locations from Geologic Quadrangle maps were digitized utilizing geo-referenced GQ's in ARCMap.	Above
D	ELEVATION	Elevation of ground surface at data point (ft. amsl)	Elevation (ft. amsl) taken from PGDP lithologic logs and/or project document tables when available. When not available, KY 2013 LIDAR was used to digitize and/or query point elevations. IGS location elevations obtained from API records. Records from locations in adjacent KY GQ's were obtained using LIDAR and were estimated from topographic and geologic quadrangle maps if outside project LIDAR footprint. PADCAD site engineering plots were utilized in early log compilation work and are still used as reference to verify original site location elevations.	R9r3 data recently updated via check by record matching against recent PEGASIS and LIDAR updates (Sept-Oct 2020)
E	ELEV SOURCE	Source(s) of information used for elevation in this database	Identification of elevation source(s)	Up to date
F	TD	Depth of boring (ft.)	From completed (ending) depth of lithologic logs entered into database	R9r3 data recently updated via check by record matching against End_of_Boring lithologic description records
G	FROM	Start of interval below ground surface (ft. bgs)	The upper depth from ground surface of a lithologic log interval	Up to date. Checked routinely when used for interval ID of materials, ID of stratigraphic and HGU tops and thicknesses
H	TO	End of interval below ground surface (ft. bgs)	The end depth from ground surface of a lithologic log interval	above
I	MP_FROMTO	Midpoint of interval below ground surface (ft. bgs)	The midpoint depth from ground surface of a lithologic log interval	above
J	IntervaltopELEV	Elevation (ft. amsl) of the top of interval	The upper elevation (ft. amsl) of a lithologic log interval	Up to date. Amended/corrected as necessary when used for interval ID of materials, ID of stratigraphic and HGU tops and thicknesses
K	IntervalbotELEV	Elevation (ft. amsl) of the base of interval	The base elevation of a lithologic log interval	above
L	IntervalMPELEV	Elevation (ft. amsl) of the interval midpoint	The midpoint elevation of a lithologic log interval	above
M	Thickness	Vertical thickness of interval (ft.)	The calculated thickness of each interval. IntervaltopELEV - Interval botELEV	Aquifer and aquitard units checked during proofing of R9r3 surface and isopach plots
N	USCSPrimaryMaterial	Short Material ID - 2 digits	Material identifier using standard material abbreviations for primary material and, if present, prevalent secondary materials. Simple materials ID that addresses bulk of entries from PGDP and nearly all entries from other sources.	Deprecated numerical indentifier column for USCS Primary Material provided in early drafts of database
O	USCS2Graded	Expanded Material ID - 4 digits	Material identifier using compound material abbreviations for primary and secondary materials	Recent site logs need this discretization completed. All compound entries should be reviewed for consistency and use.
P	MaterialsUnits	Materials units (MU)	Discretized units or sequences of material used in early log interpretations	
Q	Stratigraphy	Generalized stratigraphy for each Interval recorded in log database	Stratigraphic units from Site and published literature. Abbreviations taken from literature (Ql, Qal, TKcm, etc). Subunits assigned to Continental Deposits to discretize older coarse material sequences related to aquifer (LCD) from overlying younger & finer sequences (UCD).	Addition of Tcw (Eocene Sands & Terrace gravel) locations on PCC Terrace in areas adjacent to PGDP. In particular Twc trends on lower PCC Terrace to east of industrial site & south of Northeast Plume ~ potential overlap of coarse materials from @ 310' to 330' amsl.
R	HGU	PGDP Hydrogeologic Unit (HGU) for each Interval recorded in log database	Site HydroGeologic Units from site investigations.	Some further discretization of HU2B to identify local spatial extent of Sd and Gr horizons encountered at and below 340' amsl.
S	HGUID	Numerical ID for PGDP HGU	As used in modeling programs	
T	LITHO_DESC_All	Interval description from lithologic log	Electronically imported, OCR'ed or transcribed lithologic descriptions from available lithologic logs or entry of data from points identified on GQ's (surface exposures and sub-surface contacts) and other available maps.	Additional historic logs to be added that could not be found in Site records or postings were found in AKGWA records. Some spelling and character cleanup is still needed for recent site logs that were added to dbase
U	Completed_Stratigraphy	Stratigraphy in which boring is completed	Database function to ID stratigraphy at elevation of boring completion	Updated 11/19/2020
V	Completed_HGU	HGU in which boring is completed	Database function to ID HGU at elevation of boring completion	Updated 11/19/2020
W	NOTES_1	Questions/observations about intervals; Notes related to plotting	Notes from R9 dbase work. ID points in question, use of data record, etc. Also ID data entry that should be conducted.	Needs review to keep records and needs integration with Notes & Changes columns
X	NOTES_2	Notes related to data in the database	Gathered as final plots and evaluations proceeded for R8 and R9 of database	Needs review to keep records and needs integration with Notes & Changes columns
Y	ALIAS	Notes known alias of record name	Recorded as encountered	Not up to date - Needs ongoing review
Z	ALIAS2	Notes known alias of record name	Recorded as encountered	Not up to date - Needs ongoing review
AA	Above Interval b'	The thickness of the log interval above an interval record	ID's the vertical extent of intervals immediately above each record	Updated during proofing of R9r3 database prior to use and again prior to release
AB	Above MU Logged	The material unit (MU) of the log interval above an interval record	ID's the material content of intervals immediately above each record. ID's when interval above record was not logged in 1) lithologic log, or 2) in dbase	Updated during proofing of R9r3 database prior to use and again prior to release
AC	PEGASIS NARRATIVE	Location/point narrative from PEGASIS	Imported from PEGASIS	
AD	XYSourceNew	Source(s) of information used easting and northing in this database	Imported from UPDATE STA LOC XY ELEV_111720.xlsx collar file	
AE	ELEV SOURCE	Source(s) of information used easting and northing in this database	Imported from UPDATE STA LOC XY ELEV_111720.xlsx collar file	
AF	Surface_Point_Only	Identifies Records that were obtained for single stratigraphic data point	Locations generally digitized from GQ's (KY) with collection of associated LIDAR data where available and GQ elevation Estimation elsewhere	Locations (20+) not set up as intervals from surf.
AG	%_Clay_HU2+3	Clay Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020
AH	%_ML_HU2+3	Silt Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020
AI	%CL+ML_HU2+3	Clay and Silt Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020
AJ	%_Gravel_HU2+3	Gravel Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020
AK	%_Sand_HU2+3	Sand Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020
AL	%Grav+Sand_HU2+3	Gravel + Sand Materials % in HU2-3 log interval entries	Calculated location by location where log intervals fully penetrated HU2-3	Data developed Oct. 2020; Plotted Update 11/2/2020

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AM	Mica	HU6-6B-6C Micaceous Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AN	Blu	HU6-6B-6C Blue Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AO	Olive	HU6-6B-6C Olive Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AP	PYRITE	HU6-6B-6C Pyrite Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AQ	Lignite	HU6-6B-6CLignite Interval Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AR	Glaucon	HU6-6B-6C Glauconite Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AS	Green	HU6-6B-6CGreen Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AT	GreenClay	HU6-6B-6C Green + Clay Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AU	Black	HU6-6B-6C Black + Clay Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AV	GreyGray	HU6-6B-6C Grey or Gray + Clay Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AW	DarkGreyGray	HU6-6B-6C Dark Grey or Gray + Clay Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AX	gravel	HU6-6B-6C Gravel Interval Descriptions	Extracted to help sort out McN HU6 horizons based on lith descriptors	Evaluated against HU6 horizons 11/10-11/18/2020
AY	HU2_Footage	Lithlog Interval Footage HU2	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
AZ	HU2_%_Clay	Clay Materials % in HU2 Intervals	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BA	HU2_%_Gravel	Gravel Materials % in HU2 interval entries	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BB	HU2_%_ML	Silt Materials % in HU2 nterval entries	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BC	HU2_%_Sand	Sand Materials % in HU2 interval entries	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BD	HU2_%CL+ML	Clay and Silt Materials % in HU2 interval entries	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BE	HU2_%Grav+Sand	Gravel + Sand Materials % in HU2 interval entries	Calculated location by location where log intervals fully penetrated HU2	Data developed for 2016 GW Model development (2015). Updated August-Sept. 2020; Plotted 11/9/2020
BF	AKGWA_Scan_Link	Link to AKGWA # records page	Compiled	Data last update November, 2019
BG	PEGASIS_SCAN_LINK	Link to PEGASIS log file	Compiled	Data last update June, 2020
BH	KRCEE_SCAN_LINK	Link to KRCEE log file	Compiled	Data last update September, 2019
BI	NEP_Terr	ID's NEP Lower Terrace Points	Evaluated after noting lower QTc gravel and sands overlapped elevation with RGA locations in NEP 10/15/2020	Developed Dataset Oct. 2020; Plotted Update 11/17/2020
BJ	no HU3	Locations with no HU3 (clay/silt) Intervals (110120)	Logs fully penetrating HU3 and completed in HU's 4/5/6 were evaluated	Plotted Update 11/17/2020