

Revisions Related to TWDB's Review Comments on BRACS Geophysical Log Database and Images

6/28/2012

Initials following entries indicate those responsible for the action or comment (DO: Daniel Ortuño;  
AA: Aaron Averett; JP: Jeff Paine)

#	Comment Description	Action Taken	Notes
1	Scan quality	Rescan upon discovery and request (DO).	
2	Geographic coverage at 43%; request proprietary donated logs and data for unprocessed other logs	The proprietary collection arrived at BEG just before the end of the project and has not been fully analyzed. It contains many images that appear to have been obtained from a commercial log library by the donor and cannot be delivered to TWDB. Locations of these logs were provided in the GIS files to allow TWDB staff to identify logs of interest that could be requested from BEG.	Surface casing scans have no locations for wells not entered in database. Scans provided as a courtesy.
3	Well_id field autonumber; tblWell_Location, tblGeophysicalLog_Header, and tblGeophysicalLog_Suite; tables should begin at 1?	These ID numbers auto-incremented during successive attempts to load data into the Access database from the data entered into the custom web application developed to facilitate API numbers, location identification, and checks for already-filled cells. The numbers have not been changed.	
4	tblWell_Location and unique well_id value; multiple well ids for one well	Identified and removed duplicate well records based on the API	

		number (AA).	
5	tblGeophysicalLog_Header and tblGeophysicalLog_Suite one to many relationship	Cleaned up orphaned header and tool records created while addressing #4; deleted 691 duplicate Header and Suite entries (AA).	
6	Discrepancy among different ways of determining filled cells, unique wells, and number of logs	Updated Access database to remove duplicate table entries; can use Access tables to produce GIS files directly to ensure convergent numbers if necessary (AA, JP).	GIS files were created as an internal progress-monitoring tool from the data-entry application and may not match the final Access database.
7	Errors relating digital logs to database; missing county field names; lack of conformance of some file names to naming convention	Corrected entries and filenames (DO).	
8	Neuralog scanner software keycode	BEG has requested that Neuralog change their records to reflect transfer ownership of the scanners, scanner software, and warranties to TWDB. New software keycodes for TWDB have been requested and were sent by Neuralog to John Meyer on 5/30/2012. TWDB has also been provided keycodes assigned to BEG for the two scanners.	
9	LatDD: 1584 records with no lat value	We have no locations for these logs. Records for which latitude and longitude were missing were removed from tblWell_Location. AA copied these into no_locations_wells prior to deleting them, in case TWDB wants them, as we did	

		provide them with the scanned images. A total of 1480 well records were handled this way. Orphan records in the header and tool tables were also moved into no_locations_headers and no_locations_suites, respectively.	
10-12	LatDD errors	Corrected known latitude errors (DO, AA).	
13	LongDD: 1584 records with no long value	We have no locations for these logs. Records for which latitude and longitude were missing were removed from tblWell_Location. AA copied these into no_locations_wells prior to deleting them, in case TWDB wants them, as we did provide them with the scanned images. A total of 1480 well records were handled this way. Orphan records in the header and tool tables were also moved into no_locations_headers and no_locations_suites, respectively.	
14-17	LongDD errors	Corrected known LongDD errors (DO, AA).	
18-22	Proprietary flag problems	Being revised to remove flags where appropriate (DO, AA, JP). We grant TWDB permission to change the flag status when other public-domain	

		sources for the well locations can be demonstrated.	
23	API_Number: incorrect values (8 instances)	Corrected 12 erroneous values (AA).	
24	API_Number: 1740 missing values	No known API number for these entries (AA).	
25	API_Number: one well, two entries with different APIs	Removed duplicate entry 44395 (AA).	
26	State_Well_Number: several SWNs are in well number field	Removed from well number field and moved to SWN field (21 instances; DO).	This field was not on the data entry form.
27	State_Well_Number: several wells have SWN on log, but not written in field	Corrected two examples 39030 and 41808 (DO).	Very difficult to add at this point; would need to view all log headers
28	Well_Number: incorrect data for 43064	Corrected example and added Q number, SWN, and well type (DO).	
29	Well_Number: number often only given; TWDB wants entire well name	Data entry personnel generally entered only the number because of the name of the field. Data entry staff did enter lease and well number in BEG's data entry application. Those fields have been concatenated to form new entries in Well_Number field	
30	Well_Number: 240 entries have no value	Well numbers were entered for 135 blank entries (DO).	
31	Source_Well_Data: 1157 records with no value	The well data source was set to the BEG value in all locations where it was otherwise null. No blank entries remain (AA).	
32	Source_Well_Data: Inaccurately refers to BEG as the source	Data have been entered to indicate sources from BEG, TCEQ, and University Lands where appropriate (AA).	

		Other sources to the BEG are indirect.	
33	Q_Number: No values in field	This is one of the fields that was considered noncritical during project discussions and was typically ignored during data entry. We have tried to enter numbers where we can quickly determine them while making other corrections, but only 103 records have this field filled (DO).	
34	County_Name: Missing data (893 records)	Missing county names have been entered (AA, DO).	
35	Depth_Total: 99 records with no value	Complete (DO).	
36	Depth_Total: Two examples of incorrect data	Complete (DO).	
37	Drill_date: incorrect data format	Reformatted where values are present (AA).	
38	Drill_date: missing data for 536 records	Complete (DO); 1 still missing	
39	Drill_date: Incorrect data for 1 example	Changed 42969 from 1/1/1657 to 1/1/1957.	
40	Kelly_bushing_height: 7008 records with no value	Values entered where known; 0 entered where KB values not recorded (5392 entries) (AA, DO).	
41	Kelly_bushing_height: inaccurate value (3 examples)	Corrected (DO).	
42	Owner: 43 records with no value	36 new entries; 7 remain blank (DO).	
43	Owner: Inaccurate value in many records	Corrected as identified (DO).	
44	Well_type: Inaccurate data for 13,942 records	Well type was set to "Oil and Gas" in cases where an API number was specified (AA). Wells with identified Q or SWN numbers and no API set to "Water withdrawal."	
45	Well_type: geophysical log indicates use, but	Well type was set to	Would need to view

	value not recorded: 1 example	"Oil and Gas" in cases where an API number was specified (AA). Wells with identified Q or SWN numbers and no API set to "Water withdrawal."	most images to accurately set this for all logs. This was understood to be a non-critical attribute during data entry.
46	Horizontal datum: 13,980 have unknown	Horizontal datum was updated according to source (RRC: NAD27; IHS: NAD27; SC: NAD27) (AA, JP).	
47	Agency: Incorrect lat & long agency; 1 example; grid centroids not valid method	Corrected examples (DO). There are 172 entries where locations were determined as center of grid cell because location could not be determined from other sources used in this study (RRC, IHS, IGOR, Surface Casing).	
48	Location method: incorrect entries	Location method in data entry program defaulted to "ADDMAT" and was not overridden by data entry staff. All cases have been set to unknown.	Location sources included RRC, IGOR, and IHS. It might be possible to assign the most likely location source by comparison with IGOR and RRC databases.
49	Location_date: incorrect format for 4 entries	Corrected format (AA).	
50	Location_date: 22,482 of 22,487 values missing	Location date set to 8/31/2011 (end of original contract period) (AA).	
51	Grid_25min: missing values for 13,855 records	A spatial join was used to attach the grid cell name to each record (AA).	
52	Elev fields (5 fields): leave empty	All elevation related fields set to null (AA).	
53	GL_digital_file_name: inaccurate format; no file extensions	Removed file extension (AA).	
54	GL_digital_file_name; characters # and &;	No action	No changes required
55	GL_digital_file_name: 152 records include pathname	Pathnames removed (AA).	

56	GL_digital_file_name: inaccurate naming convention	Names corrected following specified format (DO, AA).	
57	Geophysical_log: redundant log entries (resistivity and electric, for example)	Removed all entries from Log_Suite table that had entries for ELECTRIC, SP, and one of the resistivity/induction log types. This removed 2245 extraneous ELECTRIC log entries.	More aggressive searches where "ELECTRIC" coincides with SP or one of the resistivity/induction types could remove more duplicates, but would also remove valid records where there's an entry for ELECTRIC and RESISTIVITY, for example, where the ELECTRIC entry might be for the SP log.
58	Geophysical_log: missing value for 112 records	Entries completed for missing values.	
59	Geophysical_log: Incomplete: some wells do not have all tools listed (3 examples)	Entered missing logs for 3 examples.	
60	Dtop: 95 records have no value	Number of entries without Dtop has been reduced to 21 (DO).	
61	Dtop: multiple tools have same top depth (1 example)	Corrected example; added SP log	
62	Dtop: inaccurate Dtop value for 1 example	Corrected.	
63	Dbottom: 79 records have no value	Number of entries without Dbottom has been reduced to 5 (DO).	
64	Dbottom: Inaccurate data (1 example)	Corrected (DO).	
65-70	Six missing well logs	Well logs were not found in BEG files. Entries have been deleted (DO).	

