

SOFTWARE RELEASE NOTES

dbMap/Web Version 2021.3.2



Overview

dbMap/Web 2021.3 includes performance improvements, a loader for Rock Evaluation data and a collection of enhancements and bug fixes.

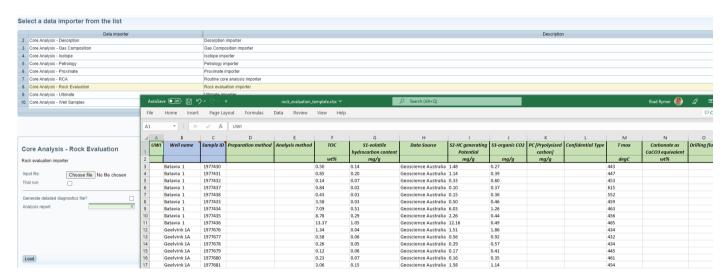
Performance enhancements

There is a collection of performance enhancements in this release:

- When performing a search in Records Management, the initial population of the list can take a little while to populate when there are millions of items. In some tests performance is up to 10 times faster. Task 81167.
- Several changes have been made to improve the performance of Audit History tracking. The most significant improvement is seen when inserting new data. In some cases, this could make importing data between 5 and 20 times faster. Task 81005.
- A potential intermittent performance problem with the Data quality tab on the well header and other screens has been resolved. Previously the Data quality tab could sometimes take 20 seconds to display or even result in a time out error in some cases. Task 80977.

Data Loaders

A data loader is now available for importing Rock Evaluation analysis data.



Highlight features introduced in 2021.2

Overview

dbMap/Web 2021.2 sees the introduction of more data loaders and functionality to support reformatting data files as they are loaded to avoid needing to copy & paste data into a different format.

New Data Loaders

Multiple new data loaders are now available that make use of the dbMap/Web data loading framework. These build on the other data loaders added in the 2021.1 releases.

Each of these data loaders comes with support for trial runs without committing changes to the database, useful messages when there is a data error preventing loading and progress notification as the data loading job runs.

The formation tops loader also comes with additional functionality to calculate TVD values if they are missing as the records are imported.

The new data loaders are:

- Well aliases
- Reservoir summaries
- Formation tops (Replacing older data loader)
- Directional surveys (Replacing older data loader)
- Checkshot surveys (Replacing older data loader)

Added Support for Obligations

A new Obligations capability has been added to dbMap/Web. This capability allows companies to capture things they are required to during a well's life cycle and maintain a record of whether they have fulfilled the requirement.

For example, a well drilled under a government petroleum act might be required to submit reports or notifications before, during and post drilling the well, including events in the well's lifecycle, such as production, fracture stimulation or abandonment. These requirements or obligations are typically included in the issue of the permit where the well is to be drilled, and the operating company must comply with them.

The new Obligations feature allows for these requirements to be defined in the system, then assigned to one or more permits. The system can then generate individual well obligations, which will include a 'due date' and provision to update the obligation with a fulfilled date if the obligation has been satisfied.

In the following screenshot, two Government reporting obligations have been assigned to a well: one a notice of completion notification and the other a Well Completion Report submission. Both obligations have an automatically generated due date. The completion notification is Overdue, based on the well's spud date.



The business rules that define the applicability of a well to an obligation and the calculation of the due date are configurable within dbMap/Web, meaning that companies can self-manage their obligation definitions within the system.

Loading Files in Alternate Formats

If you have people at your company familiar with python or other programming languages, it is now possible to write a script or create a small program that can reformat files during the data load.

An example use case is if you receive lots of files in a particular format from a service company, you can write a script to reformat the file into the Petrosys data loader format so your users can run the data load without having to copy and paste data into the expected format.

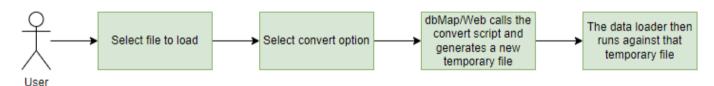
It is not just limited to reformatting from one Excel format to another Excel format. For example, you could write a script to reformat an IHS 297 ascii file and be able to load it directly using existing data loaders.

Example Interface:

Input file: Choose file No file chosen Input convert options: IHS 297 Merge option: Keep Keep all existing data	IMPORT - Well	Header		
Input convert options: IHS 297 Merge option: Keep Keep Keep all existing data	Well Header importer			
Merge option: Keep ✓ Keep all existing data	Input file:	Choose file	No fi	le chosen
	Input convert options:	IHS 297 ∨		
Trial run:	Merge option:	Keep	~	Keep all existing data
	Trial run:		48	
	Generate detailed diag	nostics file?		

How does it work

- The site administrator creates a program or a script and places it on the web server.
- When importing, the end user selects a conversion option to use.
- Behind the scenes on the server, after the input data file has been uploaded to the server, the conversion script or application is run to create a new temporary file. That temporary file is then passed to the data loader rather than the original file that was uploaded.



For more information on how this can be setup at your site see the Help topic 'dbMap/Web – Data Exchange – Input File Convert Options'.

Petrosys professional services can also create reformatting scripts. Please contact Petrosys if you would like to discuss consulting to create reformatting scripts.

Highlight features introduced in 2021.1

Overview

dbMap/Web 2021.1 sees the introduction of deeper support for more parts of the PPDM model including Core / Sample Analysis, dedicated screens for specific well test types, better support for Paly/Paleo data as well as some new data loaders. In addition this release also makes available some extensions to all clients using the Wells module:

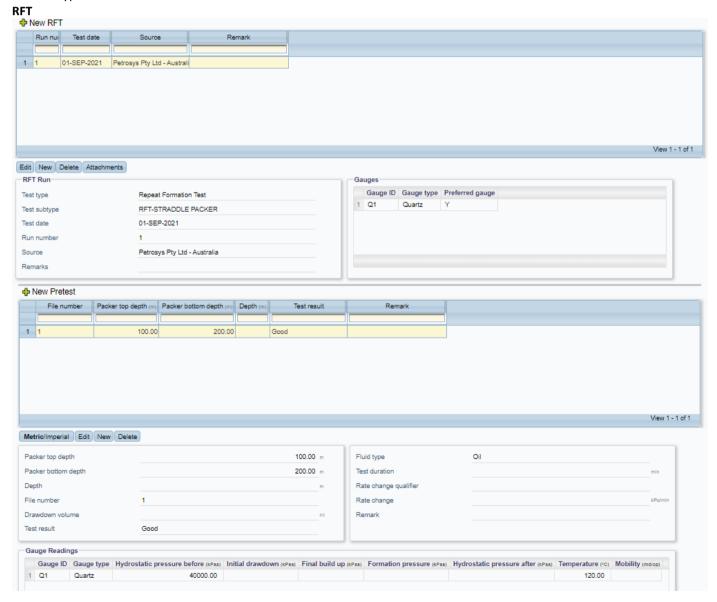
- FracDB manage well stimulation data
- Well Spec Card manage the systematic capture, approval and publishing of pre-drill well data.

Petrosys is a long term member of the PPDM community and we are pleased to also announce that dbMap/Web has been recertified as being PPDM Gold compliant.

Dedicated Well Test Screens

This release sees a collection of new dedicated well test screens that are tailored based on the different test types. Existing well test data can still be accessed via a generic well test screen, but clients can choose to start capturing their well tests in the dedicated screens.

The test types with tailored screens are:



DST

Test Details Test number Top depth (logger) 1000.00 m Drillstem Test Base depth (logger) 1030.00 m DST-HOOK WALL PACKER Top depth (driller) 02-SEP-2021 Base depth (driller) Source Petrosys Pty Ltd - Australia Test result Lost seal Condensate Misrun reason Remarks Fluid recovery Flow Results

	Flow	Temperature	
Oil	m3/d		"C
Gas	e3m3/d		
Condensate	m3/d		*C
Water	m3/d		"C

Oil API	
No gas to surface	
Condensate API	
R _w	Ωm

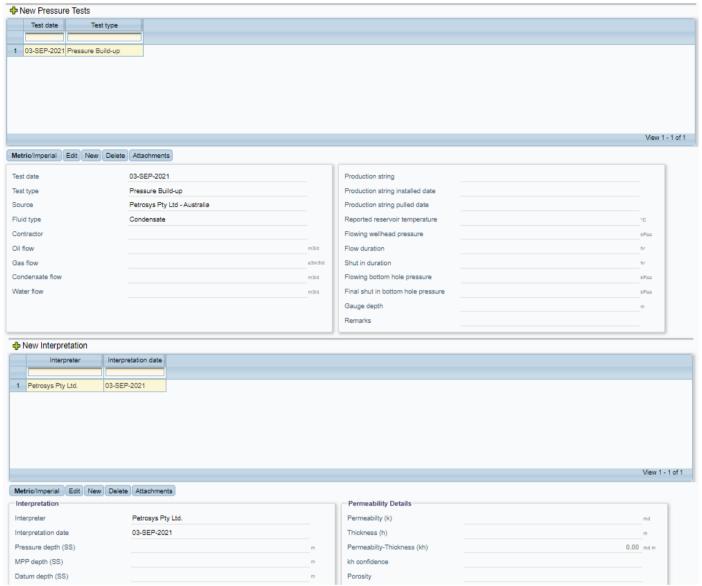
	Length	R _w	Temperature
Water cushion	m	Ωm	*C
Mud filtrate		Ωm	"C

Top choke	mm
Bottom choke	mm
Fluid time to surface	min
Surface flow pressure	kPaa
Hole temperature	°C
Hole temperature depth	m
Bottom gauge depth	m

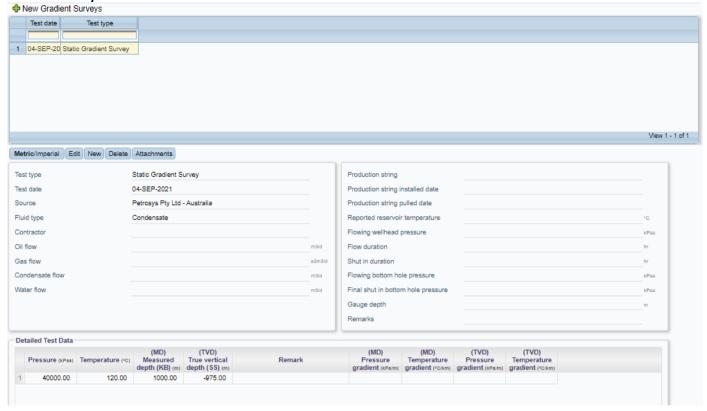
Pressure Buildup

	Time	Initial Pressure	Final Pressure
First flow	min	kPaa	kPaa
First shut-in	min		kPaa
Second flow	min	kPaa	kPaa
Second shut-in	min		iPaa
Third flow	min	kPaa	iPaa
Third shut-in	min		kPaa

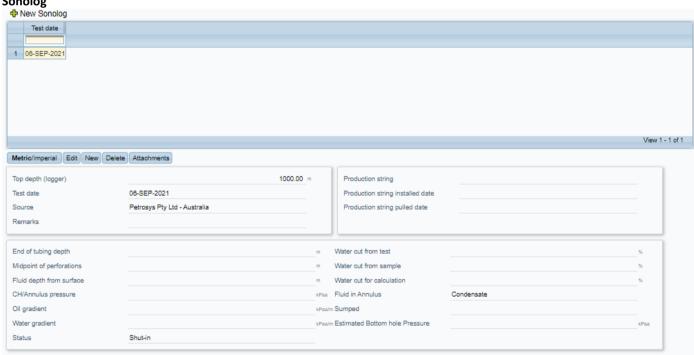
Pressure Tests



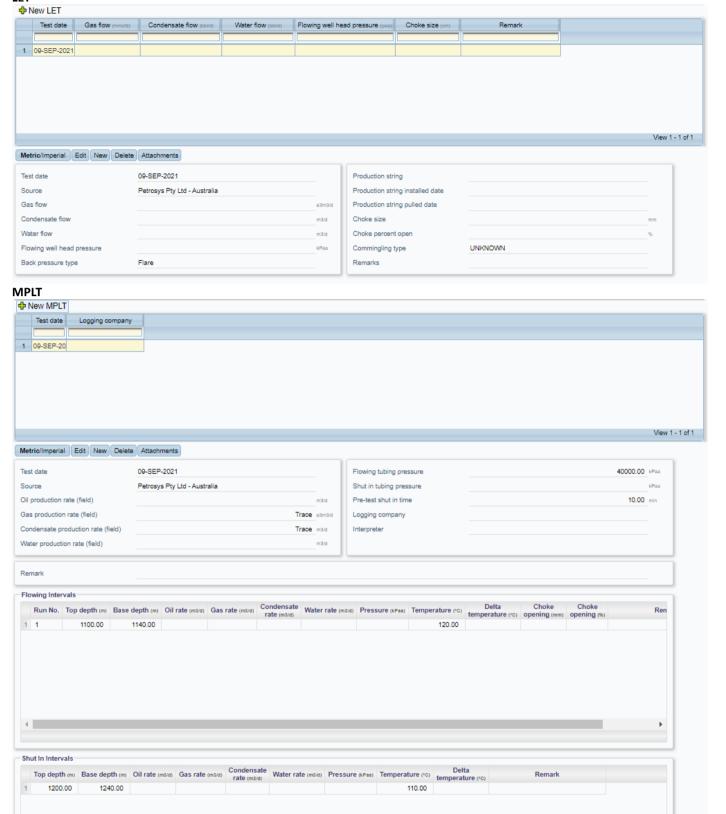
Gradient Surveys



Sonolog







Core / Sample Analysis

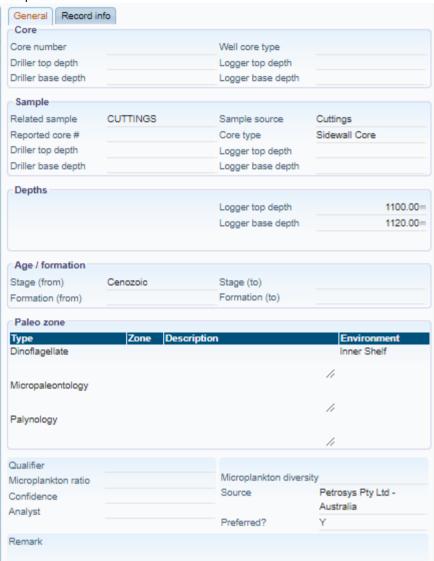
Many new core analysis screens are now available to all clients with our PPDM Wells module. The analysis screens are:

- Conventional core analysis
 - Routine core analysis
 - o Continuous core analysis
- Geochemistry
 - Rock evaluation
 - o Vitrinite
 - Liquid chromatography
 - Lithology
 - Saturate
 - o Elemental
- Coal core analysis (Previously already available to some clients)
 - Adsorption isotherm
 - Desorption
 - o Gas composition
 - o Isotope
 - Petrology
 - o Proximate
 - Rock mechanics
 - Ultimate

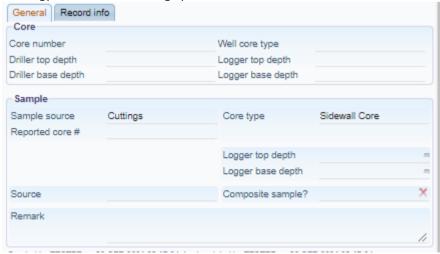
Paly / Paleo data screens

The list of fields that can be captured on our Paly/Paleo have been extended to better support key data. Key areas of Paly/Paleo information we capture includes:

Interpretations



• Lithology information including optional links to well cores.



• Fossil information including species and abundance



• Details of the report and the analyst who created the report.



Data Exchange – Data loaders

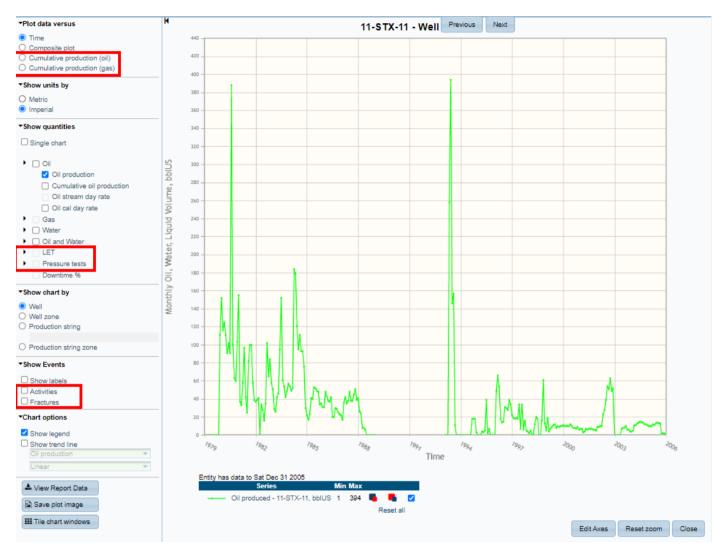
Multiple new data loaders are now available for importing Excel files for the following data types:

- Core Analysis
 - o Routine core analysis
 - o Samples
 - o Adsorption isotherm
 - o Desorption
 - o Gas composition
 - o Isotope
 - Petrology
 - o Proximate
 - Ultimate
- Paleo summaries
- Well Tests
 - Gradient Survey
 - o MPLT
 - o RFT

Production Chart Improvements

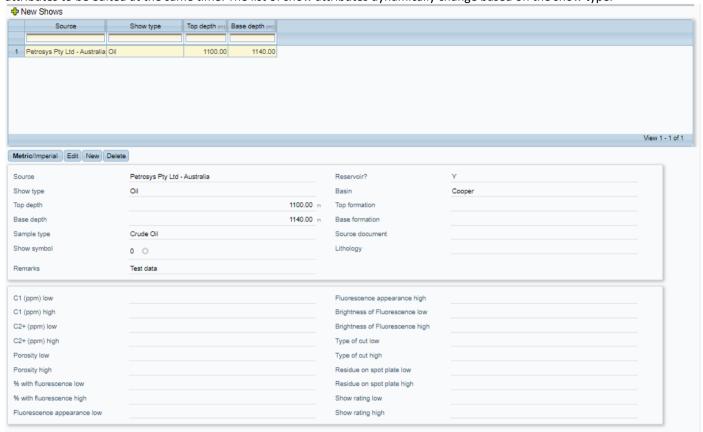
dbMap/Web production charts have been extended to allow plotting of additional information alongside the production data. Changes include:

- Charting of data against cumulative oil or gas production
- Plot oil, gas and water calendar stream day rates
- Plot LET data
- Plot well activities and fracture data
- Group data by production string or production string zone



Well Shows

A new consolidated screen for viewing and editing Well shows data is now available that allows the depth information and show attributes to be edited at the same time. The list of show attributes dynamically change based on the show type.



Well Rig and Pad

Dedicated screens are now available for linking wells to Rigs and Pads and to capture the well specific Rig & Pad information.



FracDB

The FracDB extension to our Wells module manages well stimulation data with an emphasis on the needs of the operator. With the 2021.1 release this functionality become available to all of our PPDM Wells based clients.

Well Spec Card

The Well Spec Card extension manage the systematic capture, approval and publishing of pre-drill well data. Information on proposed wells can be captured and go through an approval process with email notifications when actions are required. Once fully approved a PDF report can be generated and sent to the drilling team.

Petrosys PRO new data types available for PPDM clients – Stacking velocities, Residuals & Statx

Along with the dbMap/Web changes, there are also some changes coming to the dbMap PPDM database for the Petrosys PRO desktop application.

Support for Stacking velocities and Residuals is now available for PPDM clients.

The Petrosys Statx module is now available for purchase by PPDM clients. Statx is an application that manages a database of corrections for near surface seismic effects.

dbMap/Web continues to be PPDM Gold Compliant

Petrosys is pleased to announce that dbMap/Web has recently been recertified as having Gold Level PPDM compliance. Petrosys has been a member of PPDM for more than 20 years and we continue to see significant value in basing our data management products around the PPDM standard.

Petrosys Professional Services

The Petrosys Professional Services team is highly experienced with PPDM and Oil Industry workflows. We are always happy to discuss options for prioritizing specific functionality with funding, for example:

- Managing additional data types
- Creating additional data loaders
- Tailoring dashboards.

Please contact Petrosys support if you would like to discuss.

Detailed Release Notes Summary dbMap/Web 2021.3.2

Enhancements

dbMap/Web - Client

82077 Records management ancillary data screen customisations (Medco)

81490 Added Geographic CRS, Surface Latitude and Surface Longitude to the Wells list (Origin)

Well Test Loader - Template extended to include client specific columns (Origin)

dbMap/Web - General

81348 Formation tops loader - Added support for Replace all by Interpreter and Formation

Detailed Release Notes Summary dbMap/Web 2021.3.2

Bug Fixes

dbMap/Web - Client

- 81582 Reservoir reference screen now auto populates Code values for new records (Santos only)
- 81260 Well Activities ACTIVITY_SET_ID populated correctly (Origin)

dbMap/Web - General

- 82009 Fixed validation error when editing MPLT data
- 81483 Adsorption Isotherm loader correctly checks for existing data
- 81500 Permits PS_STATUS_TYPE set correctly
- 82082 Well Status reference screen Source field is now a lookup
- 81626 Formation reference screen Records can be edited when age sequence is not populated
- 81773 Wells Dashboard & Well Log Browser Fixed bug preventing filtering by map extent

Petrosys Release dbMap/Web 2021.3.2

Detailed Release Notes

dbMap/Web - Client

Enhancements

Records management ancillary data screen customisations (Medco) 82077

Customisation of the Ancillary data screens for Medco Energi.

Added Geographic CRS, Surface Latitude and Surface Longitude to the Wells list (Origin)

81490

Added Geographic CRS, Surface Latitude and Surface Longitude as optional columns to the Wells list.

Well Test Loader - Template extended to include client specific columns (Origin)

81427

The template for the Well Tests data loader has been extended to include Origin specific columns.

dbMap/Web - Client

Bug Fixes

Reservoir reference screen now auto populates Code values for new records (Santos only)

81582

Admin/Reference tables/General/Reservoir screen for Santos only now automatically populates the Code with the next available value when creating a new record.

Well Activities - ACTIVITY SET ID populated correctly (Origin) 81260

Fixed a bug on the "Wells / Activities" screen causing the ACTIVITY SET ID to be incorrectly set to null.

dbMap/Web - General

Enhancements

Formation tops loader - Added support for Replace all by Interpreter and Formation 81348

Extended the Well Formation Tops loader to support a "Replace all by Interpreter and Formation" option. This allows additional tops to be added to a well, or existing formations to be replaced, without needing a full set of formation picks for the well.

dbMap/Web - General

Bug Fixes

Fixed validation error when editing MPLT data

Fixed a bug causing a validation error on the computed "Delta temperature" values, when saving MPLT data.

Adsorption Isotherm loader correctly checks for existing data 81483

Fixed a bug causing the Adsorption Isotherm data loader to incorrectly report that matching data already exists.

Permits - PS_STATUS_TYPE set correctly

81500

Fixed a bug causing the PS_STATUS_TYPE column to be populated with an incorrect value.

Well Status reference screen - Source field is now a lookup 82082

The Source field on the "Well Status" reference screen has been configured to be a lookup to the R_SOURCE reference table.

Formation reference screen - Records can be edited when age sequence is not populated 81626

Fixed a bug on the Formations reference screen that was preventing a record being edited if the age sequence number was not populated.

Wells Dashboard & Well Log Browser - Fixed bug preventing filtering by map extent 81773

Fixed a bug on the "Wells Dashboard" and "Well Log Browser" preventing filtering using the "Map Extent" option.

Petrosys Release Notes

Detailed Release Notes Summary dbMap/Web 2021.3.1

Enhancements

dbMap/Web - Client

- 81266 Changed "Permit" labels to "Land right" (SKK Migas)
- 81240 Enabled Well Activities screen (Origin)
- 81238 Well log cron Fixed error when updating existing .LAS file (Origin only)

dbMap/Web - General

- 81372dbMap PPDM3.8 Cascade delete added for Paleo summary child data81353dbMap PPDM3.8 Well Tops Now sorted by depth then ordinal age code81264Well Core Lithology description now supports up to 2000 characters
- 81384 Samples Drillers depths used to calculate Mid point and Thickness if loggers depths are not provided

Detailed Release Notes Summary dbMap/Web 2021.3.1

Bug Fixes

dbMap/Web - General

<u>81359</u>	Custom report functionality has been restored
<u>81315</u>	Rock evaluation data loader - Fixed issue with loader failing due missing column
<u>81263</u>	Multiple well perforation records with the same source can be inserted for a Well
<u>81209</u>	Bin Grids - DMS/Decimal button does not change display of easting northing coordinates
<u>81313</u>	Gas Composition Data loader - Desorbed Gas attribute is now loading successfully
<u>81258</u>	Gas Composition loader correctly checks for existing data
<u>81284</u>	RM Storage path lookup does not show correct values
<u>81381</u>	Reports with extra carriage returns can be executed

Petrosys Release dbMap/Web 2021.3.1

Detailed Release Notes

dbMap/Web - Client

Enhancements

Changed "Permit" labels to "Land right" (SKK Migas)81266

Change "Permit" labels to "Land Right" for SKK Migas

Enabled Well Activities screen (Origin)

81240

Enabled the Well Activities screen for Origin.

Well log cron - Fixed error when updating existing .LAS file (Origin only)

81238

Fixed Origin's cron job to load well logs sometimes getting an error when updating an existing .LAS file and silently failing.

<u>dbMap/Web - General</u>

<u>Enhancements</u>

dbMap PPDM3.8 - Cascade delete added for Paleo summary child data 81372

It is now possible to delete a Well Paleo summary record without first needing to delete all child data on the Lithology sample and Interpretation screens.

dbMap PPDM3.8 - Well Tops - Now sorted by depth then ordinal age code

dbMap/Web Well Tops screen now sorts by ordinal age code when two tops are at the same depth.

Well Core Lithology description now supports up to 2000 characters

The dbMap Well Core Lithology screen now support descriptions up to 2000 characters. Previously it only supported up to 240 characters.

Samples - Drillers depths used to calculate Mid point and Thickness if loggers depths are not provided 81384

The "Wells / Samples" screen has been updated to calculate the "Mid point" and "Thickness" of the sample using the drillers depths, if the loggers depths are not provided.

dbMap/Web - General

Bug Fixes

81359

Custom report functionality has been restored

Fixed a bug preventing custom reports from loading.

Rock evaluation data loader - Fixed issue with loader failing due missing column 81315

Fixed a bug causing the Rock evaluation loader to fail with error 'Unable to map to collection model for collection ANL_PROPERTY_DETAIL'

Multiple well perforation records with the same source can be inserted for a Well

Fixed a bug preventing multiple perforation records, with the same source, from being inserted for a Well.

Bin Grids - DMS/Decimal button does not change display of easting northing coordinates 81209

On the bin grid screen, if you clicked the 'DMS / Decimal' button the easting northing origin value would incorrectly be formatted as if they were in degrees, minutes, seconds. This has been fixed.

Gas Composition Data loader - Desorbed Gas attribute is now loading successfully 81313

The Desorbed gas value was not being loaded by the Gas Composition data loader due to extra spaces embedded in the column header. This has been fixed.

Gas Composition loader correctly checks for existing data 81258

Fixed a bug causing the Gas Composition data loader to fail due to existing data when no existing data was present.

RM Storage path lookup does not show correct values 81284

When editing Records Management values, the Storage path lookup did not show all of the available locations to choose from.

Reports with extra carriage returns can be executed 81381

Fixed a bug preventing SQL reports with additional carriage returns from being executed.

Detailed Release Notes Summary dbMap/Web 2021.3

Enhancements

dbMap/Web - Client

81028 Well data screen buttons now have client specific layout for CCED
 81174 Well header - Metric/Imperial now converts surface temperature (Santos only)

Records Management - Improved performance of initial search

- UWI can be edited when adding a new Well (Medco)
- 81011 Well horizontal drill Added Seam to the list and panel (Origin)

dbMap/Web - General

<u>81167</u>

<u>81114</u>	Add reference table screens for Permits and Well Casings/Liners
<u>81018</u>	Data loaders now remove leading and trailing whitespace characters from data before loading
<u>79813</u>	Data loaders - Only active reference values are used to decode imported data
<u>80986</u>	Data Loader - Added Rock Evaluation loader
<u>81101</u>	When CQ is disabled, editing well coordinates no longer triggers the quality processes to run
<u>81206</u>	Data Loader - Routine Core Analysis - Added support for Lithology top and base depths
81022	Well Header - Online date added to the well header as a read only value
<u>53023</u>	Reference table edit screen for R_ENVIRONMENT is now available
<u>81223</u>	Added Formation and Seam to the Samples grid as optional columns
<u>80921</u>	Basin, Field and Geographic region have been removed from the Samples screen
<u>79719</u>	Database structure changes to maintain PPDM compliance
<u>81005</u>	Performance improvements for Audit history data

Detailed Release Notes Summary dbMap/Web 2021.3

Bug Fixes

dbMap/Web - Client

Drillers depths are shown on the Well Core screen (Origin)

dbMap/Web - General

Bulk update of Quality values has been fixed for well checkshot surveys
Fixed filtering dbMap/Web data list using a map extent from PRO
Correct Quality statistics now displayed on the Wells dashboard
Production chart - Water cut calculation has been fixed when multiple wells are charted
Correct coordinate system displayed on the directional survey screen
CQ - Data quality tab intermittent performance problem resolved
Data Loaders - Calculations are now performed when loading data
Permit filter on the seismic survey and seismic line screens are now ordered alphabetically

dbMap/Web - PLDB

80954 Well Failure Analysis importer - Block and License now always link to specific Permit records with the correct permit type

Petrosys Release dbMap/Web 2021.3

Detailed Release Notes

dbMap/Web - Client

Enhancements

Well data screen buttons now have client specific layout for CCED 81028

The buttons underneath the well header screen now have a custom grouping and layout for CCED. In addition, the label for Shoe depth has been updated on the Casing and Liners screen.

Well header - Metric/Imperial now converts surface temperature (Santos only) 81174

Well header Surface temperature can now be toggled using the "Metric / Imperial" button.

UWI can be edited when adding a new Well (Medco)81197

The Well Header screen has been modified to allow the user to specify the UWI when inserting a new well record.

Well horizontal drill - Added Seam to the list and panel (Origin) 81011

Added Seam to the list and panel on the "Wells / Horizontal Drill" screen.

dbMap/Web - Client

Bug Fixes

81000

Drillers depths are shown on the Well Core screen (Origin)

Fixed a bug preventing drillers depth fields from being shown on the Well Core screen for Origin.

dbMap/Web - General

Enhancements

Add reference table screens for Permits and Well Casings/Liners 81114

Screens have been added to Admin/Reference tables/General/PPDM/General reference for editing the following reference values:

- > Tubing grade
- Permit type
- Permit energy type
- Permit lessor type
- > Permit status
- Permit status type

Data loaders now remove leading and trailing whitespace characters from data before loading 81018

When data contains leading or trailing whitespace characters (e.g. spaces or tabs) we now remove that whitespace prior to loading. This avoids issues of unintended whitespace being loaded which may then appear in reports / affect other processes matching on data / etc.

Data loaders - Only active reference values are used to decode imported data 79813

Inactive reference table values are now ignored when decoding imported data.

Data Loader - Added Rock Evaluation loader 80986

A Rock Evaluation loader has been added to dbMap/Web.

When CQ is disabled, editing well coordinates no longer triggers the quality processes to run 81101

Previously, when using the well header loader to import wells, and you turn off the Enable CQ option, it would still run CQ if well surface or BH coordinates were modified.

Data Loader - Routine Core Analysis - Added support for Lithology top and base depths 81206

The routine core analysis data loader has been extended to allow the lithology top and base depths to be populated. These values can be seen on the "Wells / Cores / Core Description" screen.

Well Header - Online date added to the well header as a read only value

81022

Online date has been added to the Well Header as a read only value. The value can be edited on the "Wells / status" screen using a status type of "ONLINE_STATUS" and status of "Online". The well header data loader has also been extended to support loading of online date.

Reference table edit screen for R ENVIRONMENT is now available 53023

There is now a dedicated reference screen available for editing R_ENVIRONMENT records in dbMap/Web. It is available on the PPDM reference screen with name 'Environment type'.

Added Formation and Seam to the Samples grid as optional columns

The Formation and Seam values have been added to the "Wells / Samples" list, as optional columns.

Basin, Field and Geographic region have been removed from the Samples screen 80921

Basin, Field and Geographic region have been removed from the "Wells / Samples" screen

Database structure changes to maintain PPDM compliance 79719

Several database structure changes have been made to maintain PPDM compliance, such as adding constraints, renaming columns to PPDM standards, removing some non-standard columns that are not used.

The following columns have been renamed:

- > PPDM COLUMN.COLUMN AUDIT FLAG -> PS COLUMN AUDIT IND
- > PPDM_COLUMN.COLUMN_AUDIT_KEEP_FLAG -> PS_COLUMN_AUDIT_KEEP_IND
- > PPDM_TABLE.TABLE_AUDIT_COLUMN_NAME -> PS_TABLE_AUDIT_COLUMN_NAME
- > SEIS_POINT.DATIM_ELEM_OUOM -> DATUM_ELEV_OUOM
- > SEIS POINT SUMMARY.LINE LENGTH UOUM -> LINE LENGTH OUOM
- > SP_POLYGON.ATUM_ELEV_OUOM -> DATUM_ELEV_OUOM

The following non-standard PPDM3.8 columns have also been dropped as they are not used:

- ➤ ANL_ANALYSIS_REPORT.SOURCE
- > PPDM COLUMN.COLUMN AREA TYPE

- > RM_DATA_STORE.LEGACY_NAME
- > RM_PHYSICAL_ITEM.INVARIANT_ATTRIBUTE
- > RM PHYSICAL ITEM.PAGE NUMBER
- > RM PHYSICAL ITEM.STORED AS FILE NAME
- > RM WELL LOG.FILE HEADER ID
- > WELL LOG CURVE.CURVE OUTPUT
- > WELL LOG CURVE.CURVE SEQ NO

Performance improvements for Audit history data 81005

Several changes have been made to improve the performance of Audit history. The main improvement is that audit history records are no longer generated on insert of new data, so only changes are captured now. This means that importing new data is much faster. When loading large amounts of data being it can be from 5 to 20 times faster.

Records Management - Improved performance of initial search 81167

The initial search performance of the Records Management list has been improved when a large number of documents have been catalogued.

dbMap/Web - General

Bug Fixes

Bulk update of Quality values has been fixed for well checkshot surveys

Fixed a bug preventing bulk calculation of "Quality" for well checkshot surveys.

Fixed filtering dbMap/Web data list using a map extent from PRO 81124

Fixed a bug preventing data lists is dbMap/Web being filtered using the current map extent in PRO.

Correct Quality statistics now displayed on the Wells dashboard 80933

Fixed a bug causing incorrect quality statistics to be shown on the Wells dashboard. "Unknown" values were previously being reported and "Low" quality records.

Production chart - Water cut calculation has been fixed when multiple wells are charted 81046

The production chart can display water cut % values. The calculation being used previously was correct for single wells, but incorrect when charting multiple wells. The calculation has been fixed so it is now also correct when charting multiple wells.

Correct coordinate system displayed on the directional survey screen

Fixed a bug causing an incorrect coordinate reference system to be shown on the directional survey screen.

CQ - Data quality tab intermittent performance problem resolved 80977

A potential intermittent performance problem with the Data quality tab on well and other screens has been resolved. Previously the Data quality tab could sometimes take 20 seconds or even result in a time out error in some cases.

Data Loaders - Calculations are now performed when loading data 81178

Fixed a bug preventing calculation from being executed when data was inserted via a data loader.

Permit filter on the seismic survey and seismic line screens are now ordered alphabetically 80922

Fixed a bug causing Permits to be listed in a random order in the Permits tree filter on the Seismic Surveys and Seismic Lines screens.

dbMap/Web - PLDB

Bug Fixes

Well Failure Analysis importer - Block and License now always link to specific Permit records with the correct permit type 80954

The Well Failure Analysis data loader supports loading a Block and License associated with a well. These are both created as Permits but with a different permit type. When looking for existing permit records to match on, the permit type was not being taken into account, which means if you had a block and license with the same name, it could incorrectly be linked to the wrong record. This has been fixed so the permit type is always taken into account when attempting to match existing records.

Detailed Release Notes Summary dbMap/Web 2021.2.2

Bug Fixes

dbMap/Web - PLDB

81161 PLDB - Rollup results can be exported

Petrosys Release dbMap/Web 2021.2.2

Detailed Release Notes

dbMap/Web - PLDB

Bug Fixes

PLDB - Rollup results can be exported

81161

Fixed a bug preventing PLDB rollup results from being exported. This was also an issue when exporting from the "Prospects / Prospect Resources and Economics" screen for some prospects.

Detailed Release Notes Summary dbMap/Web 2021.2.1

Enhancements

dbMap/Web - Administration

79387 Simpler workflow for deploying data loaders

dbMap/Web - Client

- Well header data loader Added support for client specific columns (Santos)
- 80530 New security for editing well interpretation data (Santos)
- 80695 Well Header data loader Match by Capricorn UWI (WELL NUM) before WELL NAME (Capricorn only)

dbMap/Web - General

- 80627 Added links between seismic surveys & permits
- 80685 Formation tops loader support added for importing more metadata values and fixed preferred flag
- 80791 Data loaders Treat indicator flags such as PREFERRED_IND & ACTIVE_IND as case insensitive
- 80663 Added support for Obligations
- 80799 Added support for permits in well and seismic cross reference options
- Bota entry screens now have better support for limiting length of data entered for UTF-8 databases
- 80668 Data loader Well alias template Added sample data
- Books Data loading framework Treat as an error if input file doesn't have any rows of data
- 79549 FracDB Added Service Company to R_PROPPANT_TYPE reference screen
- 79590 FracDB Loader Remove "*" from product name on the Product sheet
- 79551 FracDB Loader Treat "NA" as a missing value for numeric values
- 80709 Pontential RM Cron failure for Oracle 19c resolved
- Upgraded GeoServer used for dbMap/Web mapping
- 80616 Well header data loader Update template to be new-style with dynamic units selection

Detailed Release Notes Summary dbMap/Web 2021.2.1

Bug Fixes

dbMap/Web - General

<u>80747</u>	Production Chart - Plot Stream Day Rate as zero when volume is zero/blank
<u>80721</u>	Palynology loader correctly finds formations by name
<u>80672</u>	Well Header Loader - Fixed error running loader when PARENT_WELL_NUM is blank
<u>80762</u>	Seismic Line - Coordinates - Fixed error when filtering by type
<u>80761</u>	Child Stratigraphic Units screen can be accessed via PRO
<u>80680</u>	Well Perforation Save as option no longer gives duplicate record error
<u>80692</u>	Well header data loader - Allow ROW_QUALITY to be updated for existing wells
<u>80797</u>	Paleo Summary Loader - Now supports more flexible linking of Lithology Sample to Well Core
<u>80702</u>	FracDB Loader - Null pointer exception has been fixed
<u>80677</u>	Quality computation allows search term to be entered

dbMap/Web - PLDB

80469 PLDB - Correct MEPS label shown on prospect resources economics screen

Petrosys Release dbMap/Web 2021.2.1

Detailed Release Notes

dbMap/Web - Administration

Enhancements

Simpler workflow for deploying data loaders

79387

Installing a new version of dbMap/Web would typically involve some administrative steps to place some files in a certain location to make the latest version of data loaders available.

From this release going forward, many of those files are now directly included inside the dbMap/Web WAR file.

This release will require the loader directory to be updated, but going forward most changes to data loaders should not require separate steps to make available.

Related to this change, dbMap/Web now has better support for managing client specific versions of data loading template files. If a company modifies a template to customize it for their users, they can now supply that file to Petrosys to incorporate in future dbMap/Web versions delivered to them, or place in a directory where it will persist between dbMap/Web version upgrades. (Note that future enhancements to data loaders could require companies to modify their custom templates).

dbMap/Web - Client

Enhancements

Well header data loader - Added support for client specific columns (Santos) 80491

The well header data loader has been extended to support loading the following Santos specific data values:

- Current operator
- Initial JV
- Current JV
- > Admin. business unit
- > Well intent

New security for editing well interpretation data (Santos)

80530

For Santos only, database and application changes have been made to support a new well security model for Formation tops and Reservoirs.

Well Header data loader - Match by Capricorn UWI (WELL_NUM) before WELL NAME (Capricorn only) 80695

The well header data loader for Capricorn has been changed to attempt matching existing wells in the following order:

- 1. UWI
- 2. Capricorn UWI (WELL NUM)
- 3. Well name

This supports the Capricorn UWI being searched for prior to the Well name search,

Added links between seismic surveys & permits 80627

dbMap/Web now supports creating links between Permits & Seismic surveys. Users can drilldown from a permit to see the linked seismic surveys and lines. The seismic survey and line lists can also be filtered by selecting a permit in the tree filter.

Formation tops loader - support added for importing more metadata values and fixed preferred flag 80685

The Formation tops loader now has the option to import Row quality, Active flag, Created by and Created date values. These columns are in the "Optional columns" worksheet of the import template spreadsheet and can be added to the Tops Input Data worksheet as needed. In addition, the Preferred pick column has been fixed so that it now loads data. Previously the Preferred pick values were ignored.

Data loaders - Treat indicator flags such as PREFERRED_IND & ACTIVE_IND as case insensitive 80791

Indicator flag columns such as PREFERRED_IND and ACTIVE_IND are now automatically converted to uppercase. This means lowercase 'y' and 'n' values will no longer need to be modified.

Added support for Obligations

80663

A new Obligations capability has been added to dbMap/Web. This capability allows companies to capture things they are required to during a well's life cycle and maintain a record of whether they have fulfilled the requirement.

Added support for permits in well and seismic cross reference options

The Cross Reference filter on the Well and Seismic survey and Seismic line lists now support filtering based on a selection of permits.

Data entry screens now have better support for limiting length of data entered for UTF-8 databases 80811

When dbMap/Web is running against a database using a UTF-8 character set, in some cases users were allowed to type more characters into a data field than could be stored in the database. Users would then receive an error message when attempting to save the data. dbMap/Web has been updated on how we determine the number of characters that can be entered to limit users entering too many characters in the user interface.

Data loader - Well alias template - Added sample data 80668

The well alias data loader template now includes some sample data to help guide users.

Data loading framework - Treat as an error if input file doesn't have any rows of data 80648

A user may sometimes select the wrong file to be loaded without any data, for example selecting a template file where no data has been added.

The new-style data loaders will now report an error to make it easier to see if a file with no data was loaded.

FracDB - Added Service Company to R_PROPPANT_TYPE reference screen

79549

It is now possible to specify the service company on the reference screen for editing Proppant types. This is used as part of the FracDB module.

FracDB Loader - Remove "*" from product name on the Product sheet

79590

In some cases the codes and names on the product sheet for Frac data would contain a trailing "*" character. These characters are not actual data but intended by the service company to highlight certain entries to readers of a report. The FracDB loader has been updated to ignore trailing '*' characters in product codes and names.

FracDB Loader - Treat "NA" as a missing value for numeric values 79551

The FracDB loader has been updated to treat "NA" as a missing value if it is found in spreadsheet cells where a numeric value is expected.

Pontential RM Cron failure for Oracle 19c resolved 80709

A potential failure of the Records Management (RM) cron job to catalog files overnight for Oracle 19c databases has been resolved. Previously, if there were a large number (500,000) files to catalog, an Oracle 19c database could run out of temporary tablespace due to query optimization differences compared with earlier versions of Oracle.

Upgraded GeoServer used for dbMap/Web mapping77853

This release includes an upgrade to the latest version of GeoServer which is used as part of the mapping in dbMap/Web.

Notes on upgrading GeoServer as part of the release are included in the installation guide.

Well header data loader - Update template to be new-style with dynamic units selection

The well header data loader has been upgrade to use a new-style template for loading data. It supports the units of the data being specified at the top of the file, as well as using the standard styling available on our other new data loaders.

In addition to the template change, the loader now supports loading the following additional data values:

- Surface location source
- Surface location confidence/quality
- > Bottom hole location source
- Bottom hole location confidence/quality

dbMap/Web - General

Bug Fixes

Production Chart - Plot Stream Day Rate as zero when volume is zero/blank 80747

On the well production chart, null values are now treated as '0'.

Palynology loader correctly finds formations by name 80721

The palynology data loader was reporting an error when matching on formations due to finding duplicates where a formation and play interval had the same name. The loader has been changed to only include formations in the search.

Well Header Loader - Fixed error running loader when PARENT_WELL_NUM is blank

The well header data loader supports an optional column 'PARENT_WELL_NUM'. If a user included this optional column in their data load but did not populate the column with a value it resulted in an error for that row. This has been fixed so blank values are allowed.

Seismic Line - Coordinates - Fixed error when filtering by type 80762

On the seismic line coordinates screen, if a user filtered by the type of coordinate (eg. CMP, Source, etc) in the tree filter an error message would be displayed and no data would be shown. This has been fixed so the filter correct works and displays matching data.

Child Stratigraphic Units screen can be accessed via PRO 80761

If dbMap/Web was launched from within Petrosys PRO, it was not possible to navigate to the 'Child Stratigraphic Units' screen. It was possible in a standard web browser. This has been fixed so users can also access the screen from within Petrosys PRO.

Well Perforation Save as option no longer gives duplicate record error

80680

The Well Perforations panel "Save as" option no longer gives an error about another record existing in the database with the same identifier.

Well header data loader - Allow ROW_QUALITY to be updated for existing wells

The well header data loader previously allowed the ROW_QUALITY column to be loaded for new wells, but it did not support the ROW_QUALITY value being updated if the user wanted to update the confidence value on existing wells.

ROW_QUALITY is now used by the data loader irrespective of inserting a new well, or updating an existing well.

Paleo Summary Loader - Now supports more flexible linking of Lithology Sample to Well Core

The palynology data loader has been changed so a matching Source is no longer required when finding a Well Core record to link to a lithology sample.

FracDB Loader - Null pointer exception has been fixed 80702

The FracDB loader could sometimes have an error when processing particular data and resulting in a 'NullPointerException' being shown in the data load results log. This has been fixed.

Quality computation allows search term to be entered 80677

Fixed a bug preventing the "Quality computation" option being used if a search terms was entered in the main "Common fields" search input.

dbMap/Web - PLDB

Bug Fixes

PLDB - Correct MEPS label shown on prospect resources economics screen

80469

Fixed a bug causing an incorrect MEPS label to be shown on the prospect resources economics screen.

Enhancements

dbMap - Client

- 80470 dbMap Wells Performance improvement when updating well headers (Origin only)
- PLDB reports re-migrated to fix column aliases (Santos only)
- 80395 FRAC STAGE SANDS VW database view fixed (Santos only)

dbMap/Web - Client

- 80468 Enable SEIS_LINE_GEOMS foreign key constraint to SEIS_LINE (Santos only)
- 80583 PS_GET_FORMATION database function improvements
- New custom fields added to well header (Capricorn)
- 80542 Well header loader support for matching parent well on Capricorn UWI added

dbMap/Web - General

- 80036 Data Exchange New framework Reservoir summaries loader
- 80492 Data Exchange New framework Well aliases loader
- 80525 Well header data loader Add support for creating Pad name (SF_PAD) reference data
- 79480 Data Exchange New framework Directional Survey loader
- 76062 Data Exchange Administrators can now write scripts to reformat input data file before loading
- 79579 Data Exchange New framework Checkshot survey loader
- 75501 Data Exchange New framework Formation tops loader
- 79550 FracDB Reference data screen available for R_FRAC_STEP_ACTIVITY_TYPE
- 80632 Platform added to well header data screen
- 79276 Well Test RFT Rate of change Qualifiers are now shown alongside the numeric value

Detailed Release Notes

dbMap - Client

Enhancements

dbMap Wells - Performance improvement when updating well headers (Origin only) 80470

For Origin, a significant performance improvement has been achieved for updating well header details other than the well name, for wells that are linked to a large number of RM items. Previously changing any value on the well header would cause an update of links to RM items. It now only updates links to RM if the well name itself is modified.

PLDB reports re-migrated to fix column aliases (Santos only) 80502

The Santos migration to PPDM/Data Hub brought across existing Prospects & Leads (PLDB) reports, however there was a problem where column aliases did not retain double quotes around them, making some of the queries invalid. The PLDB queries have been re-migrated from the COOP database as part of the database upgrades for this version to fix this.

FRAC STAGE SANDS VW database view fixed (Santos only) 80395

The FRAC_STAGE_SANDS_VW database view has been fixed and updated to support the new reservoir summaries structure for PPDM used by Santos.

dbMap/Web - Client

Enhancements

Enable SEIS LINE GEOMS foreign key constraint to SEIS LINE (Santos only)

80468

For Santos only, the database foreign key constraint from SEIS_LINE_GEOMS to SEIS_LINE has now been enabled, and any orphaned records deleted.

PS_GET_FORMATION database function improvements 80583

The database function PS GET FORMATION has had the following improvements:

- > The input parameter i_nbr_tops can now be used to specify the maximum number of formation names returned, and has a default of 10. Previously it only return 1, or all formations.
- > Additional input parameters have been added to support optional filtering by
- > Fixed duplicate formations sometimes being reported.
- > The output is truncated at 1000 characters, instead of giving an Oracle error when too many formations are found...

New custom fields added to well header (Capricorn)80543

For Capricorn only, the well header now has new fields for Quadrant, Primary drilling & wireline contractors, and up to 5 Partner equity values.

The Well Failure Analysis loader has also been extended to support importing the fields.

Well header loader - support for matching parent well on Capricorn UWI added 80542

For Capricorn only, the well header loader has been updated to try matching the parent well based on the Capricorn UWI (PARENT_WELL_NUM) field if populated in the input spreadsheet.

Data Exchange - New framework - Reservoir summaries loader 80036

A new data loader has been created for loading Reservoir summaries.

Data Exchange - New framework - Well aliases loader 80492

A new data loader has been created for loading well aliases. It supports loading a list of aliases linked to wells by either a UWI or well name.

Well header data loader - Add support for creating Pad name (SF_PAD) reference data

The well header data loader can link wells to well pads. If a pad name is listed that does not currently exist, the loader will now create a pad(SF_PAD) record and link it to the well.

Data Exchange - New framework - Directional Survey loader 79480

A new data loader has been created for loading directional surveys. It is based on our new data loading framework and includes several advances over the previous loader including:

- Better reporting of errors
- > Reporting of progress and ability to cancel loading run.
- ➤ Ability to supply diagnostics to aid investigating any issues.

Data Exchange - Administrators can now write scripts to reformat input data file before loading 76062

dbMap/Web data loaders expected input data files to be in a particular format. New functionality has been added to the framework to allow files to be converted on the fly to the expect format as they are loaded. An example use case is to support directly loading data provide by a service company in a different format.

To make use of the functionality, someone who is familiar with python or another programming language can write a script that converts a file in a different format into the expected format.

Petrosys professional services an also create these scripts.

If you are interested in more information on how this new functionality works, see the help topic 'dbMap/Web – Data Exchange – Input File Convert Options'.

Data Exchange - New framework - Checkshot survey loader 79579

A new data loader has been created for loading checkshot surveys. It is based on our new data loading framework and includes several advances over the previous loader including:

- > Better reporting of errors
- > Reporting of progress and ability to cancel loading run.
- Ability to supply diagnostics to aid investigating any issues.

Data Exchange - New framework - Formation tops loader 75501

A new data loader has been created for loading formation tops. It is based on our new data loading framework and includes several advances over the previous loader including:

- > Better reporting of errors
- Reporting of progress and ability to cancel loading run.
- Ability to supply diagnostics to aid investigating any issues.
- Calculating and populating TVD values if missing during the import.

FracDB - Reference data screen available for R_FRAC_STEP_ACTIVITY_TYPE

79550

A data screen for editing the list of Frac step activities types is now available under the Admin/Reference tables/PPDM menu.

Platform added to well header data screen 80

Platform is now available on the well header screen to view & edit the platform assigned to a well. New reference screens have also been added to be able to create and edit Platform details and Platform types.

Well Test RFT Rate of change - Qualifiers are now shown alongside the numeric value 79276

The well test RFT screen Rate of change supports an optional qualifier being stored. For example to represent '<0.02' or '>0.01'. The qualifier is stored in a different column to the numeric value and previously was shown on the screen on a separate row.

The qualifier and the numeric value are now displayed on the data screen as a single value to the user. Values can be entered with a qualifier (e.g. '<0.02') and it will automatically be saved in the relevant columns.

The data loader for RFT data already supported this behaviour.

Bug Fixes

dbMap/Web - General

80510 Well path functions in dbMap/Web now return values consistent with PRO

dbMap/Web - PLDB

80540 PLDB - Prospect Resources And Economics screen loads correctly

Detailed Release Notes

dbMap/Web - General

Bug Fixes

Well path functions in dbMap/Web now return values consistent with PRO 80510

Fixed bug with TVD calculations for wells that have multiple directional surveys with the same survey ID, so that the values now match PRO

dbMap/Web - PLDB

Bug Fixes

PLDB - Prospect Resources And Economics screen loads correctly 80540

Fixed a bug preventing the resources section on the "Prospects & Leads / Prospect Resources and Economics" screen from loading.

Enhancements

dbMap/Web - Client

80384 Cairn labels and logos have been changed to Capricorn (Capricorn)

dbMap/Web - General

80412 Security updates for third party libraries

dbMap/Web - PLDB

80404 PLDB - Drilling opportunities - CRS can be manually selected

Bug Fixes

dbMap/Web - General

80400 Well path functions in dbMap/Web return values consistent with PRO

Detailed Release Notes

dbMap/Web - Client

Enhancements

Cairn labels and logos have been changed to Capricorn (Capricorn) 80384

Labels and logos referencing Cairn Energy have been changed to Capricorn.

dbMap/Web - General

Enhancements

Security updates for third party libraries

80412

A number of third party libraries have been updated to include the latest security updates.

dbMap/Web - General

Bug Fixes

Well path functions in dbMap/Web return values consistent with PRO

80400

Fixed a bug in dbMap/Web that was causing TVD calculations to return a different value compared to PRO.

dbMap/Web - PLDB

Enhancements

PLDB - Drilling opportunities - CRS can be manually selected 80404

Fixed a bug on the "Prospects & Leads / Drilling Opportunities" screen that was causing the Geographic CRS to be read only.

Bug Fixes

dbMap/Web - General

80409 Upgraded log4j library to version 2.16

Detailed Release Notes

dbMap/Web - General

Bug Fixes

Upgraded log4j library to version 2.16

80409

log4j 2 library has been upgraded to version 2.16 which fully disables functionality causing a security vulnerability - See CVE-2021-45046 for more details.

Bug Fixes

dbMap/Web - General

80394 Upgraded log4j 2 library

Detailed Release Notes

dbMap/Web - General

Bug Fixes

Upgraded log4j 2 library

80394

log4j 2 library has been upgraded to version 2.15 which disables functionality causing a security vulnerability - See CVE-2021-44228 for more details.

Enhancements

dbMap - Client Well test DST database view now returns fluid recovery values dbMap/Web - Client <u>80316</u> PLDB Economic Extensions (Triangle Energy) dbMap/Web - General Gradient Survey Well Test Loader 80041 MPLT Well Test Loader <u>80170</u> Routine Core Analysis Loader - Added support for more Well Core related columns <u>80091</u> RFT Well Test Loader - Prevent loading spreadsheet if matching data exists 80271 Paleo Summary Loader - Allow multiple interpretations for a single sample dbMap/Web - PLDB PLDB - Attachments enabled on chronology screens

2 entries

Detailed Release Notes Summary dbMap/Web 2021.1.3

Bug Fixes

dbMap/Web - General

80185 Well Header Loader - TD basin and formation can be loaded using names instead of IDs

Paleo Summary Loader - Does not insert missing SOURCE reference values

Detailed Release Notes

dbMap - Client Enhancements

Well test DST database view now returns fluid recovery values

80373

The PPDM38 well test DST database view PS_WT_PRE_COMPLTN_PRESS_TEST now returns Fluid recovery values. Previously the FLUID_RECOVERY_DESC column values were always NULL.

<u>dbMap/Web - Client</u>

Enhancements

PLDB Economic Extensions (Triangle Energy)

Additional fields have been added to the "Economics" tabs on the Prospect header and Prospect Chronology screens.

dbMap/Web - General

Enhancements

Gradient Survey Well Test Loader

80050

80316

Added a data exchange loaders to support loading Gradient Survey data

MPLT Well Test Loader

80041

Added a data exchange loaders to support loading MPLT data

Routine Core Analysis Loader - Added support for more Well Core related columns 80170

The Routine Core Analysis Loader has been extended to support additional columns related to well core:

- > Recovered amount and associated unit
- > Total shot count
- Shot recovered
- Lithology description
- Well core remark

RFT Well Test Loader - Prevent loading spreadsheet if matching data exists 80091

The RFT Well Test loader has been modified to prevent data being loaded if matching data already exists. The loader will also only update the database if all rows in the spreadsheet can be loaded without error.

Paleo Summary Loader - Allow multiple interpretations for a single sample

80271

The Paleo Summary data loader has been modified to allow more than one interpretation to be loaded against a Lith Sample.

dbMap/Web - General

Bug Fixes

Well Header Loader - TD basin and formation can be loaded using names instead of IDs 80185

Fixed a bug causing the well header loader to only accept IDs for the TD_STRAT_NAME_SET_ID and TD_STRAT_UNIT_ID input columns. Basin and formation names can now be used to set these fields.

Paleo Summary Loader - Does not insert missing SOURCE reference values

Fixed a bug preventing the Paleo Summary Loader from completing successfully if an imported SOURCE value was missing in the database. The loader has also been changed to not insert missing SOURCE values.

dbMap/Web - PLDB

Enhancements

PLDB - Attachments enabled on chronology screens 80382

The attachments options has been enabled on both the prospect and target chronology screens.

Enhancements

dbMap - Client

80086 Routine Core Analysis view now available

dbMap/Web - Client

80069	PLDB - Commercial evaluation event added with additional economic attributes (Beach)	
<u>80320</u>	Formation TVDs now computed for non-vertical wells without directional surveys (Santos only)	
<u>78669</u>	WFA - Changed the use of UWI/Well number to allow control the well identifier (Cairn)	
80307	FracDB - Added support for other service companies (Origin)	
80208	The "What's New" screen has been enabled by default (Santos)	

Bug Fixes

dbMap/Web - Client

80265 Well header JV names are now shown instead of IDs (Santos only)

dbMap/Web - General

80310 Formation tops does not show a TVDSS value when the TVD is blank

dbMap/Web - PLDB

80281 PLDB - Resource computation - Metric/Imperial button converts all values

Detailed Release Notes

dbMap - Client

Enhancements

Routine Core Analysis view now available

80086

The new database view PS_ROUTINE_CORE_ANALYSIS is now available to enable simpler querying of the Routine core analysis data in PPDM.

<u>dbMap/Web - Client</u>

Enhancements

PLDB - Commercial evaluation event added with additional economic attributes (Beach) 80069

A "commercial evaluation" event has been added to the "Prospects & Leads / Prospect Event" screen, with support for additional economic attributes.

Formation TVDs now computed for non-vertical wells without directional surveys (Santos only) 80320

For Santos only, formation tops TVD values are now computed for wells that did not have a preferred directional survey and weren't flagged as vertical wells.

WFA - Changed the use of UWI/Well number to allow control the well identifier (Cairn) 78669

Change the use of "Well number" to be used as the main unique identifier when loading WFA data against wells. The Field has been added to lists/screens and labelled as "Cairn UWI".

FracDB - Added support for other service companies (Origin) 80307

Service company selection on FracDB screens has been changed to lookup companies that are configured as a having fracking service. The same selection is also available when running the FracDB data loader.

The "What's New" screen has been enabled by default (Santos)

80208

Enabled the "What's New" feature in the Santos Data Hub configuration.

dbMap/Web - Client

Bug Fixes

Well header JV names are now shown instead of IDs (Santos only) 8020

For Santos only, the dbMap well header now always shows JV names. Previously if a JV was flagged as inactive, it showed the ID of the JV instead of the name.

dbMap/Web - General

Bug Fixes

Formation tops does not show a TVDSS value when the TVD is blank $_{80310}$

Fixed a bug causing the TVD SS values on the "Wells / Tops" screen to display as "1" when the associated TVD value was blank.

dbMap/Web - PLDB

Bug Fixes

PLDB - Resource computation - Metric/Imperial button converts all values

Fixed a bug preventing values greater than 1,000 from being toggled between metric and imperial units on the Prospects & Leads Resource Computation screen.

Enhancements

dbMap/Web - Client

 $\frac{79967}{}$ dbMap PPDM3.8 - Well Production data acqusition flag is not kept up to date

dbMap/Web - General

79405 Added a summary report option to selected data types lists

79903 Data loading - General support for missing values for numeric fields

Bug Fixes

dbMap/Web - Client

79934 RFT - Added Repeatability and Quality fields to screen (Santos)

dbMap/Web - General

76901 Fixed display of Permits with an ID that contained a reserved character

dbMap PPDM3.8 - RFT Well tests - Add test type to list

80108 FracDB Loader - PPA values containing a trailing space are correctly handled

RCA Loader - Core analysis details are populated by the loader

79963 Text fields correctly handle values with double quotes

Detailed Release Notes

dbMap/Web - Client

Enhancements

dbMap PPDM3.8 - Well Production data acqusition flag is not kept up to date

The data acquisition flag for Well production data on the dbMap PPDM3.8 Well header dialog is now automatically set to Y when production data is created for a well. Previously it was not set and it would give an error when trying to edit a Well header when the acquisition flags were not being modified.

dbMap/Web - Client

Bug Fixes

RFT - Added Repeatability and Quality fields to screen (Santos)

79934

Adding Repeatability and Quality fields to the "Wells / RFT" screen.

<u>dbMap/Web - General</u>

Enhancements

Added a summary report option to selected data types lists 79405

A "Summary Report" option has been added to the Cores, Paly/Paleo, Production and Well Test screens. The option will only be shown if a reports exist with the following names:

- Summary Report: Core
- Summary Report: Paleo
- Summary Report: Production
- Summary Report: Well Test DST
- > Summary Report: Well Test Gradient Survey
- Summary Report: Well Test LET
- Summary Report: Well Test MPLT
- Summary Report: Well Test Pressure Tests
- Summary Report: Well Test RFT
- Summary Report: Well Test Sonolog

Data loading - General support for missing values for numeric fields 79903

Special functionality has been added when processing numeric values for missing values our newer data loaders such as well header & core analysis.

When special values are seen in the input data such as 'NA', 'N/A', and '-' that will be treated as blank/missing values.

dbMap/Web - General

Bug Fixes

Fixed display of Permits with an ID that contained a reserved character

Fixed a bug on the Permits screen that prevented records being loaded if the ID column contained a colon.

dbMap PPDM3.8 - RFT Well tests - Add test type to list 79916

Test type column has been added to the list on the RFT well test screen.

FracDB Loader - PPA values containing a trailing space are correctly handled

Fixed a bug causing an error to be shown by the FracDB loader if the PPA (concentration) value contained a trailing space character.

RCA Loader - Core analysis details are populated by the loader 80127

Fixed a bug that was preventing "Grain density", "Oil saturation" and "Water saturation" from being populated by the routine core analysis (RCA) loader.

Text fields correctly handle values with double quotes 79963

Fixed a bug causing text values containing a double quote to be truncated at the quote character when editing.

Petrosys Release Notes

Enhancements

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- 74608 Records Management Improved error message when LibreOffice is not installed or configured on the server
- 75969 Runtime parameter support improved for complex queries

dbMap/Web - Client

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dbMap/Web - General

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- Seismic coordinates screen Screen will now load if you navigate from survey->line->coordinates and then Line->coordinates
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- Wells Dashboard Data population displays correct summary information
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- 79335 Facilities Can now edit records associated with lines and polygons
- 78343 Fixed incorrect TVD SS value displayed while adding a new formation top record.
- 78896 Formation and reservoir lookups are now sorted chronologically by default
- 79076 Mapping Map now loads successfully if the user does not have any PLDB roles
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- 79875 Improvements to core analysis screens Multiple user interface issues fixed

dbMap/Web - PLDB

- 79391 PLDB Target dependencies screen now shows correct individual probability factors for targets with scenarios
- PLDB Dashboard "Prospect by basin" number of prospects is now consistent between the data table and chart
- Mapping PLDB Target layer can be displayed on the map
- 79431 PLDB Filtering prospects by "Region/Country" now correctly limits the results

Detailed Release Notes

Configuration - Licensing Enhancements

dbMap/Web 2021.1 licensing - New license file required

dbMap/Web 2021.1 requires a new license file. Please obtain your license file by logging on to the Petrosys Client Portal or contacting Petrosys Support.

dbMap/Web - Administration

Enhancements

Age and sequence number have been added to the formation reference screen

Age and sequence number have been added to the formation reference screen. When populated, these fields can now be used by people writing reports to list data in a particular order.

Increased the size of stored queries to support 24,000 characters

The size of stored reports and queries in dbMap has been increased to support up to 24,000 characters.

dbMap/Web - Administration

Bug Fixes

Change current user password functionality now supports passwords 78320 containing a space character

The administration option to allow users to change their password would previously display an error message if the new password contained a space character. The option has been changed to support passwords that includes a space character.

Now able to load a new license file via the license error page

Previously when you had an expired license, an error page would appear that included an option to upload a new license file but the upload would not succeed. The error screen has been fixed to successfully upload.

Records Management - Improved error message when LibreOffice is not installed or configured on the server

Records Management makes use of LibreOffice installed on the server machine for some functionality. dbMap/Web now displays a more informative error message if LibreOffice is not installed or not configured correctly.

Runtime parameter support improved for complex queries 75969

The support for multiple runtime parameters with separators in complex user defined queries has been improved

dbMap/Web - Client

Enhancements

dbMap/Web now contains links to epSHARE data (Santos)

79505

dbMap/Web has been updated to contain links to epSHARE data for multiple data types (Santos only).

Updated WebGIS URL (Santos)

78385

WebGIS links have been updated to use the client provided URL.

Wells / Casing/Liners - Hole depth caption changed to Section TD (CCED)

7930

The "Hole depth" label on the "Wells / Casing/Liners" screen has been changed to "Section TD".

dbMap/Web - Client

Bug Fixes

Production - Removed incorrect formatting of the production string number (Santos) 78983

Removed formatting on the production string number on the production screen. The formatting was previously causing the number to be displayed as "#####".

dbMap/Web - General

Enhancements

Added support for drillers and loggers depths 77785

Support has been added for the capture of both drillers and loggers depths throughout the application.

Data Exchange - Added routine core analysis data loader 79099

A new data exchange option has been added to load Routine Core Analysis data

Production charts - Additional options and data available to plot 77829

The production charts have been extended to allow plotting of additional information alongside the production data. Changes include:

- > Charting of data against cumulative oil or gas production
- > Plot oil, gas and water calendar stream day rates
- Plot LET data
- Plot well activities and fracture data
- Group data by production string or production string zone

Data Exchange - Added palynology data loader 78673

A new data exchange option has been added to load Palynology data

Attachments are now supported for well perforations78140

The well perforations screen now allows attachments to be stored against records. This allows files, images, notes or a links to websites to be associated with a perforation.

Directional Survey / Survey points - Extra columns can now be added to the list

When viewing directional survey points it is now possible to dog leg severity and vertical section columns to the list. You can change the columns being displayed using the icon on the top left hand side of lists.

Improved support for oil & gas shows information 77809

An improved oil & gas shows screen is now available for all clients using the PPDM wells module.

Improved user interface for managing well log data77715

The user interface used to manage well log data has been reworked to allow in improved flow for data entry and easier access to the required data. Changes including splitting the well log and log job information across two screens to remove the requirement to enter data in a certain order.

Seismic processed lines are now available for advanced search 78242

Seismic processed lines are now available for filter selection in advanced search.

Mapping - The set of default base layers has been updated 78055

The default base layers on the web map have been reviewed and updated. Changes include:

- Mundialis layers have been replaced with equivalent layers hosted by Terrestris
- > New layers hosted by eAtlas have been made available
- New layers hosted by GEBCO have been made available

Please contact Petrosys support if there are other locally hosted or publicly accessible services you would like to make available on the map.

Records Management can now preview Outlook .msg files 78926

Outlook email messages can be saved to .msg files. Some clients save and catalog relevant emails alongside related unstructured data in dbMap/Web Records Management. It is now possible to preview the text from the .msg files directly within the browser without having to download and open in another application.

Added preferred indicator to well sample analysis grids 79594

A preferred indicator column has been added to each of the analysis type grids under "Wells / Samples". The preferred indicator is set against the analysis report and applies to all analysis linked to that report.

Added support for new Well Sample Analysis data types 74838

New screens have been provided to handle well sample analysis data:

- > Conventional core analysis Routine core analysis; Continuous core analysis
- > Geochemistry Rock evaluation; Vitrinite; Liquid chromatography; Lithology; Saturate; Elemental
- Coal core analysis Adsorption isotherm; Desorption; Gas composition; Isotope; Petrology; Proximate; Rock mechanics; Ultimate; (Previously already available to some clients)

Data loaders have also been provided for Routine Core analysis and all of the analysis types grouped under "Coal core analysis"

All data type grids now include unit annotation in column labels 79296

All data type grids throughout the application have been updated to include a unit annotation in the column labels.

Data Exchange - Well header loader based on new framework 79372

A new data loader has been created for loading well headers. It is based on our new data loading framework and includes several advances over the previous loader including:

- Better reporting of errors
- Reporting of progress and ability to cancel loading run.
- ➤ Ability to supply diagnostics to aid investigating any issues.

Directional Surveys and Checkshots screens now support attachments

77876

The directional survey and checkshot survey screens now support storing attachments against the surveys. This allows files, images and web links to be associated with the surveys.

FracDB - Added completion status to the Frac panel 79844

Added "Completion status" to the "Wells / Well Treatment (Frac) / Treatment Stage / Frac" panel.

Mapping - Objects can now be selected using a hand drawn polygon

7744

dbMap/Web allows users to draw a polygon on the map to filter a list of objects such as wells, seismic lines or permit outlines. Previously mapping only supported drawing a rectangle to select the objects, but now a hand drawn polygon of any shape can also be drawn. You can toggle between Rectangle and 'Free form drawing' using the selection at the bottom of map when filtering a list by map extent.

Mapping functionality is now enabled when launching dbMap/Web screens from Petrosys PRO 73011

Previously when dbMap/Web screens were launched from Petrosys PRO, mapping functionality within dbMap/Web was not enabled. The maps within dbMap/Web are now enabled when launched in this manner, including the location maps on some data screens.

New and updated report queries included in dbMap/Web 2021.1 release

79627

Some new default queries and reports are included in the 2021.1 release including a Prospect level resources seriatim report and some Records Management reports.

Records Management can now preview zip files 78935

The Records Management module within dbMap/Web can now preview catalogued Zip files by showing a listing of the files inside the archive without having to download the file from the server. This makes it possible for users to quickly check if files of interest are included in an archive without having to download.

Data loading framework - Multiple improvements supported for new data loaders 79528

The new data loading framework in dbMap/Web has been enhanced to support several new features including:

- Support unit conversion
- > Support for caching to reduce the number of queries being run
- > Ability to reformatting dates if stored in a way not recognized by Excel
- Ability to disable CQ for a data load

New screens for capturing detailed remarks for well logs and log curves

79873

New screens are now available to capture multiple remarks for well log and well log curve records.

dbMap/Web - General

Bug Fixes

Gas Composition - Sample ID can now be edited 79147

Fixed a bug preventing the Sample ID being changed on the Gas Composition screen.

Seismic coordinates screen - Screen will now load if you navigate from survey->line->coordinates and then Line->coordinates 79319

If you navigated from the Seismic/Seismic surveys list and then drilled down through the 2D lines for a survey, to the coordinates for a line the coordinate screen would work correctly. However, if you then navigated from Seismic/Seismic lines and then drilled down to coordinates the screen would not load. This has been fixed so that you can drilldown to the coordinates screen from both menus in the same dbMap/Web session.

Well Failure Analysis Data Loader - Can now load wells with a blank well status

Previously the Well Failure Analysis data loader would flag data as having an error if the well status was blank. Now data that does not have a well status can be loaded successfully.

Wells Dashboard - Data population displays correct summary information

Fixed a bug on the Wells dashboard that caused incorrect values to be displayed on the data population summary chart.

Special HTML characters are now displayed correctly when contained in data on the Core Analysis screens 79146

Previously data that contained some special characters would not display correctly on the screen. They were edited and saved correctly. The screens have been updated to correct display special characters.

Well log viewer: Added negative value warning when track scale set to logarithmic.

A warning is now displayed when a track scale is set to logarithmic and it contains a log curve with non-positive values. The curve will not be displayed in this case.

Downhole diagram now displays shoe depths for casings 79082

The well downhole diagram now displays the shoe depths of casings rather than the base depth.

Well log viewer: Mnemonics containing the string MD incorrectly appeared as a depth curve. 79151

The well log viewer incorrectly assumed that log curves with a mnemonic containing 'MD' was a depth curve. The viewer has been changed to no longer include that check as part of determining depth curves.

Facilities - Can now edit records associated with lines and polygons 79335

Previously you would get an error if you tried to edit any attribute for a facility which was associated with a polygon or line and the Geographic CRS was not blank. This has been fixed and the Facilities dialog no longer shows the Geographic CRS, and latitude/longitude if the facility type is a polygon or line.

In addition to this, the latitude/longitude shown for Facilities that support points are now kept in sync when a geometry is imported.

Fixed incorrect TVD SS value displayed while adding a new formation top record. 78343

The top and base TVD SS values are now computed correctly when adding a new formation top record.

Formation and reservoir lookups are now sorted chronologically by default

Formation and reservoir lookups are now sorted chronologically by default. This makes use of the ordinal age code being populated for the formation and reservoir reference data.

Mapping - Map now loads successfully if the user does not have any PLDB roles

Fixed a bug causing an error on the map if the user had not been assigned any roles related to Prospects & Leads.

Records Management dashboard - Hover hint fixed for the counts showing the number of catalogued items 77394

When you hovered over the number of catalogued items at the top of the dashboard, you would see weirdly formatted text appear in the popup hover hint for the numbers. This has been fixed.

Improvements to core analysis screens - Multiple user interface issues fixed 79875

There have been multiple improvements for some user interface issues on the Core analysis screens. These include:

- > Better support for mandatory values.
- > NaN being displayed instead of a blank value in some cases
- > Better support for hover hints when your mouse hovers over a field.
- > Improved scrolling when opening screens.

dbMap/Web - PLDB

Enhancements

Asset Type is now available as a filter on the PLDB Dashboard 78623

Asset Type is now available in the list of filters on the PLDB Dashboard.

PLDB - New compute method for Reserves to enter Sales gas 79300

The new compute method "Deterministic-Allowing direct entry of Sales Gas" has been added for use on the Prospect Target Reserves resource computation screen. As the name suggests, this method allows entering Sales gas values directly, instead of computing it from Raw gas and shrinkage.

dbMap/Web - PLDB

Bug Fixes

PLDB - Target dependencies screen now shows correct individual probability factors for targets with scenarios 79391

If a prospect target has scenarios with prospective resources defined, the Target dependencies panel now correct shows the individual probability factor from the target resource computation. Previously it was showing the probability factor from the first scenario belonging to the target. This was just an issue with the value shown on the Target dependencies panel and did not affect the Prospect rollup computation.

PLDB Dashboard - "Prospect by basin" number of prospects is now consistent between the data table and chart 78387

On the PLDB dashboard the chart for displaying the number of prospects by basin was correct, but the data table listing the counts by basin was not correct. The data table has been fixed and now matches results shown in the chart.

Mapping - PLDB Target layer can be displayed on the map 78716

Fixed a bug that was preventing the Target layer from being added to the web map.

PLDB - Filtering prospects by "Region/Country" now correctly limits the results

Fixed a bug causing an incorrect set of prospects to be returned when filtering using the "Region / Country" filter on the prospect header.