শূল PETROSYS

SOFTWARE RELEASE NOTES

dbMap/Web Version 2021.1.7



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:

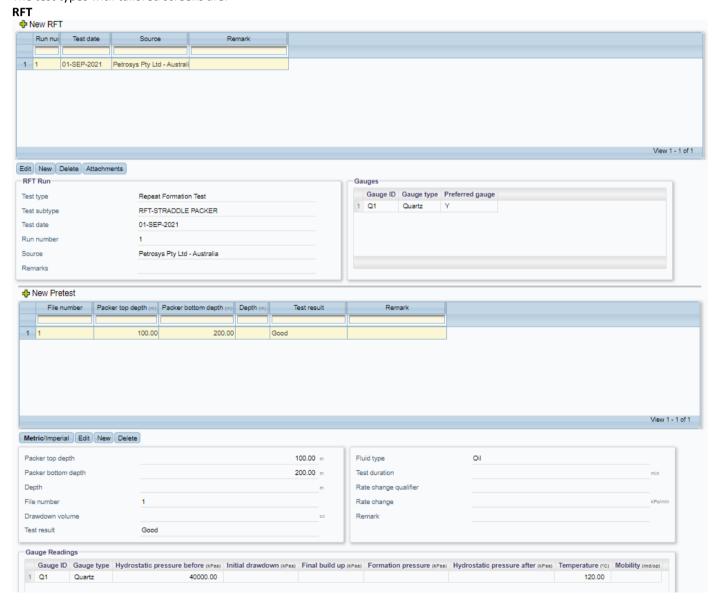
- FracDB manage well stimulation data
- Well Spec Card manage the systematic capture, approval and publishing of pre-drill well data.

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:



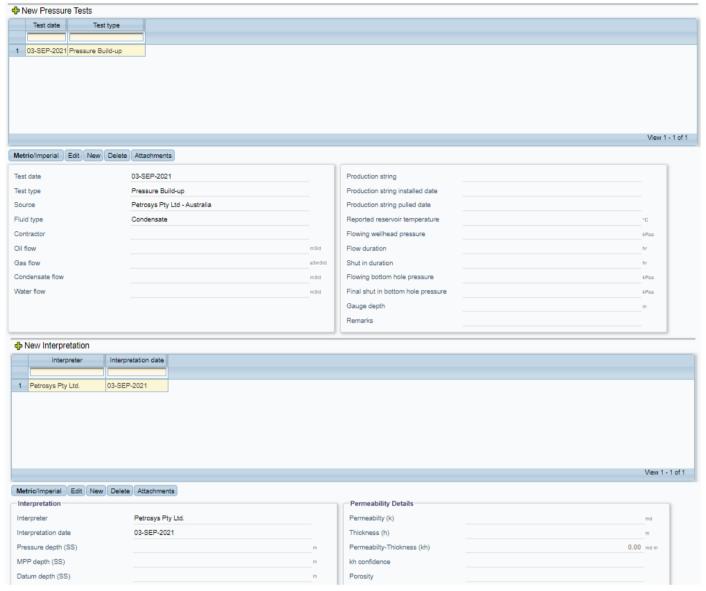
DST

Test Details Test number 1000.00 m Top depth (logger) 1030.00 m Test type Drillstem Test Base depth (logger) DST-HOOK WALL PACKER Top depth (driller) 02-SEP-2021 Base depth (driller) Test result Lost seal Source Petrosys Pty Ltd - Australia Condensate Misrun reason Contractor Remarks Fluid recovery Flow Results Flow Temperature Oil Oil API Gas No gas to surface Condensate m3/d Condensate API Water R_w Ωm Length Top choke Temperature Water cushion Ωm Bottom choke Mud filtrate Fluid time to surface Surface flow pressure Hole temperature Hole temperature depth Bottom gauge depth

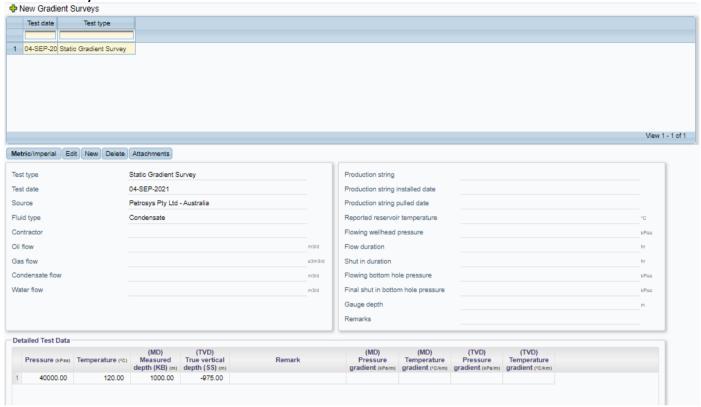
Pressure Buildup

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

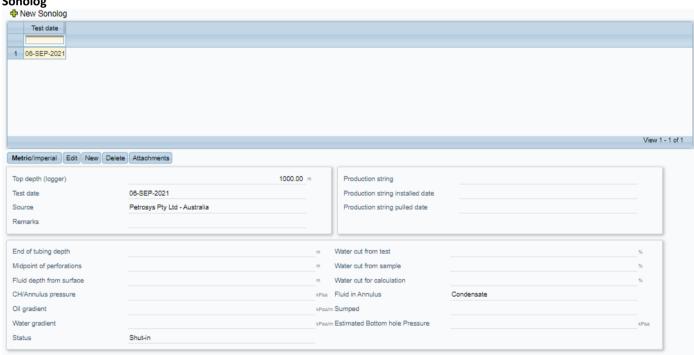
Pressure Tests



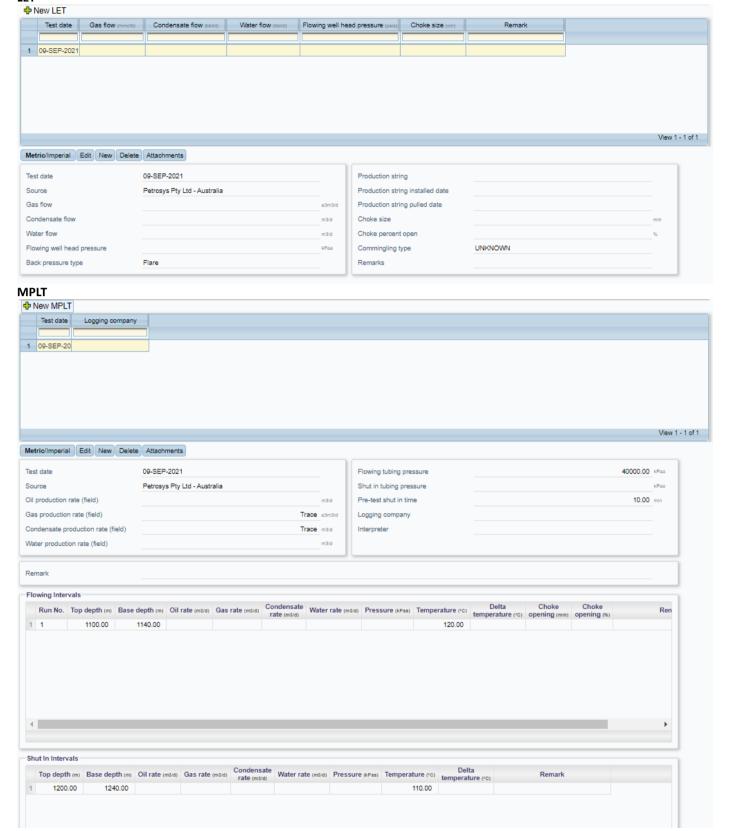
Gradient Surveys



Sonolog







Core / Sample Analysis

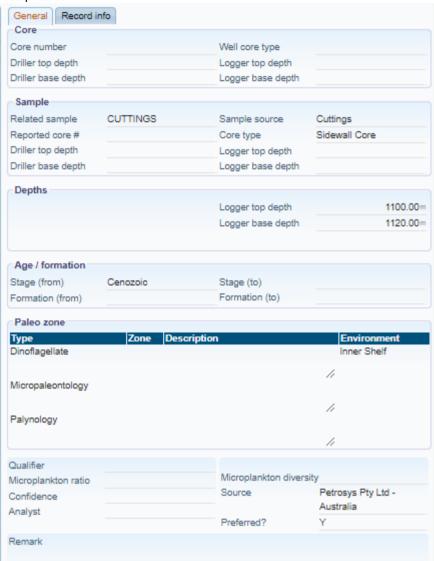
Many new core analysis screens are now available to all clients with our PPDM Wells module. The analysis screens are:

- 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

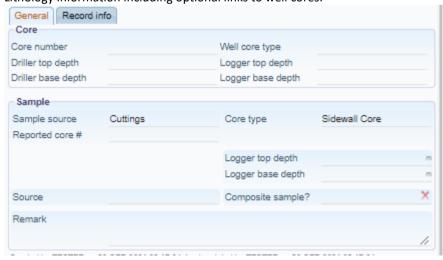
Paly / Paleo data screens

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

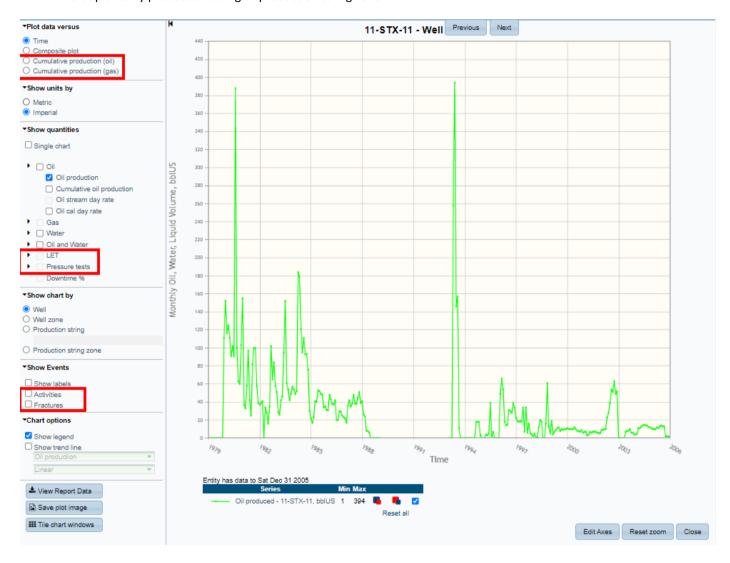
Multiple new data loaders are now available for importing Excel files for the following data types:

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

Production Chart Improvements

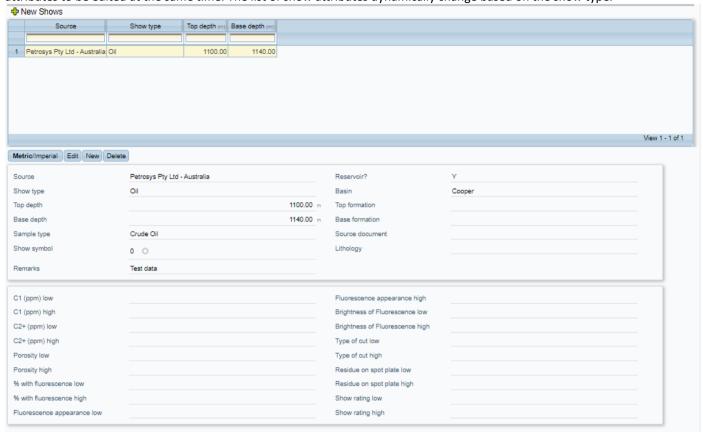
dbMap/Web production charts have been extended to allow plotting of additional information alongside the production data. Changes include:

- 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



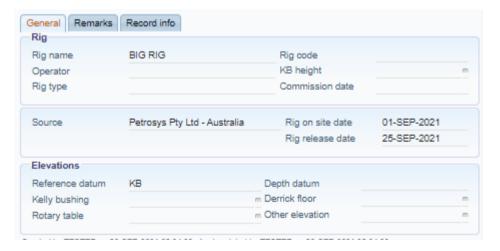
Well Shows

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.

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

Petrosys Release dbMap/Web 2021.1.7

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

Petrosys Release dbMap/Web 2021.1.6

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

Petrosys Release dbMap/Web 2021.1.5

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

Petrosys Release dbMap/Web 2021.1.4

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

Petrosys Release dbMap/Web 2021.1.3

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

	- 1-,
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

Petrosys Release dbMap/Web 2021.1.2

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

Petrosys Release dbMap/Web 2021.1.1

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

Config	uration - Licensing	
<u>79005</u>	dbMap/Web 2021.1 licensing - New license file required	
dbMap/Web - Administration		
79273 79796	Age and sequence number have been added to the formation reference screen Increased the size of stored queries to support 24,000 characters	
dbMap/Web - Client		
79505 78385 79305	dbMap/Web now contains links to epSHARE data (Santos) Updated WebGIS URL (Santos) Wells / Casing/Liners - Hole depth caption changed to Section TD (CCED)	
dbMap	p/Web - General	
77785 79099 77829 78673 78140 78139 77809 77715 78242 78055 78926 79594 74838 79296 79372 77876 79844 77441 73011 79627 78935 79528 79873	Added support for drillers and loggers depths Data Exchange - Added routine core analysis data loader Production charts - Additional options and data available to plot Data Exchange - Added palynology data loader Attachments are now supported for well perforations Directional Survey / Survey points - Extra columns can now be added to the list Improved support for oil & gas shows information Improved user interface for managing well log data Seismic processed lines are now available for advanced search Mapping - The set of default base layers has been updated Records Management can now preview Outlook .msg files Added preferred indicator to well sample analysis grids Added support for new Well Sample Analysis data types All data type grids now include unit annotation in column labels Data Exchange - Well header loader based on new framework Directional Surveys and Checkshots screens now support attachments FracDB - Added completion status to the Frac panel Mapping - Objects can now be selected using a hand drawn polygon Mapping functionality is now enabled when launching dbMap/Web screens from Petrosys PRO New and updated report queries included in dbMap/Web 2021.1 release Records Management can now preview zip files Data loading framework - Multiple improvements supported for new data loaders New screens for capturing detailed remarks for well logs and log curves	
78623 79300	O/Web - PLDB Asset Type is now available as a filter on the PLDB Dashboard PLDB - New compute method for Reserves to enter Sales gas	

Bug Fixes

dbMap/Web - Administration

- 78320 Change current user password functionality now supports passwords containing a space character
- Now able to load a new license file via the license error page
- 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

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

dbMap/Web - General

- Gas Composition Sample ID can now be edited
- Seismic coordinates screen Screen will now load if you navigate from survey->line->coordinates and then Line->coordinates
- Well Failure Analysis Data Loader Can now load wells with a blank well status
- Wells Dashboard Data population displays correct summary information
- 5 Special HTML characters are now displayed correctly when contained in data on the Core Analysis screens
- 79222 Well log viewer: Added negative value warning when track scale set to logarithmic.
- 79082 Downhole diagram now displays shoe depths for casings
- Well log viewer: Mnemonics containing the string MD incorrectly appeared as a depth curve.
- 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
- Records Management dashboard Hover hint fixed for the counts showing the number of catalogued items
- 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

Petrosys Release dbMap/Web 2021.1

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.