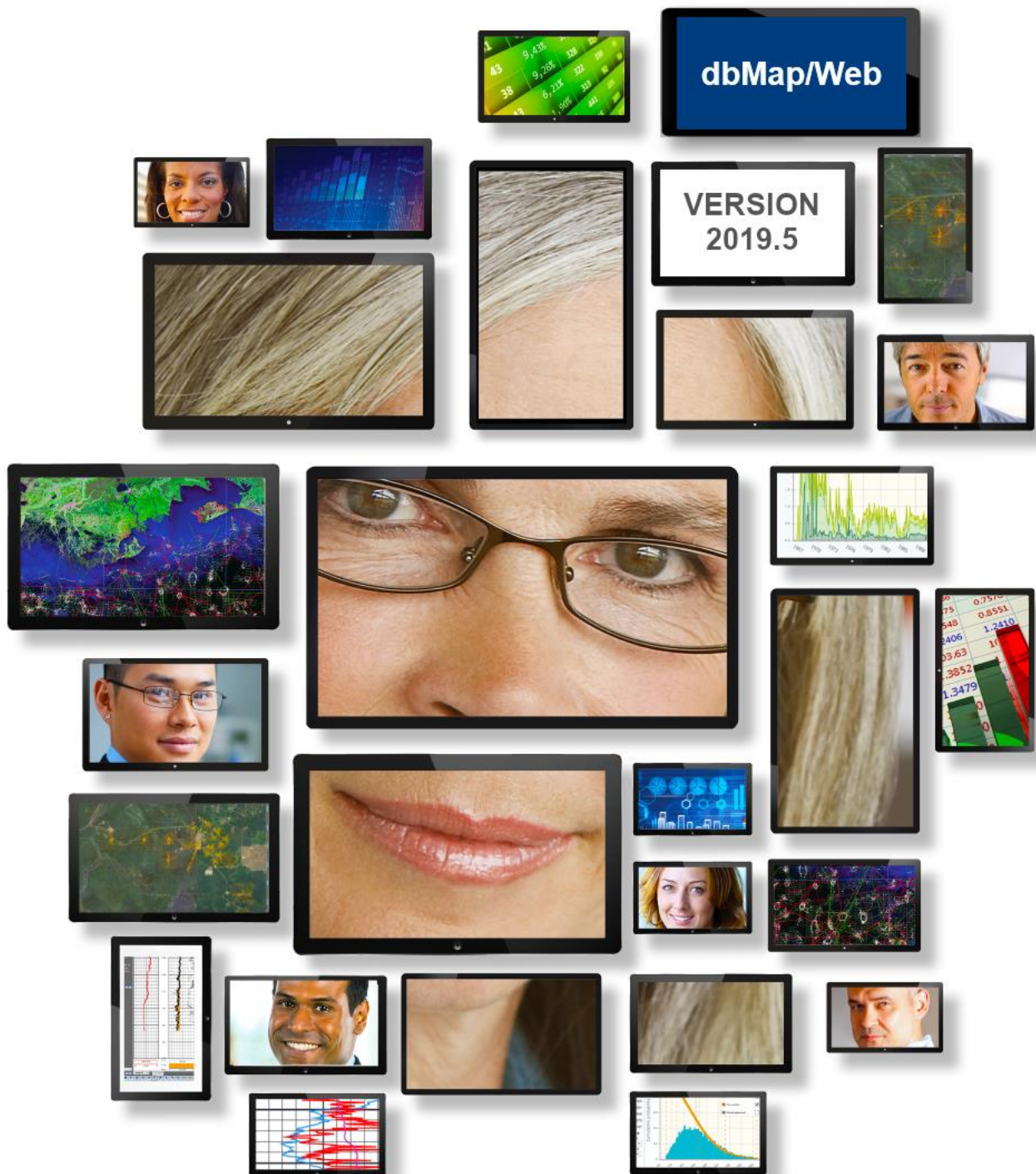


# SOFTWARE RELEASE NOTES

dbMap/Web Version 2019.5.1

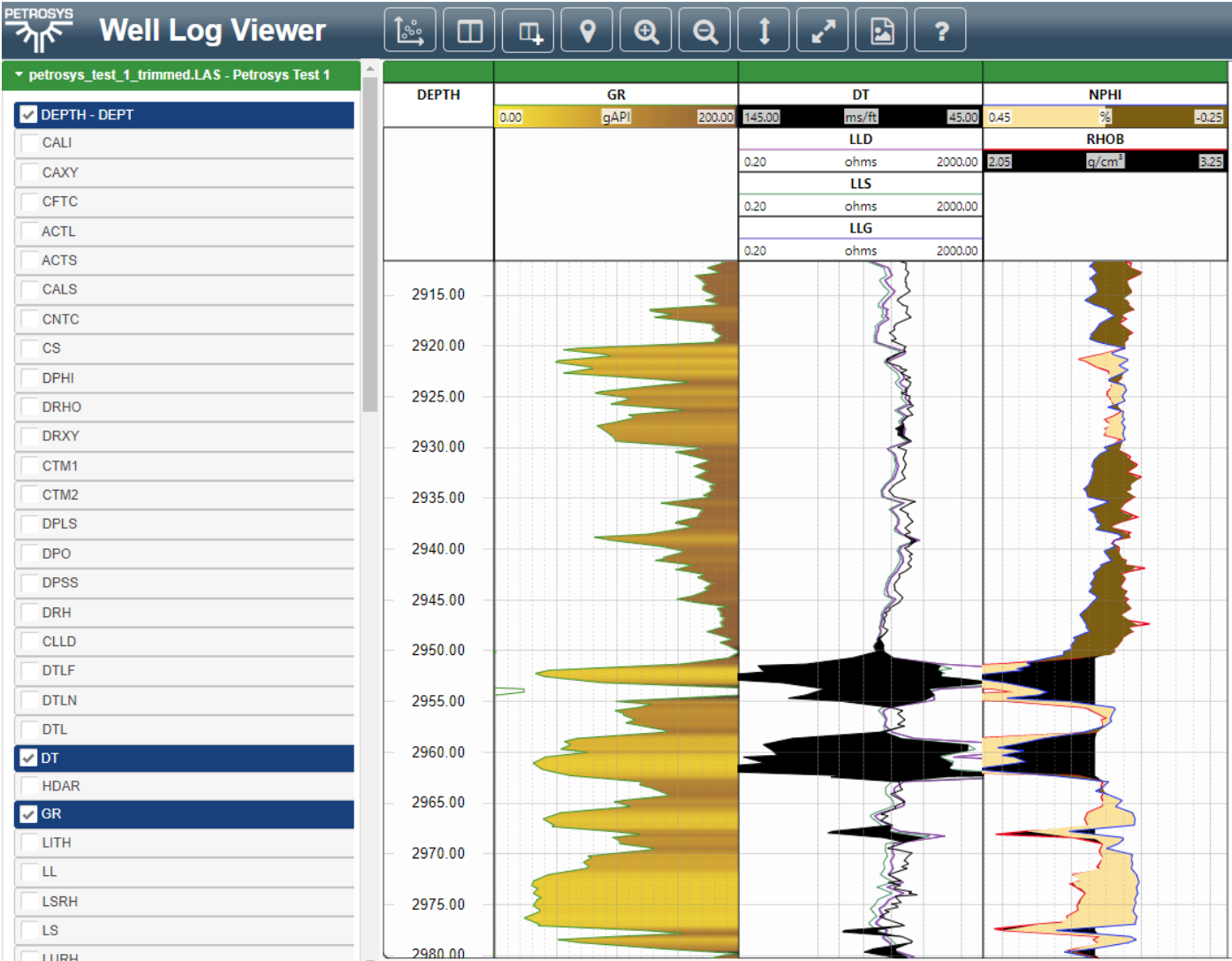


Overview

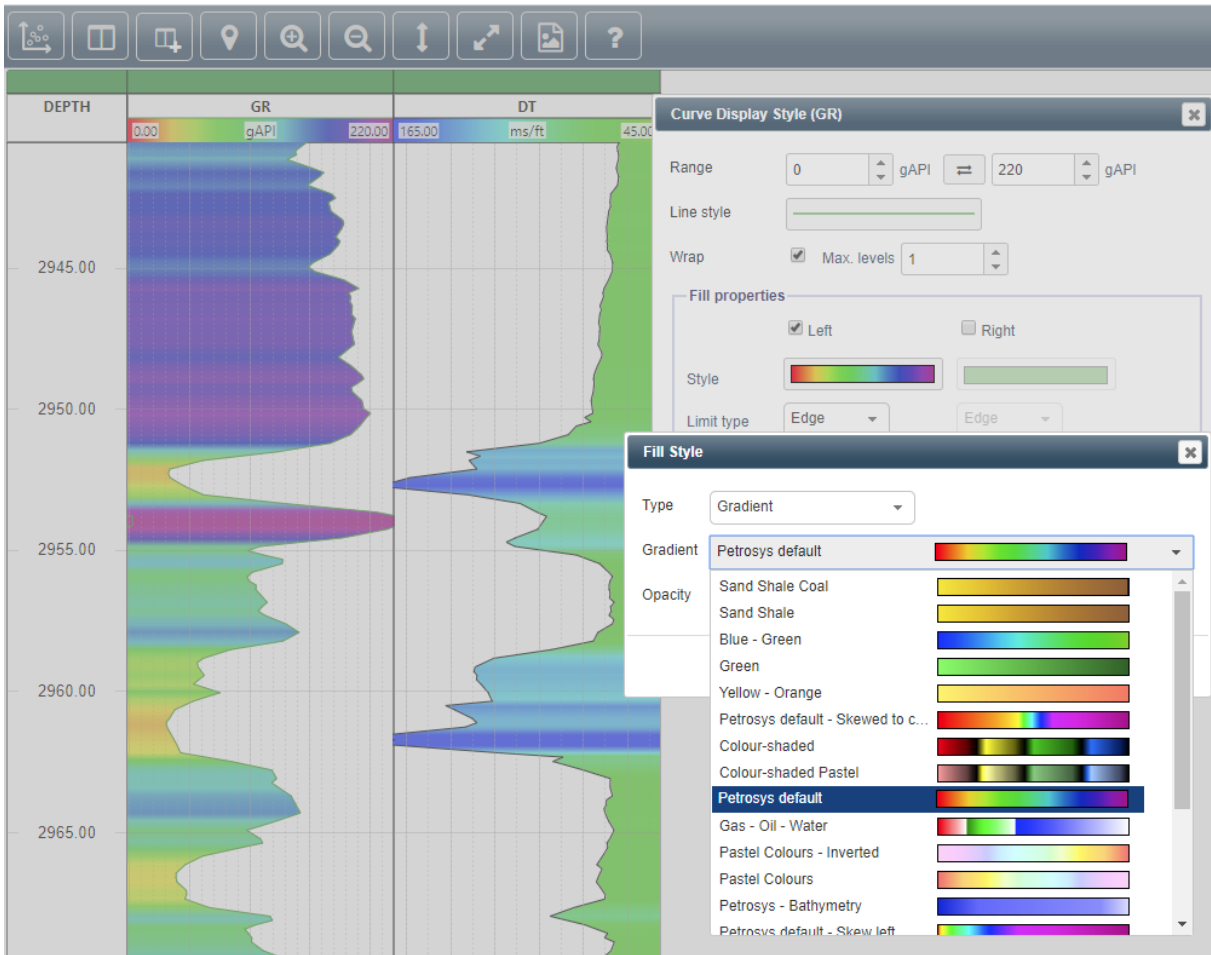
dbMap/Web 2019.5 introduces display of gradients as fill styles in the well log viewer.

Well Log Viewer Gradient Support

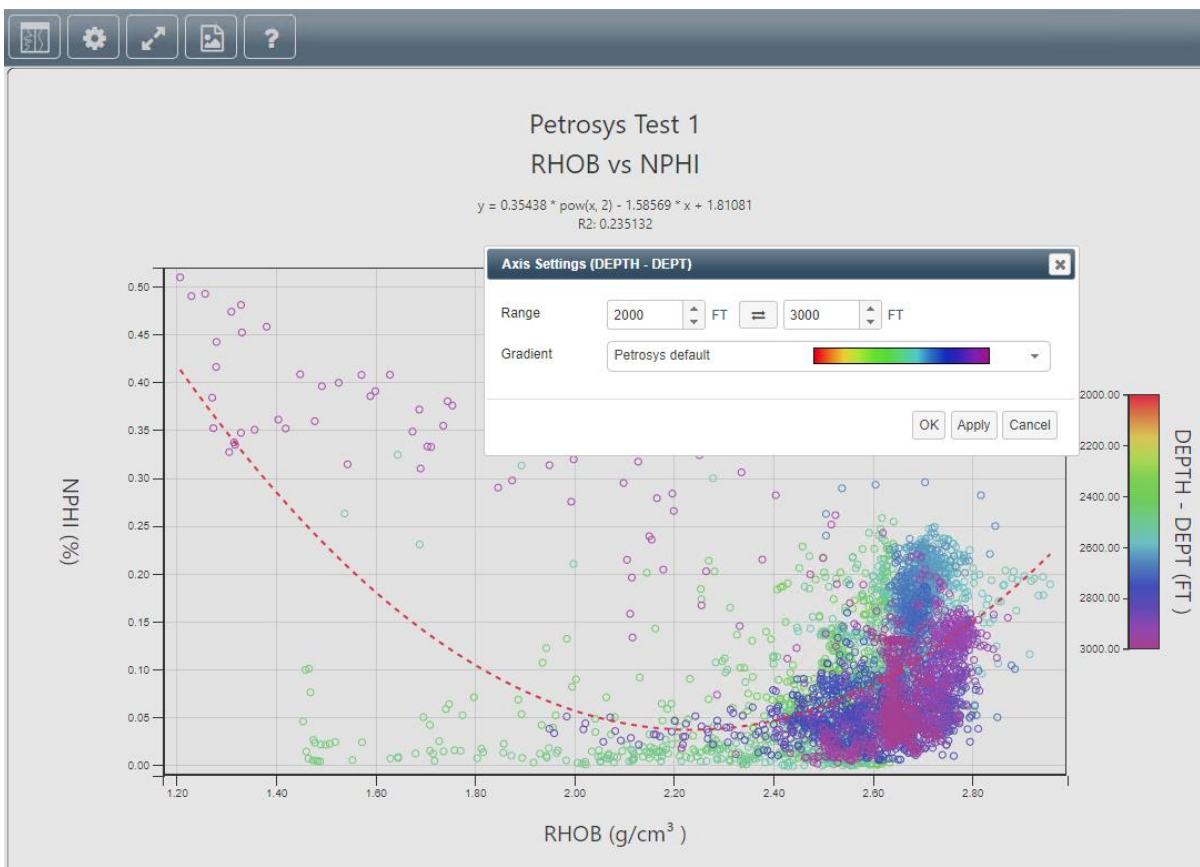
The fill styles available for the Well Log viewer have been extended to allow for gradients. Gradient fills can be applied to the left or right of a log curve, to the edge or between two curves.



In addition to the standard set of gradients shipped with the Well Log Viewer, additional custom gradients can be added.



Additionally, the gradient used in the cross-plot Z axis can now be changed to any of the installed gradients.



## ***Highlight features introduced in 2019.4***

### **Overview**

dbMap/Web 2019.4 introduces two significant enhancements to PLDB to aid in the estimation of resources. The Well Failure Analysis module has also been enhanced to allow more complex data.

### **Risk Model**

A new feature, called Risk Model, has been introduced in PLDB to refine the estimation of chance of success. This feature provides guidance to geoscientists, via a series of configurable questions, whose answers provide suggested ranges for risk 'sub-factors' that are then combined to a final risk value for each risk element (Closure, Seal, Reservoir, and Source).

This feature can be enabled by entering the required details into the administration section of PLDB.

The process to derive a chance of success for a risk element (shown here for Closure):

- Respond to the 'Level of Knowledge' questions in the upper section of the Risk Model screen
- Enter the appropriate 'sub factor' chance of successes in the lower section. The values must be within the limits prescribed by the confidence values entered.
- The resultant chance of success is shown at the base of the panel.

Probability factors: Closure (Pcl)

**Level of knowledge** Data availability and confidence

Parameter/data	Available	Confidence	Comments
Well Control available?	<input type="checkbox"/>	Low: 1	Limited Wells nearby
Seismic data available?	<input checked="" type="checkbox"/>	High: 3	3d seismic

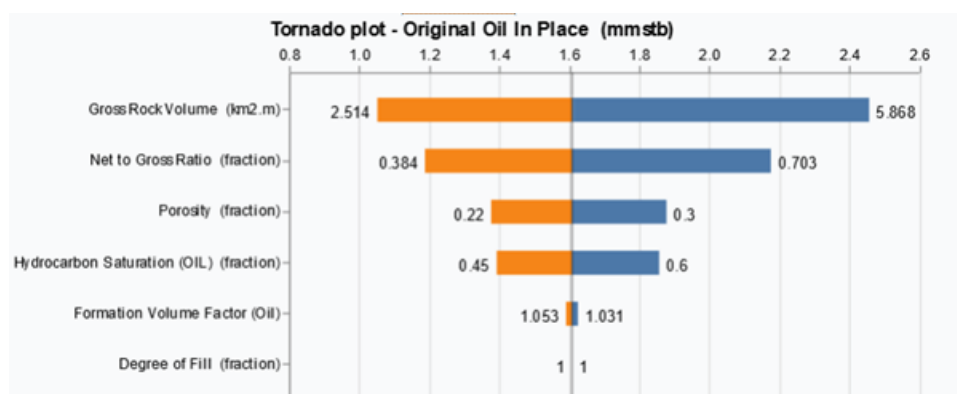
**Chance of success** (%) that at least the P90% closure values of the prospect are reached

Issue	Range	Probability	Comments
SeismicAvailability: is there sufficient seismic coverage to define the closure?	0.3 - 0.8	0.70	Seismic coverage excellent
Interpretation: has the interpretation of available seismic occurred?	0 - 1		
Time vs Depth: Is the conversion of Time to Depth well understood? Consider depth conversion methods used etc	0.3 - 0.7	0.70	depth conversion analysis completed

**Overall closure chance: 49%**

### **Tornado plots**

Tornado plots have been added to improve the resource estimation process, by giving an insight as to which of the input parameters has the greatest effect on the final resource estimate.



In the example above, the Tornado plot is indicating that the Gross Rock Volume has the largest effect on the calculation of Oil in place, followed by the Net-to-gross ratio.

The Tornado plot can be generated for a selection of output volumes, including OGIP/OOIP, Sales Gas, and Recoverable Oil.

## **Well Failure Analysis – Enhancements for importing and storing min/max values**

The Well Failure Analysis module has been enhanced with several changes that improve the ability to work with complex data. Some of the key changes include:

- Some Play analysis and Source analysis attributes now support optionally storing minimum and maximum values instead of only a discrete value.
- Base depths are now supported for Pressure and Temperature data.
- When importing data, we now support more flexibility in how ranges of data are specified. For instance, '10 to 20', '<20', '>10'.
- When importing Pressure and Temperature data, we now support multiple records being specified in a single row by using a delimiter.

Import functionality, reports and data screens have all been updated to reflect the new changes.

## **Highlight features introduced in 2019.3**

### **Overview**

dbMap/Web 2019.3 introduces two significant enhancements to PLDB as well as enhancements and bug fixes to the wider product.

### **PLDB Discovered Resources**

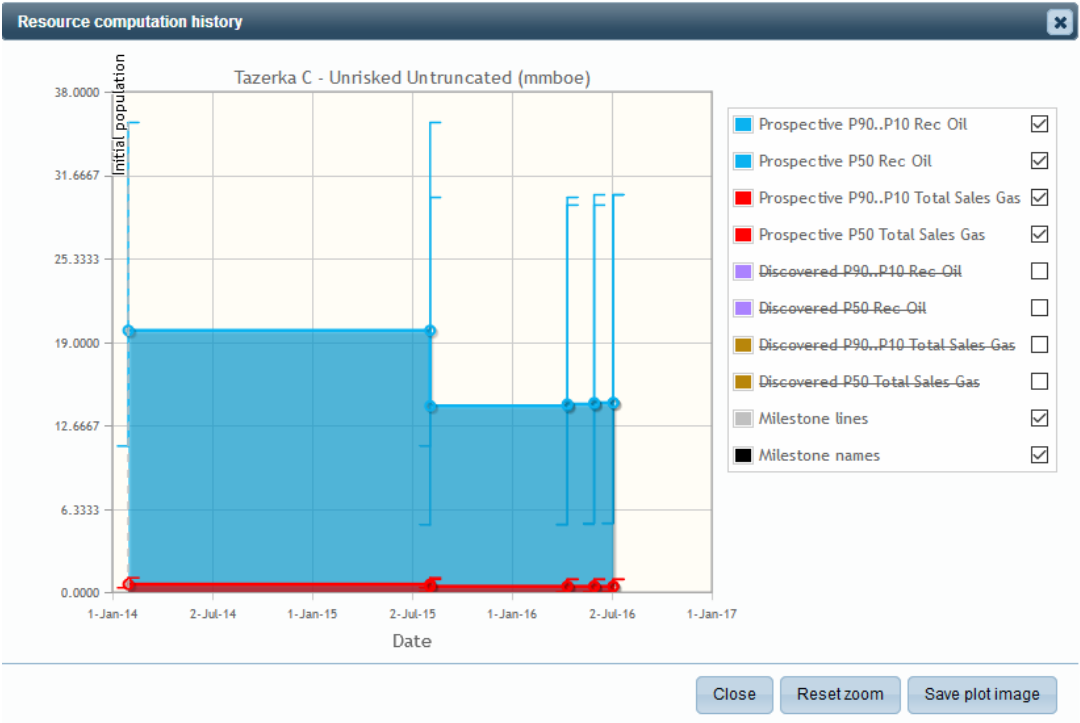
PLDB had existing support for Prospective, Contingent and Reserves resource computations. This release adds support for Discovered resources which are part of the Society of Petroleum Engineers PRMS standard. Key functionality includes:

- A new Discovered resource computation dialog for targets, which supports copying from Prospective resources.
- Separate Prospect level roll-up of Discovered resources for primary targets, which is visible in the Prospect chronology list and new Prospect Milestone list or via the Prospect summary report.
- As they are stored separately, Discovered resources are not included in aggregation/enrolment of Exploration resources performed during automated roll-up, reporting, dashboarding, or on-demand roll-up.
- Discovered resources are only able to be created once a target status has been classified as proven successful.

### **PLDB Chronology enhancements**

The existing Prospect Chronology screen has been enhanced and the introduction of Milestones gives a clearer picture of the key changes to a Prospect's resources over time. Some of the key functionality include:

- Milestones can be defined as special types of events, and the list is customisable by clients.
- Prospect Chronology only shows key milestones by default, but full details of incremental changes and other prospect, portfolio, target and drilling opportunity events can be shown on request.
- The Prospect and dashboard tree filters have been expanded to support seamless search & find based on milestone, and the Prospect header dialog displays the current milestone.
- The Prospect Header dialog lists all key milestones to allow easy viewing without having to drill-down through the Prospect Chronology dialog.
- A Prospect level resource summary chart has been added to show how the Prospective resource estimates have changed over time, along with the milestones and Discovered resources.





**Highlight features introduced in 2019.2**

## Overview

dbMap/Web 2019.2 sees the introduction of new Well Core Analysis functionality as well as further enhancements to the Petrosys Well Log Viewer with the addition of templates, display of formation tops and cross-plots.

## Well Core Coal Analysis

Support for storing detailed information has been added for Samples and several analysis types: Adsorption isotherm, Desorption, Gas composition, Isotope, Petrology, Proximate, Rock evaluation, Rock mechanics and Ultimate.

In addition to Data management functionality such as import, creation of new records, editing existing records and deleting, there are also many calculations automatically performed on screens including ratios and summing of values.

The functionality has been developed on top of the PPDM 3.9 Sample Analysis module and the attributes for each analysis type can be tailored by clients.

A subset of the analysis screens is shown below.

### Adsorption Isotherm Analysis

Isotherm Pressure Region		Isotherm BHT temp	1.000 degC
Isotherm Reservoir Pressure Eqn:M		Isotherm BHT depth (KB MD)	1300.000 m
Isotherm Reservoir Pressure Eqn:C		Time since circulation stopped	2.000 hr

#### Methane (CH<sub>4</sub>) Isotherm

Sample mass	1104.000 g	Isotherm moisture & ash type	Air Dried
Isotherm helium grain density	1.000 g/cm <sup>3</sup>	Isotherm Langmuir volume raw	6.000 cm <sup>3</sup> /g
Isotherm moisture	2.000 %	Isotherm Langmuir volume DAF	7.000 cm <sup>3</sup> /g
Isotherm ash	3.000 %	Isotherm Langmuir pressure	8.000 MPa
Isotherm volatiles	4.000 %	Isotherm experimental temperature	9.000 degC
Isotherm fixed carbon	5.000 %	Isotherm remarks	Methane results

#### Ethane (C<sub>2</sub>H<sub>6</sub>) Isotherm

### Desorption Analysis

Desorption problem?	Y
Problem description	Test problem

Express lab issues	Yes	Lost gas	40.000 %
Sorption time	1.000 hr	Diffusivity	7.000 1e6/s
Q1 raw	2.000 m <sup>3</sup> /t	Q1 DAF	8.000 m <sup>3</sup> /t
Q2 raw	3.000 m <sup>3</sup> /t	Q2 DAF	9.000 m <sup>3</sup> /t
Q3 raw	4.000 m <sup>3</sup> /t	Qt DAF	10.000 m <sup>3</sup> /t
Qt raw	5.000 m <sup>3</sup> /t	Q3 DAF	11.000 m <sup>3</sup> /t
Reservoir test temperature	6.000 degC		

Remark	Place holder additional information
--------	-------------------------------------



## Gas Composition Air Free Analysis

## Sample A Analysis

Sample ID	First sample
Time sample taken	0.250 day
Desorbed gas (Q1+Q2, Raw) at time	1.000 m3/t
C1	2.000 mol %
C2	3.000 mol %
C3	4.000 mol %
iso C4	5.000 mol %
n C4	6.000 mol %
neo C5	7.000 mol %
iso C5	8.000 mol %
n C5	9.000 mol %
C6	10.000 mol %
CO2	11.000 mol %
N2	12.000 mol %
Air	13.000 mol %

## Sample B Analysis

Sample ID	
Time sample taken	day
Desorbed gas (Q1+Q2, Raw) at time	m3/t
C1	mol %
C2	mol %
C3	mol %
iso C4	mol %
n C4	mol %
neo C5	mol %
iso C5	mol %
n C5	mol %
C6	mol %
CO2	mol %
N2	mol %
Air	mol %

## Sample C Analysis

## Sample D Analysis

## Gas Isotope Analysis

## Isotope Sample A Analysis

Sample ID	First sample
Date sample taken	31-May-2019
Time sample taken	0.250 day
Fluid type	Gas
Fluid source	Desorption
delta13C CH4	1.000 ppt VPDB
delta13C C2H6	2.000 ppt VPDB
delta13C C3H8	3.000 ppt VPDB
delta13C i-C4H10	4.000 ppt VPDB
delta13C n-C4H10	5.000 ppt VPDB
delta13C neo-C5H12	6.000 ppt VPDB
delta13C i-C5H12	7.000 ppt VPDB
delta13C n-C5H12	8.000 ppt VPDB
delta13C C6H14	9.000 ppt VPDB
delta13C CO2	10.000 ppt VPDB
delta DCH4	11.000 ppt VPDB

## Isotope Sample B Analysis

Sample ID	Second sample
Date sample taken	31-May-2019
Time sample taken	0.500 day
Fluid type	Gas
Fluid source	Desorption
delta13C CH4	1.000 ppt VPDB
delta13C C2H6	2.000 ppt VPDB
delta13C C3H8	3.000 ppt VPDB
delta13C i-C4H10	4.000 ppt VPDB
delta13C n-C4H10	5.000 ppt VPDB
delta13C neo-C5H12	6.000 ppt VPDB
delta13C i-C5H12	7.000 ppt VPDB
delta13C n-C5H12	8.000 ppt VPDB
delta13C C6H14	9.000 ppt VPDB
delta13C CO2	10.000 ppt VPDB
delta DCH4	11.000 ppt VPDB

## Isotope Sample C Analysis

## Isotope Sample D Analysis

## Petrographic Analysis

Vro Max			1.000	%		Vro Random			5.000	%
Alginite Reflectance			2.000	%		VRE Alginite			6.000	%
Bitumen Reflectance			3.000	%		VRE Bitumen			7.000	%
Bituminite Reflectance			4.000	%		VRE Bituminite			8.000	%

Group	%	%mmf	Sub group	%	%mmf	Macerial	%	%mmf	Sub macerial	%	%mmf
Vitrinite	1.000	2.000	Telovitrinite	10.000	12.000	Textinite	1.000	5.000			
						Textu-ulminite	2.000				
						Eu-ulminite	3.000	7.000			
						Telocollinite	4.000				
			Detrovitrinite	18.000	9.000	Attrinite	5.000				
						Densinite	6.000	9.000			
						Desmocollinite	7.000				
			Gelovitrinite	27.000	0.000	Corpogelinite	8.000				
						Porigelinite	9.000				
						Eugelinite	10.000				
Liptinite	3.000	4.000				Sporinite	11.000				
						Cutinite	12.000	20.000			
						Resinite	13.000				
						Liptodetrinite	14.000				
						Alginite	15.000		Telalginite	16.000	
									Lamalginite	17.000	8.000
									Non-fluorescing Alginite	18.000	
						Suberinite	19.000				
						Fluorinite	20.000				
						Exsudatinitite	21.000				
Inertinite	5.000	6.000	Telo-inertinite	72.000	0.000	Bituminite	22.000				
						Fusinite	23.000				
						Semifusinite	24.000				
			Detro-inertinite	53.000	0.000	Funginite	25.000				
						Inertodetrinite	26.000				
						Micrinite	27.000				
Other / Non Plant Organic Matter						Macrinite	28.000				
						Zooclasts	29.000				
						Bitumen	30.000				
						Pyrobitumen	31.000				
Minerals						Organoclasts	32.000				
						Mineral description					

## Proximate Analysis

Relative density	1.000	g/cm <sup>3</sup>	Volatle matter	4.000	%
Moisture	2.000	%	Fixed carbon	5.000	%
Ash	3.000	%	Proximate moisture & ash type	Equilibrium	

Remark	Placeholder Proximate Analysis remark
--------	---------------------------------------

## Rock Evaluation Analysis

Preparation method	Solvent Extracted	Sample lithology	Coal
Analysis method	Rock Eval 6 (Pyrolysis) / Leco (TOC)	Weight after acid wash	1104.000 g
TOC	1.000 wt %	HI [Hydrogen index]	300.000 mg/g/wt %
S1-volatile hydrocarbon content	2.000 mg/g	OI [Oxygen index]	400.000 mg/g/wt %
S2-HC generating Potential	3.000 mg/g	P1-production index	0.400
S3-organic CO <sub>2</sub>	4.000 mg/g	S1+S2 potential yield	5.000 mg/g
PC [Pyrolyzied carbon]	5.000 mg/g	S2 / S3	0.750
T max	6.000 degC	S1 *100 / TOC	200.000
Carbonate as CaCO <sub>3</sub> equivalent	7.000 wt %	Interpreted kerogen type	Type IV
Drilling fluid	Mud		

Remark	Placeholder remark
--------	--------------------

## Rock Mechanics Analysis

Analysis type	As Received	Cohesion	8.000
Test condition	TBA	Plug orientation	Horizontal
Bulk density	1.000 g/cm3	Dynamic shear modulus	9.000 psi
Confining pressure	2.000 psi	Dynamic bulk modulus	10.000 psi
Compressive strength	3.000 psi	Dynamic Youngs modulus	11.000 psi
Static Youngs modulus	4.000 psi	Dynamic Poissons ratio	12.000
Static Poissons ratio	5.000	Ultrasonic wave velocity shear	13.000 ft/sec
Ultrasonic wave velocity compressional	6.000 ft/sec	Tensile strength	14.000 psi
Unconfined compressive strength (UCS)	7.000 psi	Effective mean stress (confining)	15.000 psi

Remark Placeholder remark

## Ultimate Analysis

Sample preparation	Kerosene	Total sulfur	7.000 %
Carbon	1.000 %	Organic sulfur	8.000 %
Hydrogen	2.000 %	Inorganic sulfur	9.000 %
Nitrogen	3.000 %	Atomic H/C	23.833
Sulfur	4.000 %	Atomic O/C	3.753
Oxygen	5.000 %	Atomic S/C	1.498
Iron	6.000 %	Atomic N/C	2.572
		Atomic S(organic)/C	2.997

Remark Placeholder remark

## Well Log Viewer Enhancements

The new integrated well log viewer introduced in dbMap/Web 2019.1 has been further-improved, adding several new features:

### Templates

Support for user-defined well log templates which incorporate track and curve layouts and styles. Once a well log view is configured, it can be saved as a template. Templates can be applied to any well log and provide a quick-and-easy method of displaying log curves with a consistent layout and style. Quickly switch between different views of your log data using templates.

Select a Template

Name	Description	Created By	Created Date
		Default	
Quickview Induction	Quickview Induction Logs	Default	31/05/2019, 11:06:00
Quickview Sonic	Quickview Sonic Logs	Default	31/05/2019, 10:57:00
Quickview	Quickview	Default	31/05/2019, 11:11:00
Styles demonstration	Default template to demonstrate the various	Default	31/05/2019, 11:19:00

Template Details

**Name:** Styles demonstration

**Description:** Default template to demonstrate the various line and fill styles

**Created by:** Default

**Created date:** 31/05/2019, 11:19:00

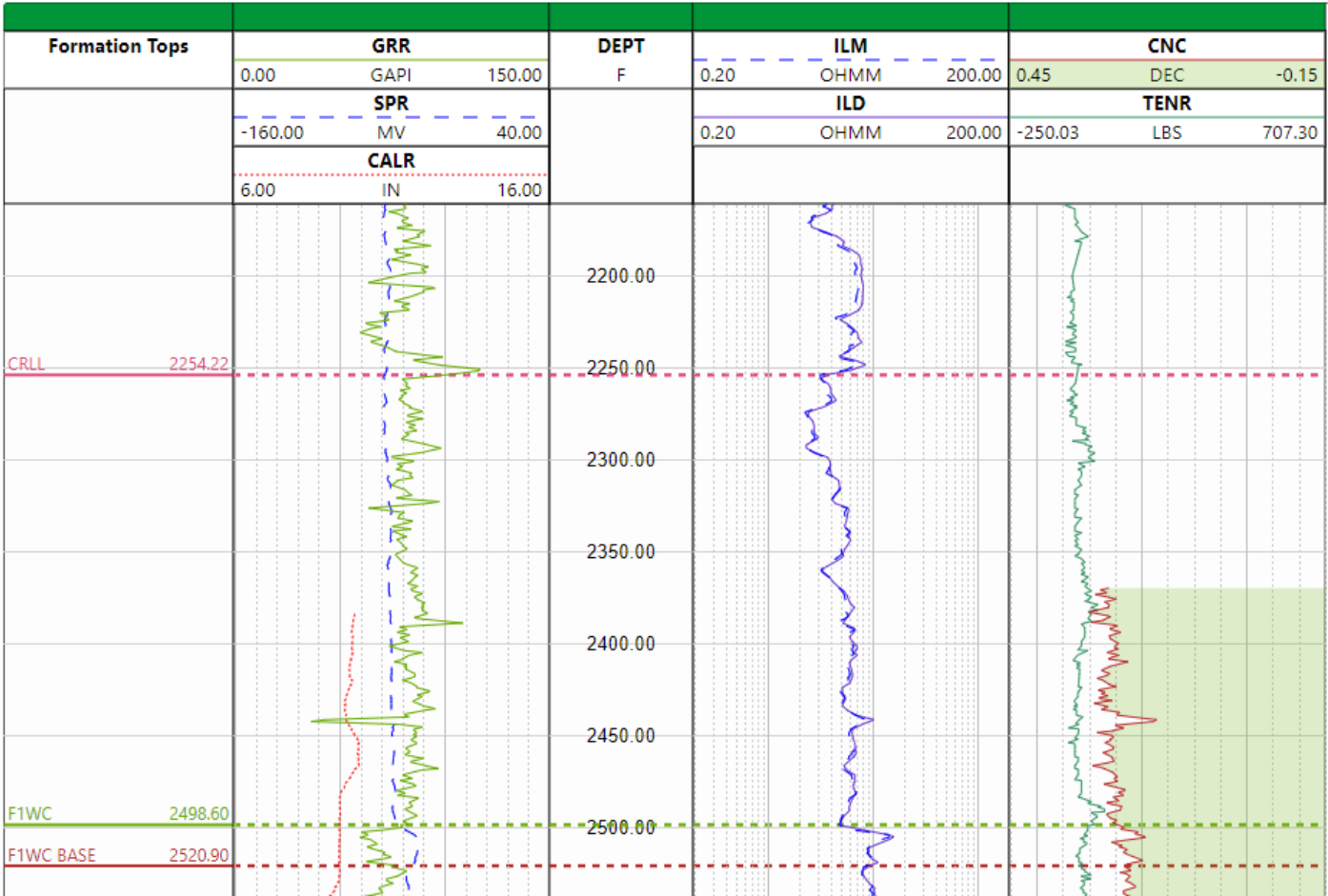
**Log file:** KupeSth5Log.las

**Matches:** BIT, CALI, SP, GR, DEPT, LLD, MSFL, ILM, TNPH, PEF, TVD

OK Cancel

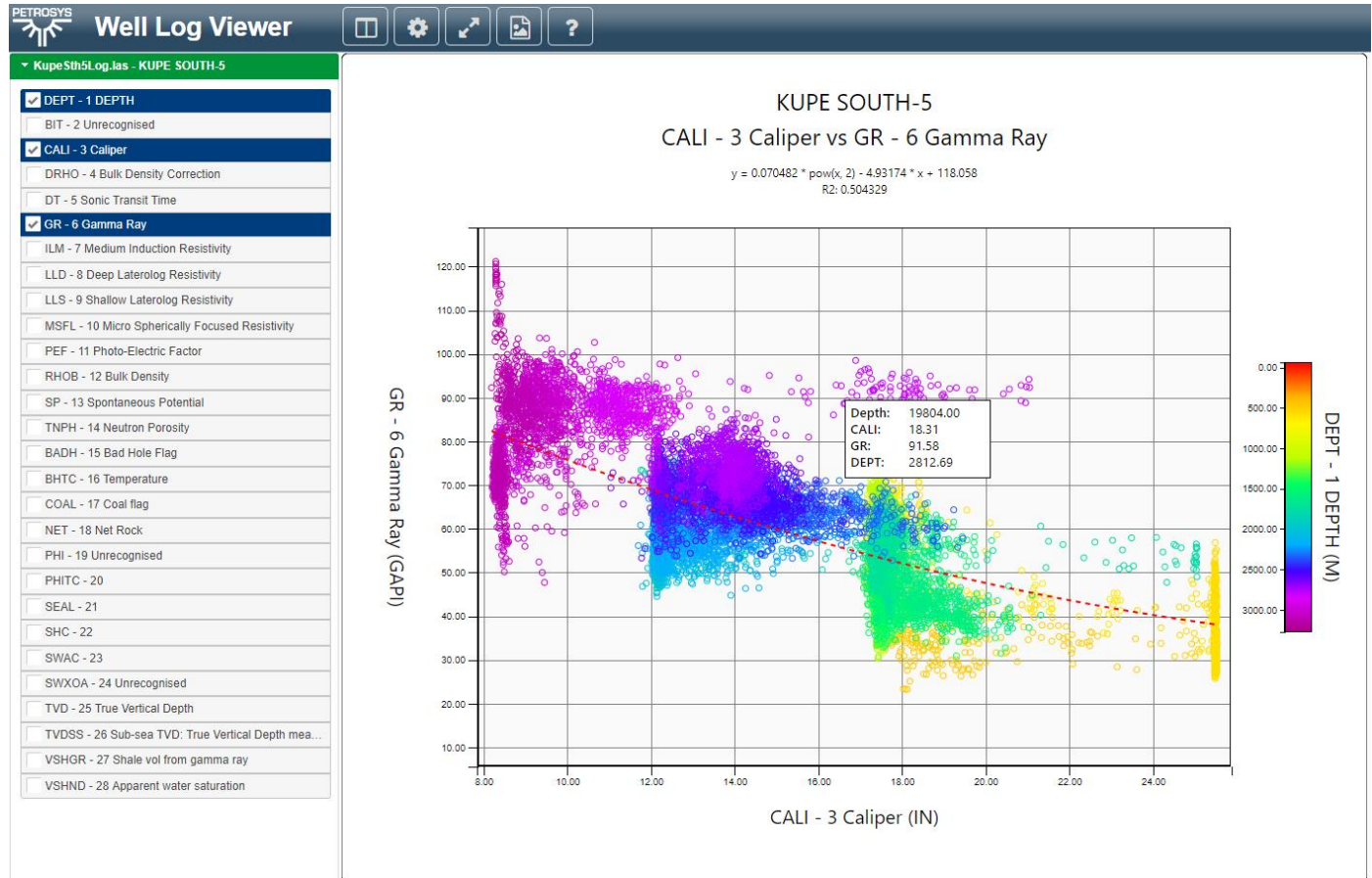
Formation Tops

Added support for displaying formation tops from the database in a separate track and optionally across all tracks.



## Cross-plots

A new display mode has been added to show the well log data in a cross plot. The cross-plot mode supports customizable axes and line of best fit calculations.



## Wrapping

Well log curve data can optionally be wrapped to show the extents of data spikes. Up to two levels of wrapped data can be displayed.

## Other Enhancements

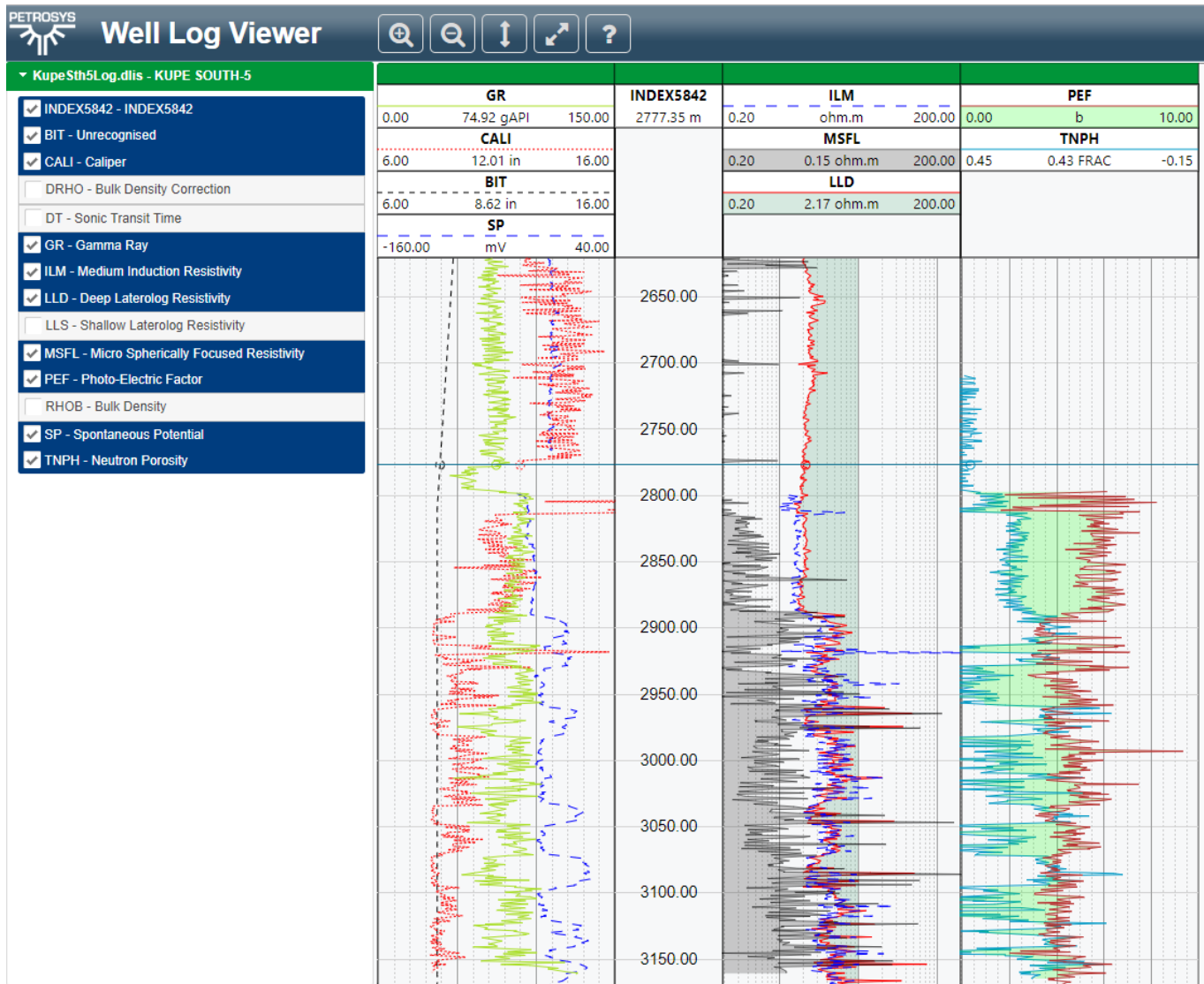
- Support for selecting from multiple frames of DLIS data.
- The Well Log Viewer composite and cross-plot displays can now be exported to a PNG image file with a single click.
- Reverse a curve's display range with a single click.

***Highlight features introduced in 2019.1*****Overview**

dbMap/Web 2019.1 sees the introduction of the Petrosys Well Log Viewer as well as a Well Failure Analysis module and Common Risk Segments polygons support for PLDB.

**Well Log Viewer**

A new integrated well log viewer has been added to dbMap/Web which provides a quick and easy method to interactively view the well log curves within catalogued LAS and DLIS files.

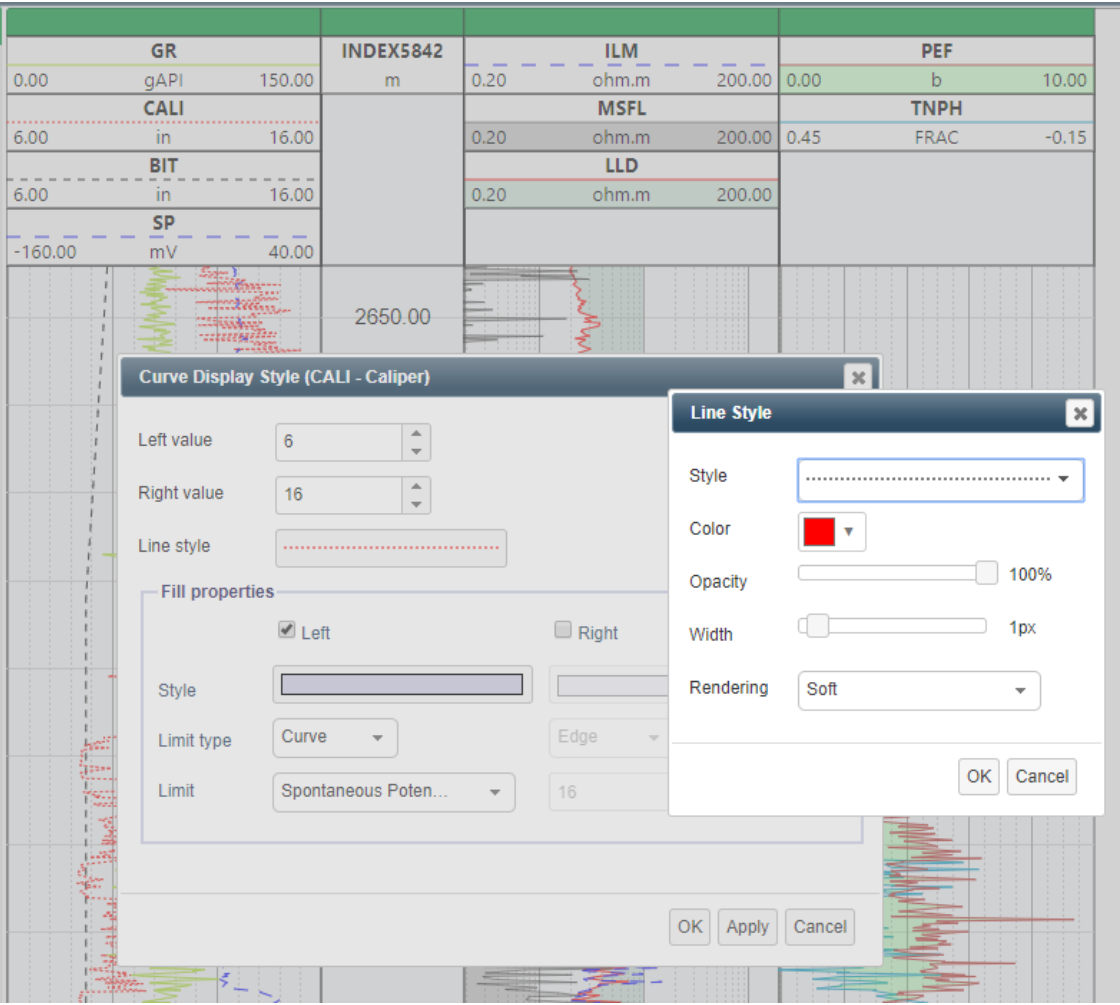


The new well log viewer provides the following features:

- Support for catalogued LAS and DLIS files.
- Interactive display of multiple tracks.
- Interactive display of multiple curves per track.
- Linear and logarithmic track value scales.
- Modify curve line style (color, style, width, opacity).
- Modify curve left and right fill styles (color, opacity, fixed limit, fill between curves).
- Modify major and minor graticule display styles (color, style, width, opacity, frequency).
- Modify curve display range (left and right values).



- Interactively re-order tracks and curves using drag and drop.
- Zoom, pan and cursor tracking.



**Note:** A separate license is required to access the well log viewer. Please contact Petrosys support for more details.

## Well Failure Analysis

A new module to conduct 'Well Failure Analysis' is now available. This module allows companies to analyse data from existing wells to determine where plays have been successful and unsuccessful. The reasons for the failure in the unsuccessful plays can be queried and mapped, allowing better decisions or research to be conducted ahead of future wells.

### Filters and Queries

Users can filter on specific play names and high level information about where success/failure exists and the reasons for this failure.

The screenshot shows the 'Well Failure Analysis' interface. On the left is a tree view with the following structure:

- Wells
  - All wells (41)
  - Wells with WFA data (20)
    - WFA Play Status
    - Plays
    - Risk failure
      - Charge (19)
      - Reservoir (19)
        - Plays
          - Plio (1)
          - MioU\_Mess\_1\_Ng\_PP (5)
          - MioL\_Aqui\_Lang\_3\_NG\_LM (6)
          - MioL\_Pria\_Aqui\_4\_Pg\_O (4)
          - Eoc\_Than\_Pria\_5\_Pg\_E (2)
          - Palc\_Maas\_Than\_6\_Pg\_Pc (1)

On the right is a table with the following columns: CQ, Well name, Plays, Failed plays, and Status. The table contains 5 rows of data:

	CQ	Well name	Plays	Failed plays	Status
1	<input checked="" type="checkbox"/>	Clipper-1	2	2	All WFA plays failed
2	<input checked="" type="checkbox"/>	Endeavour-1	2	2	All WFA plays failed
3	<input checked="" type="checkbox"/>	Galleon-1	2	2	All WFA plays failed
4	<input checked="" type="checkbox"/>	Resolution-1	2	2	All WFA plays failed
5	<input checked="" type="checkbox"/>	Tara-1	2	2	All WFA plays failed

In addition, more detailed queries can be run, for example; to identify which wells within a given play(s) have failed due to a particular play element.

The screenshot shows the 'Query parameters' dialog box. It has several sections:

- Play selection - optional**: ☒ in
- Charge risk - optional**: ☐ in
- Reservoir risk - optional**: ☒ in
- Seal risk - optional**: ☐ in
- Trap risk - optional**: ☐ in

Below these are tabs for 'Properties' and 'Query'. The 'Query' tab is active, showing:

- Query name**: WFA TEST1: Filter: Choose Factors(s)...
- Description**: Filter well list based on wells selected plays.
- Owner**: PUBLIC
- Created by**: TESTER
- Updated by**: TESTER

On the right is a 'Reservoir risk - optional Lookup' table:

	Reservoir
1	<input type="text" value=""/>
2	<input checked="" type="checkbox"/> Absent
3	<input type="checkbox"/> Not penetrated
4	<input type="checkbox"/> Present + effective
5	<input checked="" type="checkbox"/> Present + not effective
6	<input type="checkbox"/> Present + uncertain effectiveness
7	<input checked="" type="checkbox"/> Probably absent
8	<input type="checkbox"/> Probably present
9	<input type="checkbox"/> Uncertain

Well Summary		Source Analysis 1		Temperature 2		Pressure 1		Play Analysis 5		
<div> <div>▼ Source analysis : Kimmeridge, 152.1 Ma, Kimmeridgian, Kimmeridge Clay Fm, 200, 113, 5.6, 400, 0.6, Restricted Shallow Marine, API</div> <div> <div> <div>⚙️</div> <div>↔️</div> <div>📄</div> <div>📊</div> <div>⛶</div> </div> <div>New Source analysis</div> </div> </div>										
	Source rock	Formation	Top age	Gross thickness	Net thickness	Average TOC	Hydrogen index	Maturity (VR)	Facies	Source
1	Kimmeridge	Kimmeridge C	152.1 Ma, Kimmeridgian	200	113	5.6	400	0.6	Restricted Shallow Marine	API

## Temperature

Well Summary      Source Analysis      **Temperature 2**      Pressure 1      Play Analysis 5

▼ Temperature : 3168, 93.1, 42, GEOVIC

⚙️ ↔️ 📄 📊 + New Temperature

	Depth	Temperature	Temperature (corrected)	Geothermal gradient	Source
1	3168	93.1		42	GEOVIC
2	4024	129.1		42	GEOVIC

## Pressure

Well Summary






Source Analysis

Temperature 2

Pressure 1

Play Analysis 5

▼ Pressure : 3000, 3000.00045, Oil, GEOVIC





 New Pressure

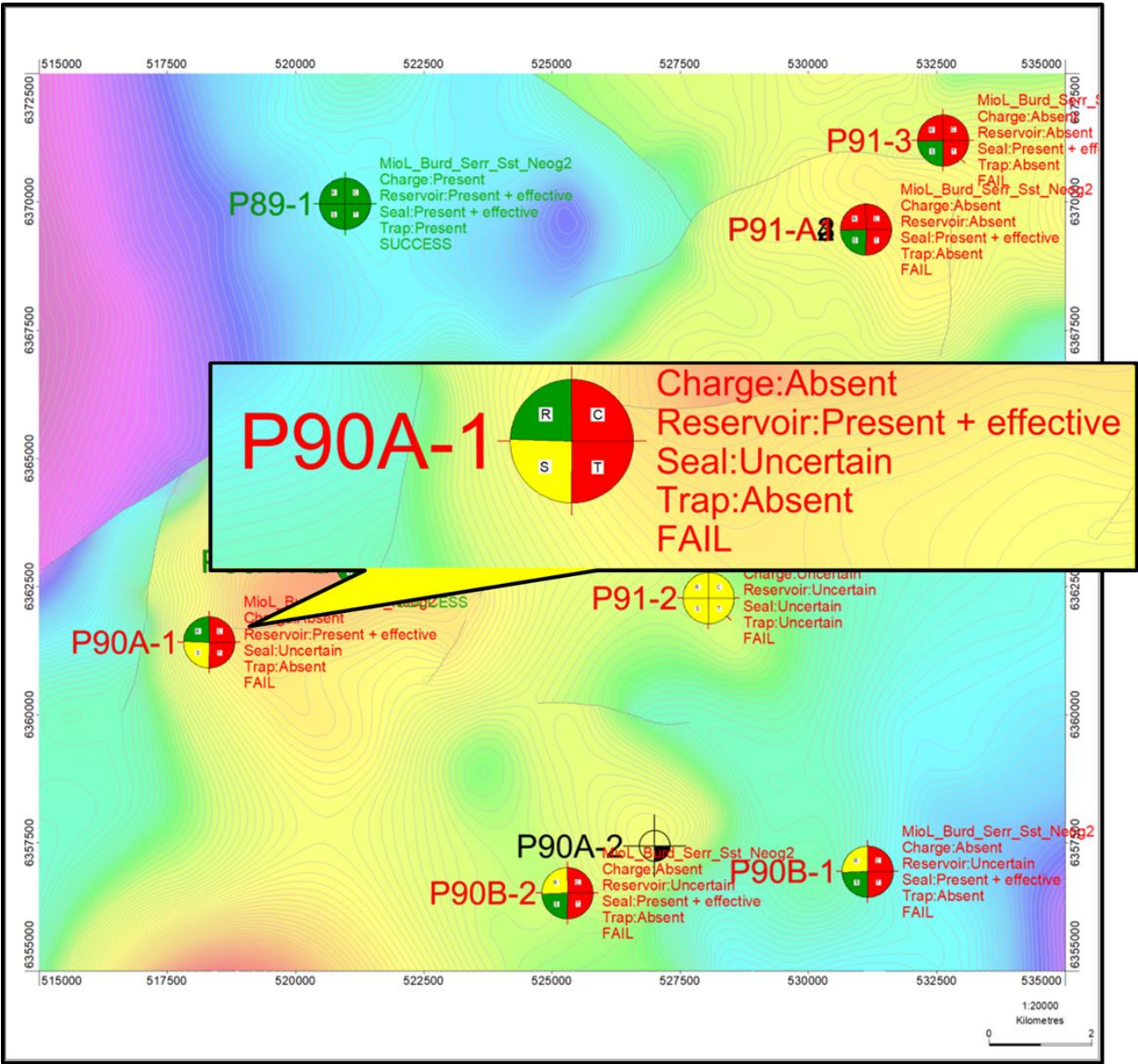
	Depth	Pressure	Fluid type	Source
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	3000	3000.00045	Oil	GEOVIC

## Play Analysis

Well Summary		Source Analysis 1		Temperature 2		Pressure 1		Play Analysis 5	
▼ Play analysis : Plio_Piacen_Neog1 (Success)									
New Play analysis									
	Play name	Series	Top age	Base age	Charge	Reservoir	Seal	Trap	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	Plio_Piacen_Neog1	Pliocene	2.6 Ma, Piacenzian		Present	Present + effective	Present + effective	Present	
2	MioL_Burd_Serr_Sst_Neog2	Lower Miocene	11.6 Ma, Serravallian	16 Ma, Burdigalian	Present	Present + effective	Present + effective	Present	
3	Eoc_Pria_Carb_Palg1	Eocene	33.9 Ma, Priabonian		Absent	Present + effective	Absent	Absent	
4	Eoc_Bart_Sst_Palg2	Eocene	37.8 Ma, Bartonian		Present	Uncertain	Present + effective	Absent	
5	Eoc_Lut_Sst_Palg3	Eocene	41.2 Ma, Lutetian		Present	Absent	Present + effective	Uncertain	

Well Failure Analysis in PRO

Stop-light style displays, incorporating success and failure analysis results for wells are now even more easily created inside Petrosys PRO. This capability makes it very easy to visualise and analyse risk spatially.



## PDF Reporting

In addition to *displaying* the Well Failure data, it can also be analysed through the easy creation of PDF reports

REPORTwfa.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools REPORTwfa.pdf x

71%

**PETROSYS**

**Well Failure Analysis**

**P89-1**

Print Date: 28-MAR-2019

**Play analysis 4:**

System:	Eocene	Target trap type:	
Top age:	37.8 Ma, Bartonian	Depositional environment:	
Base age:		Lithology:	Sandstone
Cairn play name:	Eoc_Bart_Sst_Palg2	HC shows:	
Formation member:		API:	
Top of reservoir prone interval bmsl (m):	3780	GOR:	
Base of reservoir prone interval bmsl (m):		Net reservoir:	-3780
Gross reservoir:		Porosity range:	
Charge:	Present	Average porosity:	
Reservoir:	Uncertain	Core:	No
Seal:	Present + effective	Tests:	No
Trap:	Absent		

**Play analysis 5:**

System:	Eocene	Target trap type:	
Top age:	41.2 Ma, Lutetian	Depositional environment:	
Base age:		Lithology:	Sandstone
Cairn play name:	Eoc_Lut_Sst_Palg3	HC shows:	
Formation member:		API:	
Top of reservoir prone interval bmsl (m):	4120	GOR:	
Base of reservoir prone interval bmsl (m):		Net reservoir:	-4120
Gross reservoir:		Porosity range:	
Charge:	Present	Average porosity:	
Reservoir:	Absent	Core:	No
Seal:	Present + effective	Tests:	No
Trap:	Uncertain		

**Source Analysis**

Source:	API	Source average TOC:	5.6
Source age:	152.1 Ma, Kimmeridgian	HI:	400
Source formation:	Kimmeridge Clay Fm	Source maturity:	0.6
Source gross thickness (m):	200	Source facies:	Restricted Shallow Marine
Source net thickness (m):	113	Mud type:	

**Temperature Data**

Depth bmsl (m):	3168
Uncorrected temperature:	93.1
Corrected temperature:	
Geothermal gradient:	42

**Temperature Data**

Depth bmsl (m):	4024
Uncorrected temperature:	129.1
Corrected temperature:	
Geothermal gradient:	42

**Pressure Data**

Depth bmsl (m):	3000
Pressure (psil):	3000.00045
Fluid type:	Oil
Data source:	GEOVIC
Data links:	
Comments:	

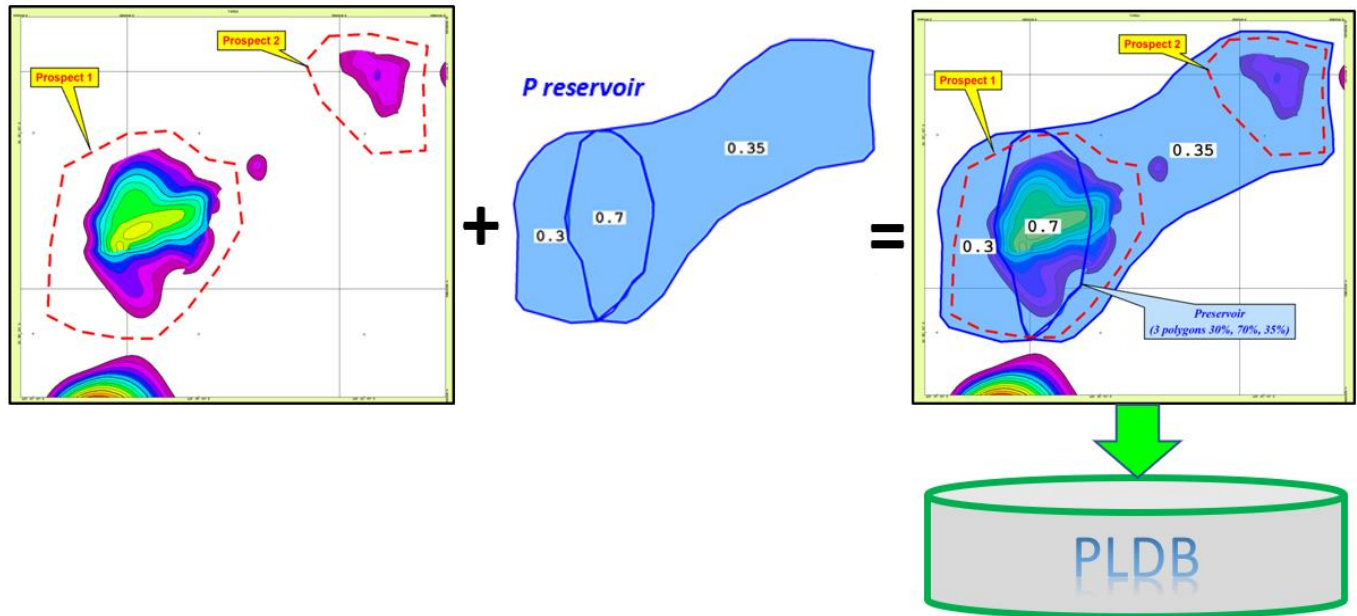


## Prospects & Leads

### Common Risk Segments

Petrosys Prospects & Leads module now supports storing Common Risk Segment (CRS) polygons against play interval chance factors and using spatial comparison with the Prospect or Target polygon to determine the appropriate Play chance factors to use in the resource computation.

The CRS polygons are expected to have an attribute defining the risk for each polygon, and can be loaded into the database using the Petrosys PRO Spatial Data Translator, from data sources such as shape files exported from GIS-PAX Player software.



## Detailed Release Notes Summary dbMap/Web 2019.5.1

### Enhancements

#### *dbMap/Web - PLDB*

[76583](#) Improved visibility of message indicating a polygon exists for a prospect



## Detailed Release Notes Summary dbMap/Web 2019.5.1

### Bug Fixes

#### *dbMap/Web - Client*

[76621](#) WFA - List export to excel now works (Cairn)

[76662](#) Prospect target / scenarios can now be added (Santos)

[76651](#) The Prospect and Prospect target loaders limit selection of Milestones to ones from the current prospect (Cairn)

#### *dbMap/Web - General*

[76724](#) Numeric fields can be set to zero when editing a record

## Petrosys Release dbMap/Web 2019.5.1

### Detailed Release Notes

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#### dbMap/Web - Client

#### Bug Fixes

##### **WFA - List export to excel now works (Cairn)**

76621

The Well failure analysis list export option no longer gives an error about performing the export and executing the query.

##### **Prospect target / scenarios can now be added (Santos)**

76662

A bug preventing Santos from adding Prospect target / Scenarios has been fixed.

##### **The Prospect and Prospect target loaders limit selection of Milestones to ones from the current prospect (Cairn)**

76651

The Loader from the Prospect screen and the Prospect target screen only shows Milestones from the current prospect not Milestones from all prospects.

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#### dbMap/Web - General

#### Bug Fixes

##### **Numeric fields can be set to zero when editing a record**

76724

Fixed a bug preventing numeric fields being set to zero when editing a record. This bug was introduced in the 2019.5 release and resulted in blank values being stored in place of zero values entered by the user.

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#### dbMap/Web - PLDB

#### Enhancements

##### **Improved visibility of message indicating a polygon exists for a prospect**

76583

A message is shown on the panel when a Prospect has an existing polygon. This message has been made bolder so it stands out a bit more.

## Detailed Release Notes Summary dbMap/Web 2019.5

### Enhancements

#### *dbMap - Client*

[76134](#) Wells / Core Samples - Formation and Seam are now manually edited instead of auto-populated (Origin)

#### *dbMap/Web - Client*

[76426](#) PLDB activated for Cairn

#### *dbMap/Web - General*

[76221](#) Improvements have been made to the general file attachments dialog

[75202](#) Well log viewer - Added support for gradient fills

[75711](#) Excel XLSB files can now be imported by dbMap/Web data loaders

[76165](#) Well Failure Analysis - Indicator list columns are now displayed as blank when value is null

#### *dbMap/Web - PLDB*

[76013](#) PLDB - Well now automatically linked when replicated DOP set to "Drilled" (Santos)

## Detailed Release Notes Summary dbMap/Web 2019.5

### Bug Fixes

#### *dbMap/Web - Client*

[76228](#)      Toggling between Metric/Imperial or Gauge/Absolute on the LET panel has been fixed (Santos)

#### *dbMap/Web - General*

[74775](#)      The server's language settings no-longer impact on the loading of license files

[76176](#)      Well log viewer - Formation tops now available when launched from Records Management

[76107](#)      Wells / Dashboard - consistent colors are used for the QC charts

#### *dbMap/Web - PLDB*

[76168](#)      PLDB Chronology list now shows correct Oil/Gas values when milestones exist

# Petrosys Release dbMap/Web 2019.5

## Detailed Release Notes

### [dbMap - Client](#) [Enhancements](#)

#### **Wells / Core Samples - Formation and Seam are now manually edited instead of auto-populated (Origin)** 76134

Initially the Formations and Seams were auto-populated and read-only. This has been changed so they are now manually edited and not auto-populated.

### [dbMap/Web - Client](#) [Enhancements](#)

#### **PLDB activated for Cairn** 76426

PLDB functionality has been enabled.

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### [dbMap/Web - Client](#) [Bug Fixes](#)

#### **Toggling between Metric/Imperial or Gauge/Absolute on the LET panel has been fixed (Santos)** 76228

The pressure units were not always reflecting the users choice of Metric /Imperial or Gauge/Absolute. This has been fixed.

### [dbMap/Web - General](#) [Enhancements](#)

#### **Improvements have been made to the general file attachments dialog** 76221

The following changes have been made to the attachments dialog:

- Consistently referring to them as 'Attachments' not 'Notes'
- Included a count of attachments
- Increased the size of thumbnail images
- Auto-collapsing large amounts of text and including a button to expand to see all text

#### **Well log viewer - Added support for gradient fills** 75202

The Well Log Viewer now supports fills using a gradient.

#### **Excel XLSB files can now be imported by dbMap/Web data loaders** 75711

Excel XLSB files are a binary version of XLSX files. Data loaders in dbMap/Web now support reading data from files in XLSB format.

#### **Well Failure Analysis - Indicator list columns are now displayed as blank when value is null** 76165

The indicator columns on the Well Failure Analysis list (e.g. Seismic Anomaly) are now displayed as blank when the value is null. Previously, null values were represented with a red cross.

**The server's language settings no-longer impact on the loading of license files**

74775

Previously if you ran dbMap/Web on a server with a non-English language setting you could receive an error message when the license file was being read. The reading of the license file is now independent of the language settings on the server.

**Well log viewer - Formation tops now available when launched from Records Management**

76176

Previously, when launching the Well Log Viewer from Records Management, no formation tops were available to select. This has now been fixed.

**Wells / Dashboard - consistent colors are used for the QC charts**

76107

The QC charts on the Wells / Dashboard now consistently use the same colors for the 4 possible values: High, Medium, Low and Unknown even if one or more of these values has no data to display.

**PLDB - Well now automatically linked when replicated DOP set to "Drilled" (Santos)**

76013

For Santos only, Drilling opportunities that have been replicated to basic wells are now automatically linked when the DOP status is set to "Drilled". Previously you had to manually select the well for these drilling opportunities when updating the status.

**PLDB Chronology list now shows correct Oil/Gas values when milestones exist**

76168

The PLDB Prospect chronology list now shows the correct Prospective and Discovered oil and gas values when a prospect has one or more milestones defined. Previously the values shown in the list were much bigger than they should have been. This was only a problem in the Chronology list. The correct data was stored in the database and shown on other screens and reports.

## Detailed Release Notes Summary dbMap/Web 2019.4.1

### Enhancements

#### *dbMap/Web - PLDB*

- [75810](#) PLDB - MEPS values of zero on the Prospect header screen are no longer shown if MEPS is disabled
- [75856](#) PLDB - Support added for tornado plots from depth-area compute methods
- [75814](#) PLDB - Tested failure targets can now have their resource calculation values zeroed via a button



# Detailed Release Notes Summary dbMap/Web 2019.4.1

## Bug Fixes

### *dbMap/Web - Client*

- [75863](#) PPDM / General Reference option has been removed from the reference menu (Santos)
- [75864](#) Fixed the Formation reference screen (Santos)

### *dbMap/Web - General*

- [74832](#) RM - Improved performance of bulk update
- [76059](#) Core Analysis - Fixed Gas Composition data loader
- [75996](#) Fixed characters set issue when loading static resources

### *dbMap/Web - PLDB*

- [75916](#) PLDB - Filtering by polygon file performance improved
- [75842](#) PLDB - Advanced search for PLDB / Dilling Opportunity / Post Well Audit is now working
- [75839](#) PLDB - Multi-scenario sales gas shows in the correct units
- [75844](#) PLDB - My Access performance improved
- [75852](#) PLDB - Tornado Plot is drawn whenever the Tornado plot tab is present on the resource calculator

# Petrosys Release dbMap/Web 2019.4.1

## Detailed Release Notes

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### dbMap/Web - Client

### Bug Fixes

#### **PPDM / General Reference option has been removed from the reference menu (Santos)** 75863

Santos is not configured for all of the PPDM reference tables so this options has been removed from their reference menu.

#### **Fixed the Formation reference screen (Santos)** 75864

Fixed a bug on the Santos Formations reference screen that prevented it from loading.

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### dbMap/Web - General

### Bug Fixes

#### **RM - Improved performance of bulk update** 74832

Improved the performance of the bulk update functionality in Records Management. Bulk update would previously time out if a large number of records were selected.

#### **Core Analysis - Fixed Gas Composition data loader** 76059

Fixed a bug preventing the Gas Composition loader from finding a sample that matches the details in the input file.

#### **Fixed characters set issue when loading static resources** 75996

Fixed a character set issue that was preventing some static resources from loading correctly.

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### dbMap/Web - PLDB

### Enhancements

#### **PLDB - MEPS values of zero on the Prospect header screen are no longer shown if MEPS is disabled** 75810

Previously a zero was shown for the MEPS value, on the Prospect header screen, if MEPS was disabled, now it is left blank. Additionally a note has been added to remind users that Truncated Distributions will be set to zero if MEPS is not enabled.

#### **PLDB - Support added for tornado plots from depth-area compute methods** 75856

Tornado plots are now available for all Depth-Area and Depth-Volume compute methods in Prospects & Leads

#### **PLDB - Tested failure targets can now have their resource calculation values zeroed via a button** 75814

A button to zero prospective resources will show on the prospective resources screen if the target has a status of "Tested - Failure".

**PLDB - Filtering by polygon file performance improved** 75916

The performance of filtering the list of Prospects & Leads by Petrosys polygon file when running from within Petrosys PRO has been significantly improved. Previously it would often time out.

**PLDB - Advanced search for PLDB / Dilling Opportunity / Post Well Audit is now working** 75842

A change in the data structure has been reflected in configuration so the Prospects / Drilling Opportunity / Post Well Audit advanced search works again.

**PLDB - Multi-scenario sales gas shows in the correct units** 75839

The title for Sales gas units column on the Scenarios tab on the Multi-scenario screen now shows the units that have been configured in the database.

**PLDB - My Access performance improved** 75844

The performance of the Prospects & Leads My Access dialog has been improved significantly. Previously it would often time out.

**PLDB - Tornado Plot is drawn whenever the Tornado plot tab is present on the resource calculator** 75852

A bug was fixed that prevented the tornado plot from being drawn on some resource calculation screens even when the tornado plot tab was present, it would always be blank.

## Detailed Release Notes Summary dbMap/Web 2019.4

### Enhancements

#### *dbMap/Web - Client*

- [75765](#) Enabled column rules on the well header (Origin)
- [75645](#) The Wells / Coal Summary / Coals tab, now includes the Coal Name (Origin)

#### *dbMap/Web - General*

- [75795](#) Well Failure Analysis - Enhancements for importing and storing min/max values
- [72940](#) Records Management dashboard now contains a location map
- [72991](#) Support for Java 6 and 7 has been removed
- [75541](#) The Rule reference screen for CQ, now allows editing of the Use condition description
- [74911](#) Well header - Changed order of Rig release and Abandonment dates

#### *dbMap/Web - PLDB*

- [73615](#) Prospect and Target screens now show whether polygon outlines exist
- [74120](#) A new reference screen has been added for Prospect Activity
- [72789](#) Added common risk segments help documentation
- [75041](#) Added support for defining a risk model
- [75056](#) Editing prospect target / Resource calculator values now give more helpful validation messages
- [75517](#) The Captured indicator has been added to the Prospect tree filter
- [75736](#) The prospects tree filter now includes a filter for Permit / production license

## Detailed Release Notes Summary dbMap/Web 2019.4

### Bug Fixes

#### *dbMap/Web - General*

- [74833](#) Correct list of reports are available when running dbMap/Web via Petrosys PRO
- [75199](#) The Formation reference screen, from the lookup on the Well / Tops panel, now displays without error
- [74774](#) Regional settings on the client PC no longer result in a mix of number formats on some panels
- [74596](#) Default user credentials are retained during the login process
- [74986](#) Searching and sorting on reference table screen improved for Province/State
- [75170](#) Selecting a storage path when adding a new records management item no longer displays an error

#### *dbMap/Web - PLDB*

- [75466](#) Prospect Target Resource computation - Last re-sync date and reason are now shown correctly

# Petrosys Release dbMap/Web 2019.4

## Detailed Release Notes

### [dbMap/Web - Client](#) [Enhancements](#)

#### **Enabled column rules on the well header (Origin)** 75765

Enabled database column rules on the well header for Origin.

#### **The Wells / Coal Summary / Coals tab, now includes the Coal Name (Origin)**

75645

A new value has been added to the Wells / Coal Summary / Coals tab for the Coal name.

### [dbMap/Web - General](#) [Enhancements](#)

#### **Well Failure Analysis - Enhancements for importing and storing min/max values**

75795

The Well Failure Analysis module has been enhanced with several changes that improve the ability to work with complex data. Some of the key changes include:

- Some Play analysis and Source analysis attributes now support optionally storing minimum and maximum values instead of only a discrete value.
- Base depths are now supported for Pressure and Temperature data.
- When importing data, we now support more flexibility in how ranges of data are specified. For instance '10 to 20', '<20', '>10'.
- When importing Pressure and Temperature data, we now support multiple records being specified in a single row by using a delimiter.

Import functionality, reports and data screens have all been updated to reflect the new changes.

#### **Records Management dashboard now contains a location map** 72940

A location map tab has been added to the records management dashboard. This map displays wells linked to the selected records.

#### **Support for Java 6 and 7 has been removed** 72991

Java 6 and 7 are no longer supported by Petrosys dbMap/Web.

#### **The Rule reference screen for CQ, now allows editing of the Use condition description**

75541

The reference panel for editing Rules for CQ now includes Use condition description.

#### **Well header - Changed order of Rig release and Abandonment dates**

74911

On the well header screen we have changed the order of the Rig release and Abandonment dates to match the order of those activities.

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### [dbMap/Web - General](#)

### [Bug Fixes](#)

## **Correct list of reports are available when running dbMap/Web via Petrosys PRO**

74833

Some general SQL reports were not available for selection when dbMap/Web was running inside of Petrosys PRO. This has now been fixed so the reports are available.

## **The Formation reference screen, from the lookup on the Well / Tops panel, now displays without error**

75199

A configuration issue has been fixed that prevented the Wells / Tops / Formation lookup from launching its reference panel.

## **Regional settings on the client PC no longer result in a mix of number formats on some panels**

74774

A bug has been fixed that resulted in some numbers on some panels, like the PLDB Resource computation panel, from displaying in a different regional format based on the client PC's regional settings.

## **Default user credentials are retained during the login process**

74596

A bug has been fixed that displayed an incorrect error message if a user failed to log in, which was the result of the default user credentials being cleared when a login failed.

## **Searching and sorting on reference table screen improved for Province/State**

74986

On the Admin/Reference Tables/PPDM/General reference screen, some tables had custom names provided to make their purpose easier to identify. The custom names previously did not behave as expected during filtering and sorting but has now been resolved.

## **Selecting a storage path when adding a new records management item no longer displays an error**

75170

In some cases, selecting a Storage path when adding a new Records Management item would display an error. This has been fixed.

## [dbMap/Web - PLDB Enhancements](#)

### **Prospect and Target screens now show whether polygon outlines exist**

73615

The PLDB Prospect and Target screens now display a note if polygon outlines exist.

### **A new reference screen has been added for Prospect Activity**

74120

A new reference screen has been added for Prospect Activity

### **Added common risk segments help documentation**

72789

A new help topic has been added about managing risk segments.

### **Added support for defining a risk model**

75041

PLDB now has the ability to define a more complex risk model, comprised of questions about level of knowledge and data quality that drive probability ranges for risk sub-factors.

The questions and sub-factors are fully customizable to clients needs, along with the rules that specify the probability ranges.



For example, the existing Source chance factor could be defined as a combination of two sub-factors for chance of source presence and effectiveness. Questions can then be defined such as whether sufficient quality of seismic data exists for the area and whether there are nearby wells of fields that have proven the existence and/or effectiveness of the source rock. The answers to the questions are in the form of a low, medium or high confidence level, which can then drive the range of probabilities supported. If the answers to seismic and well questions are high, then the ranges may be between 0.8 and 1.0, but if the answers are both low, then the supported ranges may be between 0.3 and 0.5.

Please contact Petrosys support if you would like more details and help setting up a risk model.

## **Editing prospect target / Resource calculator values now give more helpful validation messages**

75056

The validation error messages on the Resource computation panel are now specific to the row being edited to help fix data-entry errors.

## **The Captured indicator has been added to the Prospect tree filter**

75517

The prospect tree filter can now filter on Captured indicator. Some clients may have this configured with a different name referencing 'interest' or 'acreage' etc..

## **The prospects tree filter now includes a filter for Permit / production license**

75736

A new filter has been added to the Prospect tree filter to filter on Permit or production license

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### dbMap/Web - PLDB

### Bug Fixes

## **Prospect Target Resource computation - Last re-sync date and reason are now shown correctly**

75466

In some cases, the Prospect Target Resource computation dialog would show the incorrect last re-sync date and reason for the latest version of the resource computation.

These fields are also no longer shown when an earlier revision is chosen, and the date of the selected version is shown, to avoid any confusion.

## Detailed Release Notes Summary dbMap/Web 2019.3.2

### Bug Fixes

#### *dbMap/Web - Client*

[75674](#) PLDB - User access screen fixed (Santos)

[75602](#) PLDB - Fixed validation rule when setting prospect to 'Current' (Santos)

#### *dbMap/Web - General*

[75597](#) Mapping - Style attribute included when loading WMS base layers

# Petrosys Release dbMap/Web 2019.3.2

## Detailed Release Notes

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### dbMap/Web - Client

### Bug Fixes

#### **PLDB - User access screen fixed (Santos)**

75674

Fixed an error on the "Admin / Security / Prospect & Leads / User access" screen for Santos

#### **PLDB - Fixed validation rule when setting prospect to 'Current' (Santos)**

75602

The validation rule that prevents the prospect status being set to current if a polygon does not exit has been fixed.

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### dbMap/Web - General

### Bug Fixes

#### **Mapping - Style attribute included when loading WMS base layers**

75597

Fixed a bug preventing WMS base layers from being displayed due to the "STYLE" attribute not being included in the request for the layer.

# Detailed Release Notes Summary dbMap/Web 2019.3.1

## Enhancements

### *dbMap/Web - Client*

- [74577](#) Updated LIMS database URL (Santos)
- [75261](#) Core Coal Analysis - Allow any well sample to be used as a sample group (Origin)
- [74634](#) Core Coal Analysis - Gas Composition analysis can be linked to any Adsorption Isotherm analysis for the well (Origin)
- [75437](#) Mapping - Added map extents (Santos)
- [75469](#) Mapping - Well name correctly displayed in annotations and list of selected features (Santos Data Hub)
- [74823](#) The Field, Well type and Config type are now read only on the Well Spec Card panel (Origin)
- [75551](#) Wells - Added custom fields (Santos Data Hub)
- [75359](#) Wells - Changed permit tree filter grouping (Origin)
- [74665](#) Wells - Rename Well numeric ID to GPinfo Well ID (Cooper)
- [75554](#) Wells / Completions - Added custom fields (Santos Data Hub)
- [74633](#) Wells / Core Samples - Formations and seams shown for any interpreter (Origin)

### *dbMap/Web - General*

- [75468](#) Records Management - Allow preview of LAS files as an ASCII file
- [74960](#) Wells cross reference now supports filtering by a Records Management list
- [75527](#) Some additional well symbols have been added
- [74789](#) Well log viewer - Improved support for reading non-standard LAS files
- [74945](#) Well log viewer - Updated the browser tab title to show the log file name first
- [75553](#) Wells / Well Support Facilities - Added rig details to list

# Detailed Release Notes Summary dbMap/Web 2019.3.1

## Bug Fixes

### *dbMap/Web - Client*

- [74746](#) The reference screen for Completion method now matches Petrosys PRO (Santos)
- [75301](#) Core Coal Analysis - Calculations executed when using data loaders (Origin)

### *dbMap/Web - General*

- [74721](#) Well log viewer - Curve segments on a logarithmic scale are no longer linear
- [75425](#) Well log viewer - Fixed curve header tracking/units field obscured when using opaque fills
- [75389](#) Well log viewer - Improved DLIS reader to better handle index spacing errors
- [75061](#) Well log viewer - Templates now store formation tops tracks
- [75067](#) Wells / Core Samples - A copy of a Sample can now be created using the "Save as" button

### *dbMap/Web - PLDB*

- [74988](#) PLDB - Basin name is shown on the prospect header even if no country is selected (Origin)
- [75307](#) PLDB - Fixed distribution plot for "Bo"
- [75498](#) PLDB - Correct gas units shown on the Prospect Milestones and Chronology screens
- [75087](#) PLDB - Employees with names longer than 15 characters can now have basins assigned

# Petrosys Release dbMap/Web 2019.3.1

## Detailed Release Notes

### [dbMap/Web - Client](#) [Enhancements](#)

#### **Updated LIMS database URL (Santos)** 74577

The Santos Well LIMS database URL has been updated to point to the new server.

#### **Core Coal Analysis - Allow any well sample to be used as a sample group (Origin)** 75261

Changed selection of "Isotherm sample group" on the "Wells / Core Samples" panel to allow selection of any well sample.

#### **Core Coal Analysis - Gas Composition analysis can be linked to any Adsorption Isotherm analysis for the well (Origin)** 74634

Linking from a Gas Composition analysis to an Adsorption Isotherm analysis now includes any Adsorption Isotherm analysis for the same well.

#### **Mapping - Added map extents (Santos)** 75437

Added requested map extents to the standard and data hub Santos environments.

#### **Mapping - Well name correctly displayed in annotations and list of selected features (Santos Data Hub)** 75469

Annotations and the list of selected featured only displays the well name value for a well.

#### **The Field, Well type and Config type are now read only on the Well Spec Card panel (Origin)** 74823

Since the Field, Well type and Config type are read only in the database, they are now read only on the Well Spec Card panel.

#### **Wells - Added custom fields (Santos Data Hub)** 75551

Inclusion of additional fields on the Well Header for the Santos Data Hub environment.

#### **Wells - Changed permit tree filter grouping (Origin)** 75359

Changed the "Permit" filter on the "Wells" screen to allow easier selection of wells operated by Origin.

#### **Wells - Rename Well numeric ID to GPinfo Well ID (Cooper)** 74665

The Well numeric ID is now called GPinfo Well ID for Cooper.

#### **Wells / Completions - Added custom fields (Santos Data Hub)** 75554

Added fields to the "Wells / Completions" screen to show the "Average geothermal gradient" and "Surface temperature".

#### **Wells / Core Samples - Formations and seams shown for any interpreter (Origin)** 74633

The "Wells / Core Samples" screen has been updated to show related formation and seam information based on relates "Wells / Tops" from any interpreter.

## **The reference screen for Completion method now matches Petrosys PRO (Santos)**

74746

The sort order, columns and location of inputs are now the same in dbMap/Web and Petrosys PRO

## **Core Coal Analysis - Calculations executed when using data loaders (Origin)**

75301

Fixed a bug preventing calculations being executed when creating records using the Core Coal Analysis data loaders.

## **Records Management - Allow preview of LAS files as an ASCII file**

75468

LAS files stored in Records Management can now be previewed as plain text (ASCII) files.

## **Wells cross reference now supports filtering by a Records Management list**

74960

It is now possible to create a list of wells based on a list of linked records management items.

## **Some additional well symbols have been added**

75527

Some missing well symbols have been added to match Petrosys PRO

## **Well log viewer - Improved support for reading non-standard LAS files**

74789

The LAS reader is now tolerant of non-standard LAS files containing blank lines. These can now be viewed in the Well Log Viewer.

## **Well log viewer - Updated the browser tab title to show the log file name first**

74945

To improve visibility when multiple Well Log Viewer tabs are open, the browser tab titles now start with the name of the well log file, followed by the path.

## **Wells / Well Support Facilities - Added rig details to list**

75553

The "Wells / Well Support Facilities" displays a generic list of facilities for the well. Additional columns have been added to the list to provide more information, when the facility is a rig.

## **Well log viewer - Curve segments on a logarithmic scale are no longer linear**

74721

Previously, curve segments rendered on a logarithmic track were rendered on a linear scale between points. This caused minor mismatches between the tracking cursor and curve segment at high zoom levels. Now, both the tracking cursor and the line segments use a logarithmic scale.

## **Well log viewer - Fixed curve header tracking/units field obscured when using opaque fills**

75425

Previously, the curve units and tracking information was obscured by the fill color shown in the curve header. When using opaque fills, the field was completely covered. This has now been fixed.

## **Well log viewer - Improved DLIS reader to better handle index spacing errors**

75389

The DLIS reader used by the Well Log Viewer has been improved to support a larger range of DLIS files. Specifically those containing mismatching index spacing and range and those with non-uniform samples depths.

## **Well log viewer - Templates now store formation tops tracks**

75061

Previously, formation tops tracks weren't saved to the template. Now, when you save a template containing formation tops, the track location and style is maintained.

*Note:* The formation tops selection is not stored in the template.

## **Wells / Core Samples - A copy of a Sample can now be created using the "Save as" button**

75067

A bug preventing a sample record from being copied using the 'Save as..' button has been fixed.

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### dbMap/Web - PLDB

### Bug Fixes

## **PLDB - Basin name is shown on the prospect header even if no country is selected (Origin)**

74988

If no Country was selected for a prospect then the basin code was shown instead of the basin name. This has been fixed so the basin name shows with or without a country selected.

## **PLDB - Fixed distribution plot for "Bo"**

75307

Fixed a bug preventing the distribution plot for variable "Bo" being displayed.

## **PLDB - Correct gas units shown on the Prospect Milestones and Chronology screens**

75498

Fixed a bug causing incorrect units to be displayed for gas values on the "Milestones" tab on the prospect header, the "Prospect Chronology" list and the "Target Chronology" list. This was only an issue for clients that do not use BCF as the default gas unit.

## **PLDB - Employees with names longer than 15 characters can now have basins assigned**

75087

A bug preventing users with names longer than 15 characters from being assigned basins has been fixed.



## Detailed Release Notes Summary dbMap/Web 2019.3

### Enhancements

#### *dbMap/Web - General*

- [74589](#) Well log viewer - Icon improvements
- [74235](#) Well log viewer - Resizeable tracks
- [74152](#) Well log viewer - Support for LAS v2.1

#### *dbMap/Web - PLDB*

- [73653](#) PLDB now supports Discovered Resources
- [73673](#) PLDB Chronology enhancements
- [74697](#) PLDB - Company interest is now included in the dashboard tree filter (Santos)

## Detailed Release Notes Summary dbMap/Web 2019.3

### Bug Fixes

#### *dbMap/Web - General*

- [74572](#) Core Coal Analysis - Cancelling creation of analysis records now works consistently
- [74560](#) Core Coal Analysis - New Gas compositions can now specify the linked Adsorption isotherm analysis as part of initial creation
- [74468](#) Core Coal Analysis - The counts on buttons under the Core sample panel are now updated when adding and deleting records

# Petrosys Release dbMap/Web 2019.3

## Detailed Release Notes

### [dbMap/Web - General](#) [Enhancements](#)

#### **Well log viewer - Icon improvements** 74589

The icons for cross-plots and composite log charts have been updated to better represent the functionality,.

#### **Well log viewer - Resizeable tracks** 74235

The width of tracks can now be resized interactively in the Petrosys Well Log Viewer.

#### **Well log viewer - Support for LAS v2.1** 74152

LAS format version 2.1 is now supported for displaying in the Petrosys Well Log Viewer.

### [dbMap/Web - General](#) [Bug Fixes](#)

#### **Core Coal Analysis - Cancelling creation of analysis records now works consistently** 74572

Pressing the Cancel button after starting to add a new sample analysis (Adsorption isotherm, Desorption etc..) would sometimes leave the panel in state where the new blank record remained on the screen. This has been fixed.

#### **Core Coal Analysis - New Gas compositions can now specify the linked Adsorption isotherm analysis as part of initial creation** 74560

You can now add a new gas composition and link it to an Analysis isotherm before clicking the Save button. Previously the gas composition had to be saved first before it could be linked to an Adsorption Isotherm.

#### **Core Coal Analysis - The counts on buttons under the Core sample panel are now updated when adding and deleting records** 74468

The count of Sample analysis records that is shown on the buttons below the Core sample panel are now correctly updated when new Sample analysis records are added or deleted.

### [dbMap/Web - PLDB](#) [Enhancements](#)

#### **PLDB now supports Discovered Resources** 73653

PLDB had existing support for Prospective, Contingent and Reserves resource computations. This release adds support for Discovered resources which are part of the Society of Petroleum Engineers PRMS standard. Key functionality includes:

- A new Discovered resource computation dialog for targets, which supports copying from Prospective resources.
- Separate Prospect level roll-up of Discovered resources for primary targets, which is visible in the Prospect chronology list and new Prospect Milestone list or via the Prospect summary report.
- As they are stored separately, Discovered resources are not included in aggregation/enrollment of Exploration resources performed during automated roll-up, reporting, dashboarding, or on-demand roll-up.
- Discovered resources are only able to be created once a target status has been classified as proven successful.

## PLDB Chronology enhancements

73673

The existing Prospect Chronology screen has been enhanced and the introduction of Milestones gives a clearer picture of the key changes to a Prospect's resources over time. Some of the key functionality include:

- Milestones can be defined as special types of events, and the list is customisable by clients.
- Prospect Chronology only shows key milestones by default, but full details of incremental changes and other prospect, portfolio, target and drilling opportunity events can be shown on request.
- The Prospect and dashboard tree filters have been expanded to support seamless search & find based on milestone, and the Prospect header dialog displays the current milestone.
- The Prospect Header dialog lists all key milestones to allow easy viewing without having to drill-down through the Prospect Chronology dialog.
- A Prospect level resource summary chart has been added to show how the Prospective resource estimates have changed over time, along with the milestones and Discovered resources.

## PLDB - Company interest is now included in the dashboard tree filter (Santos)

74697

Prospects can now be filtered by whether a company has an interest in a prospect. (Santos only)

## Detailed Release Notes Summary dbMap/Web 2019.2

### Enhancements

#### *dbMap/Web - Client*

[74341](#) PLDB activated for Origin

#### *dbMap/Web - General*

[72863](#) Core Coal Analysis

[73476](#) Well Log Viewer - Enhancements

[74367](#) Well Perforation data loader extended to support additional columns

[74521](#) Well Failure Analysis - Enhancements to data loading in 2019.2

#### *dbMap/Web - PLDB*

[69405](#) PLDB - Size of distribution variable values has been increased

[72682](#) Prospect roll-up now produces more consistent results for Prospects with single targets

## Detailed Release Notes Summary dbMap/Web 2019.2

### Bug Fixes

#### *dbMap/Web - PLDB*

[74424](#) Correct play probability factors are now shown for target scenario resource computations

[74305](#) Performance of PLDB\_TARGET\_POLYS view improved

# Petrosys Release dbMap/Web 2019.2

## Detailed Release Notes

### [dbMap/Web - Client](#) [Enhancements](#)

#### **PLDB activated for Origin**

74341

PLDB functionality has been enabled.

### [dbMap/Web - General](#) [Enhancements](#)

#### **Core Coal Analysis**

72863

A new coal core analysis module has been added to our well functionality. The PPDM 3.9 Sample Analysis model is used to manage Samples as well as analysis for :

- Adsorption isotherm
- Desorption
- Gas composition
- Isotope
- Petrology
- Proximate
- Rock evaluation
- Rock mechanics
- Ultimate

#### **Well Log Viewer - Enhancements**

73476

A number of enhancements have been made to the Well Log Viewer introduced with dbMap/Web 2019.1.

##### *Templates*

Support for user-defined well log templates which incorporate track and curve layouts and styles. Once a well log view is configured, it can be saved as a template. Templates can be applied to any well log and provide a quick-and-easy method of displaying log curves with a consistent layout and style. Quickly switch between different views of your log data using templates.

##### *Formation Tops*

Added support for displaying formation tops from the database in a separate track and across all tracks.

##### *Crossplots*

A new display mode has been added to show the well log data in a cross-plot. The cross-plot mode supports customizable axes and line of best fit calculations.

##### *Wrapping*

Well log curve data can optionally be wrapped to show the extents of data spikes. Up to two levels of wrapped data can be displayed.

##### *Other Enhancements*

- Support for selecting from multiple frames of DLIS data.
- The Well Log Viewer display can now be exported to a PNG image file with a single click.
- Reverse a curve's display range with a single click.

## Well Perforation data loader extended to support additional columns

74367

The well perforation data loader has been extended to support importing additional columns.

## Well Failure Analysis - Enhancements to data loading in 2019.2

74521

A series of enhancements and fixes have been made to the data loading functionality for Well Failure Analysis data. Changes include:

- Reference Elevation values including 'SS' are now supported. In some cases they are automatically translated to standard values such as 'MSL'.
- The allowed length of Data source values has been increased
- More information is now provided when the data to be imported has invalid numbers
- Play analysis well test types are now automatically created if they don't already exist
- The allowed length of Well result has been increased.

### [dbMap/Web - PLDB](#)

### [Enhancements](#)

#### **PLDB - Size of distribution variable values has been increased**

69405

The size of PLDB resource computation distribution variable values has been increased to support analysis of larger areas.

#### **Prospect roll-up now produces more consistent results for Prospects with single targets**

72682

The Prospect rollup of target resources now produces more consistent results for prospects with a single target. Previously you could get slight differences in the Total MMBOE distribution values compared with the target's original values.

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### [dbMap/Web - PLDB](#)

### [Bug Fixes](#)

#### **Correct play probability factors are now shown for target scenario resource computations**

74424

When creating a new Prospect target scenario resource computation, the Probability factors tab now shows the correct Play chance factors. Previously it just showed the total as 1.

#### **Performance of PLDB\_TARGET\_POLYS view improved**

74305

The performance of the database view PLDB\_TARGET\_POLYS has been significantly improved. Where previously it could take 5 minutes to select all records from the view, it now takes about 2 seconds.



# Detailed Release Notes Summary dbMap/Web 2019.1

## Enhancements

### *dbMap/Web - Client*

- [73439](#) Geological Province changed to Basin in the wells tree filter (Santos)
- [73640](#) Row-based security has been added for Wells (Origin)
- [73537](#) Easting/Northing values are now shown on well header (Greymouth)
- [73879](#) Spotfire link updated to latest version of Sportfire (Santos)
- [73429](#) Three new columns have been added to the view FRAC\_SPOTFIRE\_VW (Santos).

### *dbMap/Web - General*

- [73014](#) Well Failure Analysis
- [73193](#) The formation summary records are re-calculated when using the data loader
- [73475](#) Well log viewer
- [72845](#) Performance improvements have been made to the Well log curve summary report
- [73287](#) CQ batch job has been optimised and can now continue from previous run
- [72942](#) Dashboard pie charts have been changed to donut charts
- [72766](#) Performance improvements have been made to displaying panels by caching the buttons

### *dbMap/Web - PLDB*

- [35852](#) Prospects & Leads now supports Common Risk Segment polygons
- [70509](#) New tree filter options have been added for Onshore and Offshore

## Detailed Release Notes Summary dbMap/Web 2019.1

### Bug Fixes

#### *dbMap/Web - Client*

[73606](#) Catalogued items are recorded with the media type of Electronic file (Origin)

[73365](#) Users with a full stop in their username can now use web mapping

#### *dbMap/Web - General*

[73274](#) Lookups in the Advanced search query builder no longer cause the embedded browser in PETROSYS PRO to crash

[73928](#) Aliases can now be created for Formations

[74106](#) Well log browser screen - Depths now have a space comma instead of a space as the thousand separator

## Petrosys Release dbMap/Web 2019.1

Detailed Release Notes

### [dbMap/Web - Client](#) [Enhancements](#)

#### **Geological Province changed to Basin in the wells tree filter (Santos)**

73439

"Geological province" replaced by "Basin" for consistency with SANTOS DATA HUB (PPDM).

#### **Row-based security has been added for Wells (Origin)**

73640

Row-based security, that uses the well's confidential\_type column as been added for Origin.

#### **Easting/Northing values are now shown on well header (Greymouth)**

73537

The Well header panel now shows Easting/Northing values.

#### **Spotfire link updated to latest version of Sportfire (Santos)**

73879

The link 'Laboratory Data (LIMS)' on the Well panel was updated to match the latest configuration of Spotfire.

#### **Three new columns have been added to the view FRAC\_SPOTFIRE\_VW (Santos).**

73429

The three new columns added to the view FRAC\_SPOTFIRE\_VW are Closure Gradient, Pore Gradient and Adjusted KH.

### [dbMap/Web - Client](#)

### [Bug Fixes](#)

#### **Catalogued items are recorded with the media type of Electronic file (Origin)**

73606

A bug with cataloguing RM items has been fixed so they are categorised as 'Electronic file' Media type.

#### **Users with a full stop in their username can now use web mapping**

73365

Fixed a bug causing mapping to fail for users with a full stop (.) in their username.

### [dbMap/Web - General](#) [Enhancements](#)

#### **Well Failure Analysis**

73014

A new module to conduct 'Well Failure Analysis' is now available. This module allows companies to analyse data from existing wells to determine where plays have been successful and unsuccessful. The reasons for the failure in the unsuccessful plays can also be queried and mapped, allowing better decisions or research to be conducted ahead of future wells.

#### **The formation summary records are re-calculated when using the data loader**

73193

When importing records via the data loader, the formation summary records will be re-calculated.

## Well log viewer

73475

A new integrated well log viewer has been added to dbMap/Web which provides a quick and easy method to interactively view the well log curves within catalogued LAS and DLIS files.

*Note:* A separate license is required to access the well log viewer. Please contact Petrosys support for more details.

## Performance improvements have been made to the Well log curve summary report

72845

The well log curve summary report is now faster to generate.

## CQ batch job has been optimised and can now continue from previous run

73287

Confidence and Quality (CQ) batch job has been optimised to be faster with a new option added to continue from the last run.

## Dashboard pie charts have been changed to donut charts

72942

All pie charts on all dashboards in dbMap/Web have been changed to donut charts that are easier to read and now have colors that are consistent with other charts.

## Performance improvements have been made to displaying panels by caching the buttons

72766

By caching the panel buttons, panels are faster to load and display on the web page.

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## dbMap/Web - General

## Bug Fixes

### Lookups in the Advanced search query builder no longer cause the embedded browser in PETROSYS PRO to crash

73274

A bug causing the embedded browser to crash when a user activated the advanced search and tried to select values from a lookup has been fixed; only the embedded (PETROSYS PRO) browser was affected.

### Aliases can now be created for Formations

73928

A bug that prevented Aliases from being added to Formations has been fixed.

### Well log browser screen - Depths now have a space comma instead of a space as the thousand separator

74106

Previously on the well logs browser screen, depths that were larger than 999 were displayed with a space as the thousand separator in lists. They are now displayed with a comma instead. For example depths are now formatted as 1,234.56

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## dbMap/Web - PLDB

## Enhancements

### Prospects & Leads now supports Common Risk Segment polygons

35852

Petrosys Prospects & Leads module now supports storing Common Risk Segment (CRS) polygons against play interval chance factors and using spatial comparison with the Prospect or Target polygon to determine the appropriate Play chance factors to use in the resource computation.

The CRS polygons are expected to have an attribute defining the risk for each polygon, and can be loaded into the database using the Petrosys PRO Spatial Data Translator, from data sources such as shape files exported from Player. By default the attribute used is named "Risk2", but this can be configured by modifying the PLDB\_PLAY\_CHANCE\_POLY\_ATTR\_NAME code group value on Admin/Reference Tables/General dialog.

## **New tree filter options have been added for Onshore and Offshore** 70509

New filter options for Onshore and Offshore have been added to the tree filter for Prospects.