whitson+ Comparison Plot

22 January 2025

Virtual

Topics: Coloring, Normalization, Aggregation

Main objective: Click every button and not rush.

Small Courses throughout the Year

- ✔ 22 Jan: Comparison Plot in whitson+ (virtual) ← **TODAY**
- ✔ 13 Feb: PVT & Phase Behavior in whitson+ (virtual)
- ✔ 27 Feb: Flowback in whitson+ (virtual)
- ✔ 26 March: Nodal Analysis in whitson+ (virtual)
- ✔ 24 April: Bottomhole Pressure in whitson+ (virtual)
- ✔ 7 May: DCA & Type Wells in whitson+ (virtual)
- ✔ 25 June: Analytical & Numerical RTA in whitson+ (virtual)
- ✔ 20 Aug: Flowing Material Balance in whitson+ (virtual)
- ✔ 25 Sep: Numerical Model in whitson+ (virtual)
- ✔ 1 October: whitson+ software course (in-person)
- ✔ 15 Oct: Nodal Analysis in whitson+ (virtual)
- ✔ 5 Nov: Well Tests (CPG. DQI & DFIT) in whitson+ (virtual)
- ✔ 3 Dec: DCA & Type Wells in whitson+ (virtual)

Send e-mail to carlsen@whitson.com if you haven't received the invite to the courses.

Need Course Certificate?

Contact carlsen@whitson.com

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CERTIFICATE OF ATTENDANCE

John Doe

has successfully completed

RTA in whitson+

1/2-day Course held Virtually

14 July 2022

Mathias Lia Carlsen

GM Americas

www.whitson.com

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Training

https://whitson.com/training/

SEP 18 2024	whitson+ software course 1-Day, In person course - Houston 8 am-16 pm Central Time (CT)	Register
OCT 02 2024	Nodal Analysis in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Summer Time (CEST)	Register
OCT 16 2024	Well Tests (CPG & DFIT) in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Summer Time (CEST)	Register
DEC 04 2024	DCA & Type Wells in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Time (CET)	Register
FEB 13 2025	PVT & Phase Behavior in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Time (CET)	Register
APR 24 2025	Bottomhole pressure calculations in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Summer Time (CEST)	Register
JUN 25 2025	Analytical and Numerical RTA in whitson+ 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Summer Time (CEST)	Register
AUG 20 2025	Flowing material balance in whitson+ Virtual 1/2 Day Course 8-12 am Central Time (CT) | 7-11 am Mountain Time (MDT) | 3-7 pm Central European Summer Time (CEST)	Register

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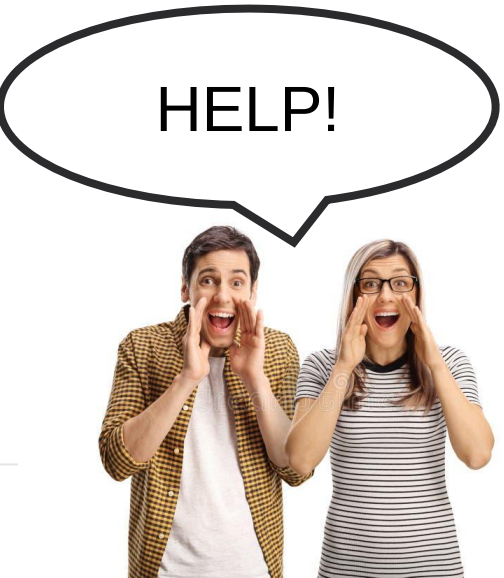
An all-in-one solution

Web-based solution

- ✓ DCA & Type Well
- ✓ PVT
- ✓ BHP Calculations
- ✓ FMB
- ✓ RTA
- ✓ Reservoir Simulation
- ✓ Nodal Analysis
- ✓ Well Testing (CPG, DFIT)

General Support

whitson+ software
support@whitson.com (2 min response time)



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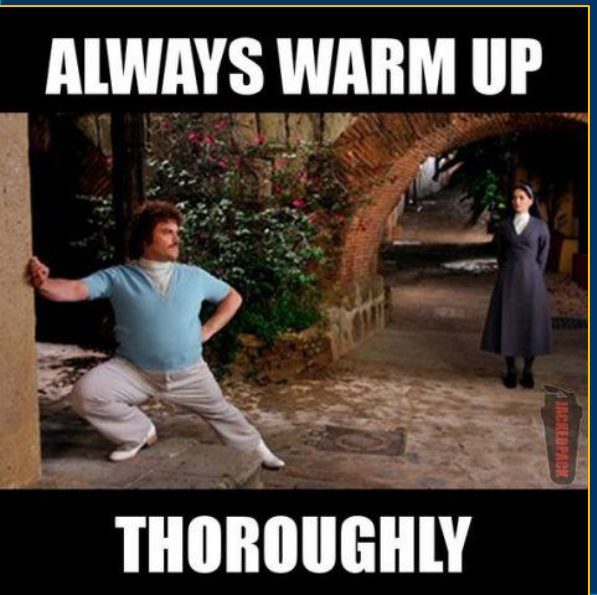
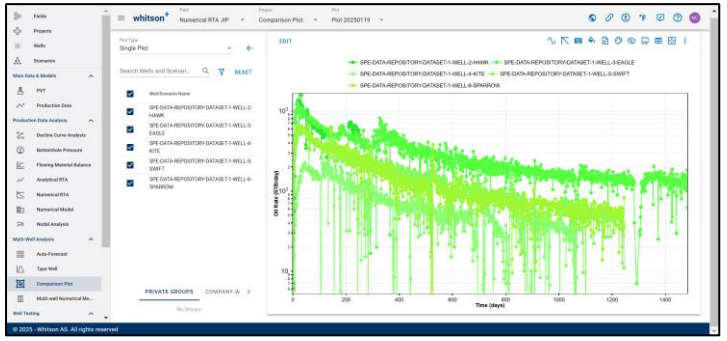
Agenda

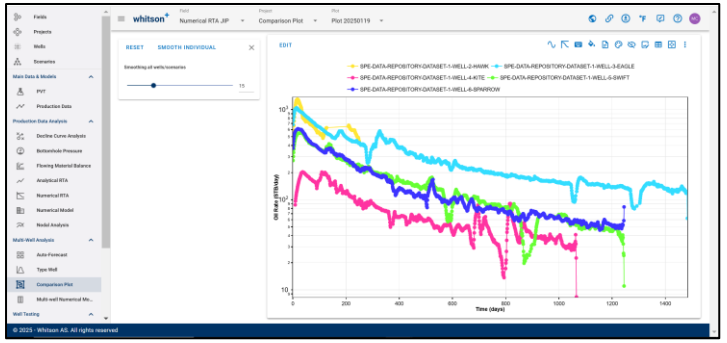
- Single Plot
  - Create plot
  - Smoothing
  - Coloring
  - Customize Plot
  - Normalization
  - Aggregation
    - By sum
    - By Average
- Advanced
  - Appending forecasts
  - Multiple Axis
  - 2x2 plot
  - RTA plots – PNRs and RNPs

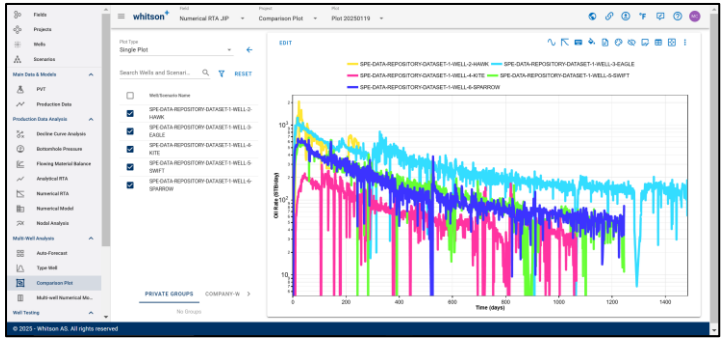
Exercises



1 Exercise 1: Single Plot



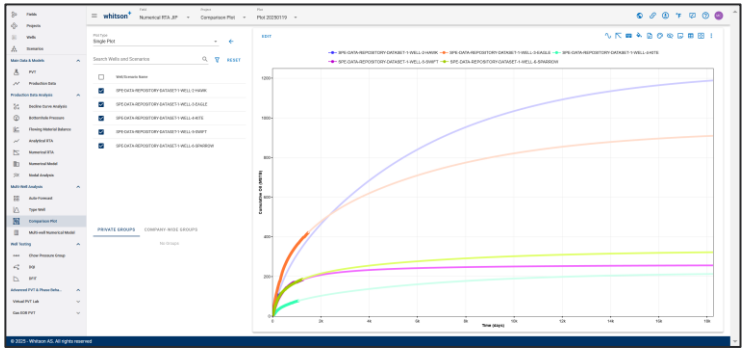


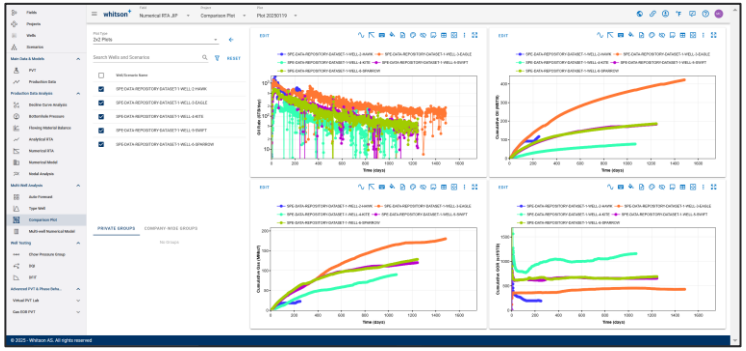


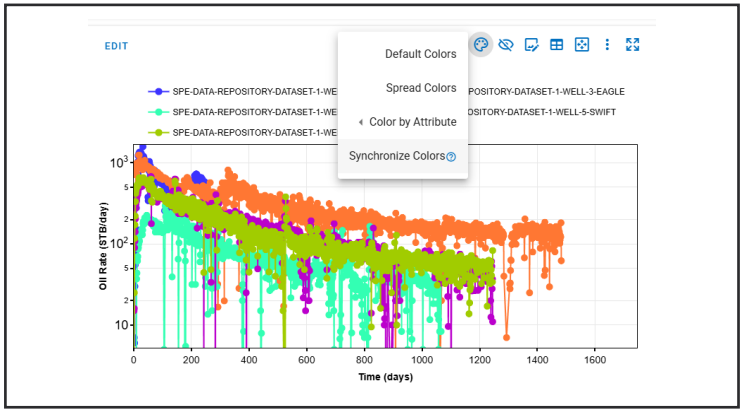
1. Create plot
2. Make rate time plot (semi log)
3. Plot Alteration
4. Spread color
5. Smoothing on
6. Smoothing off
7. Remove Markers
8. Highlighting
9. Customize plot
10. Sharing a plot with a friend
11. Edit x-axis
12. Normalize y-axis
13. Normalize x-axis
14. Remove normalization (x-axis)
15. Aggregation
16. Multiple Axis

2

Exercise 2: Advanced Topics







1. Creating a new plot
2. Editing plot settings
3. Rate cum plot
4. Appending forecasts
5. Removing forecasts
6. 2x2 plots
7. Synchronize colors

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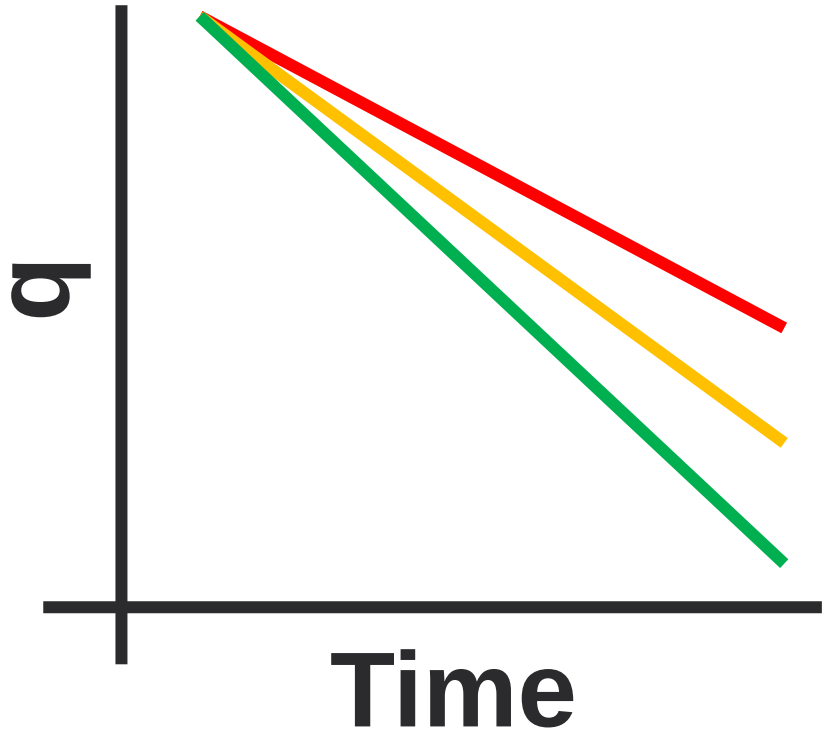
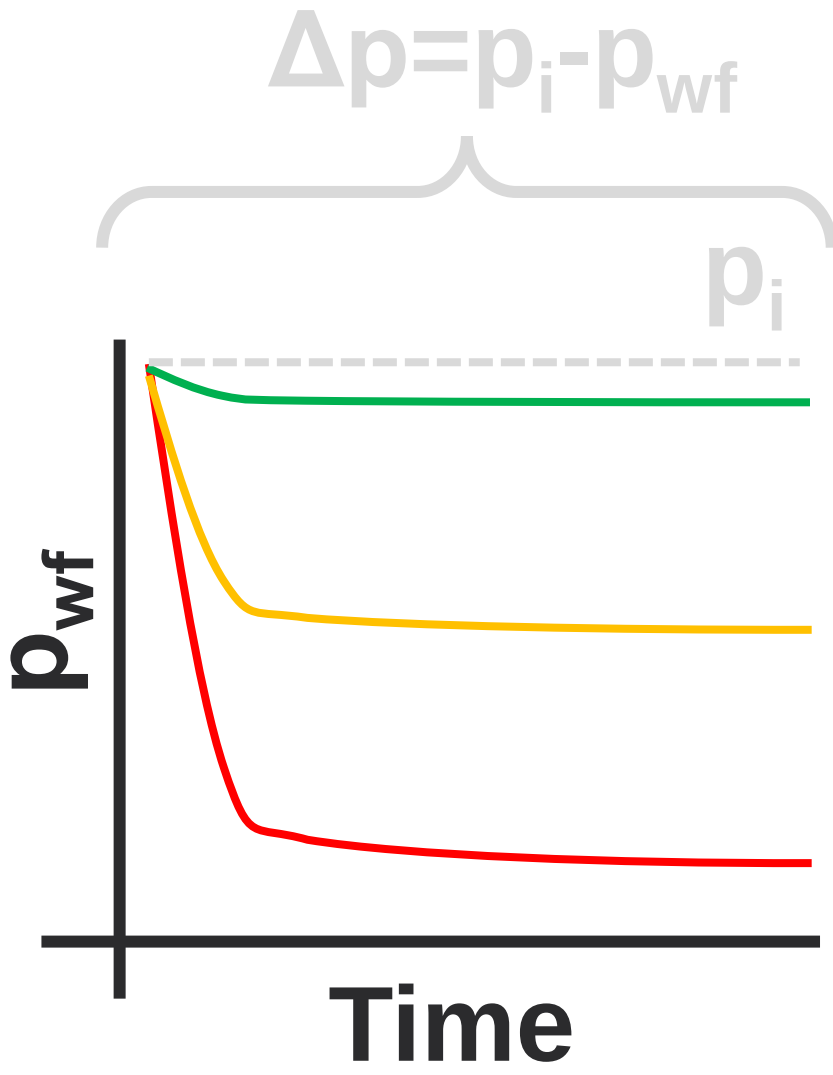
3 Which well is the 'best' on this plot?





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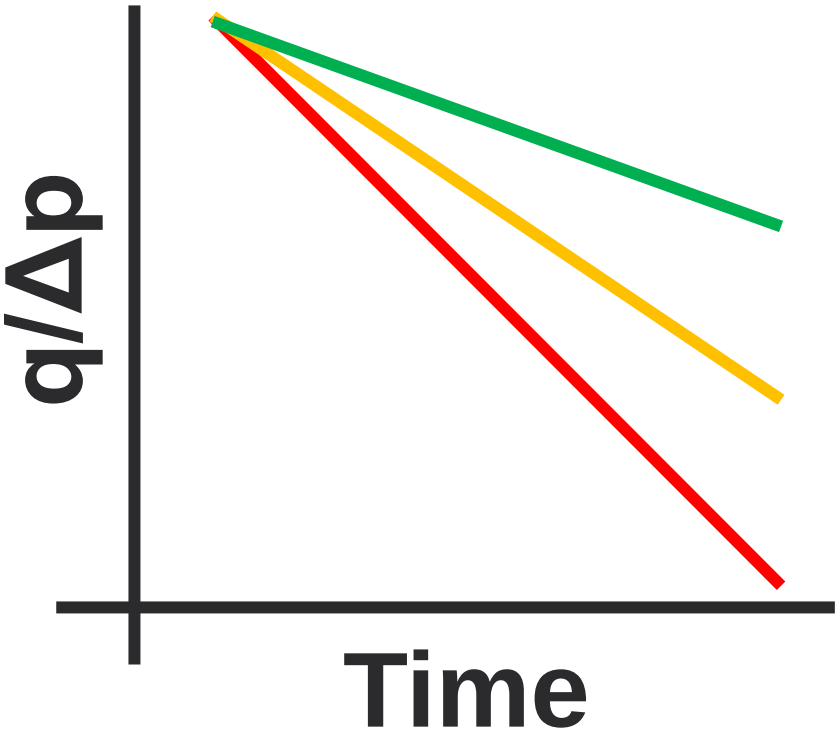
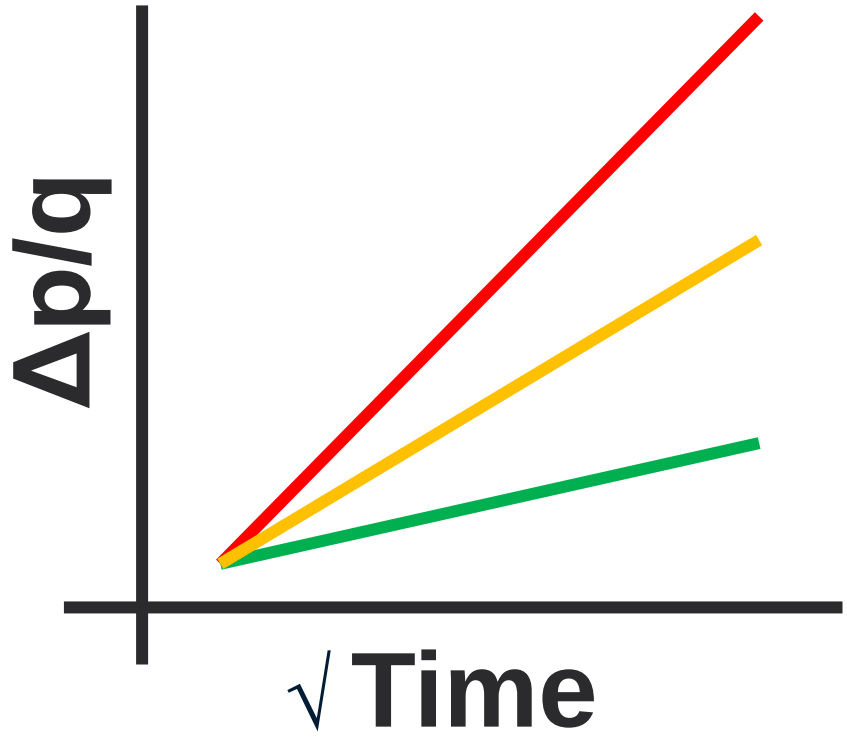
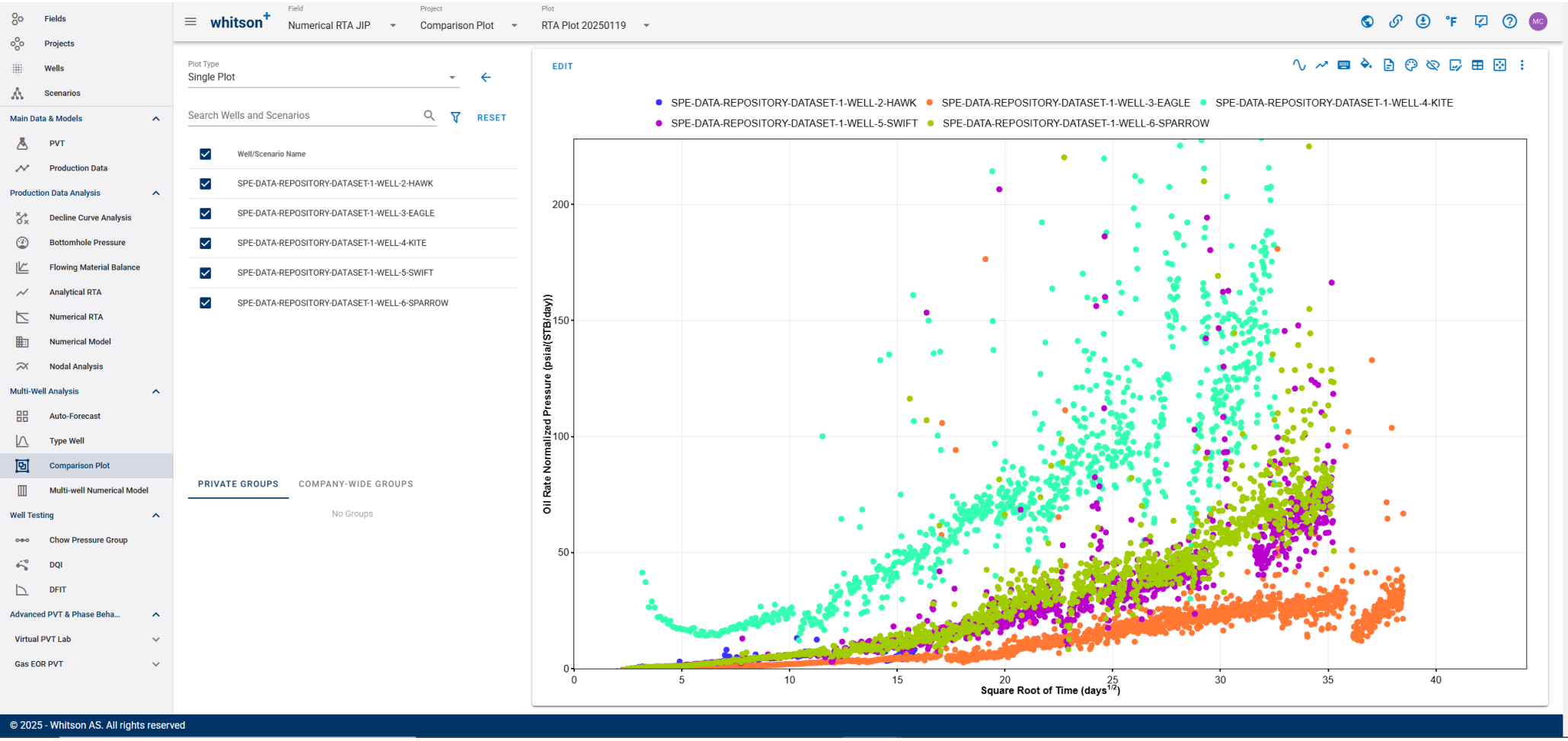
3 Which well is the ‘best’ on this plot?





3 Exercise 3: Square root of Time Plot



We support energy companies, oil services companies, investors and government organizations with expertise and expansive analysis within PVT, gas condensate reservoirs and gas-based EOR. Our coverage ranges from R&D based industry studies to detailed due diligence, transaction or court case projects.

We help our clients find best possible answers to complex questions and assist them in the successful decision-making on technical challenges. We do this through a continuous, transparent dialog with our clients - before, during and after our engagement.

The company was founded by Dr. Curtis Hays Whitson in 1988 and is a Norwegian corporation located in Trondheim, Norway, with local presence in USA, Middle East, India and Indonesia.

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Trondheim, Norway	Houston, TX 77019, US
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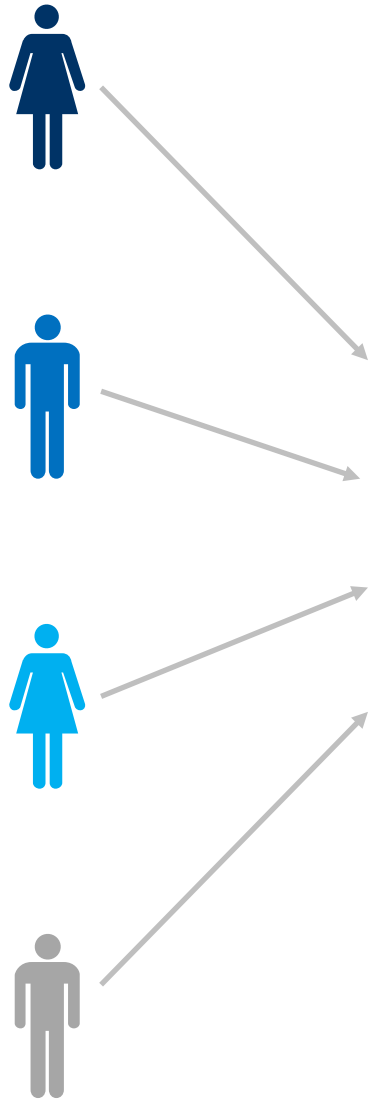
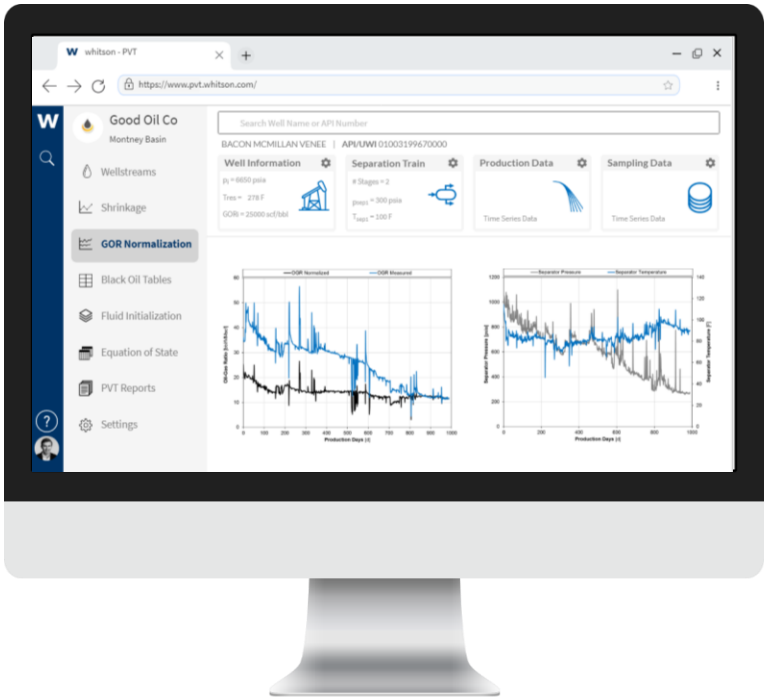
Software Basics

Access to whitson+





NOT YOUR COMPANY DOMAIN

www.courses.whitson.com

Username: your e-mail

Password: WhitsonDCA2024*

*Send an e-mail to dahouk@whitson.com if you need help to login.

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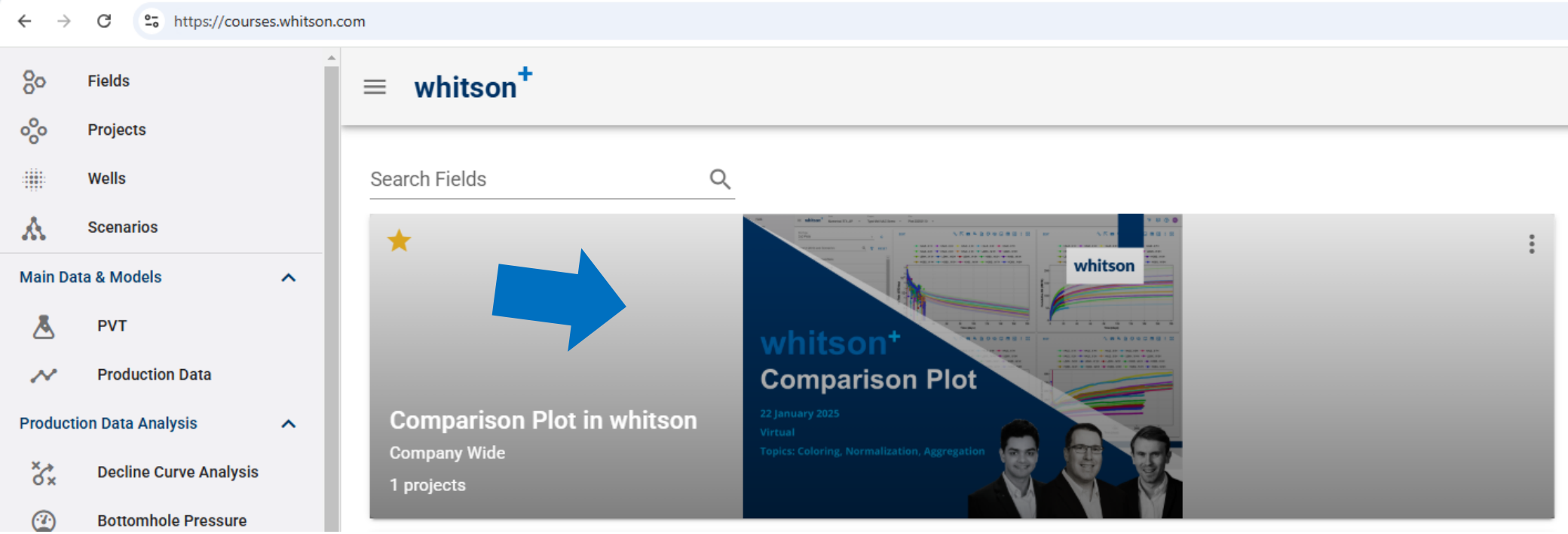
Access to whitson+



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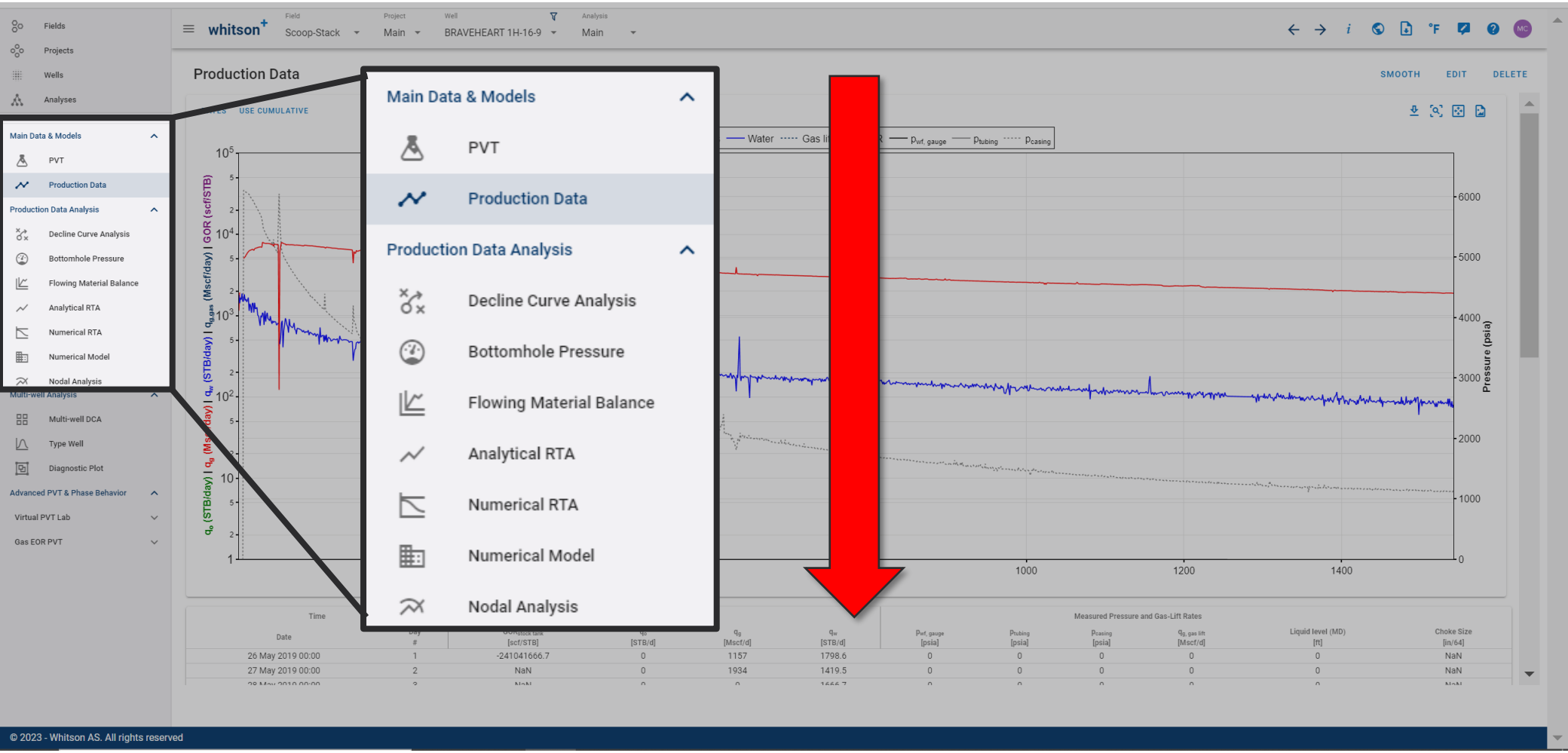
Software Structure: Top Down



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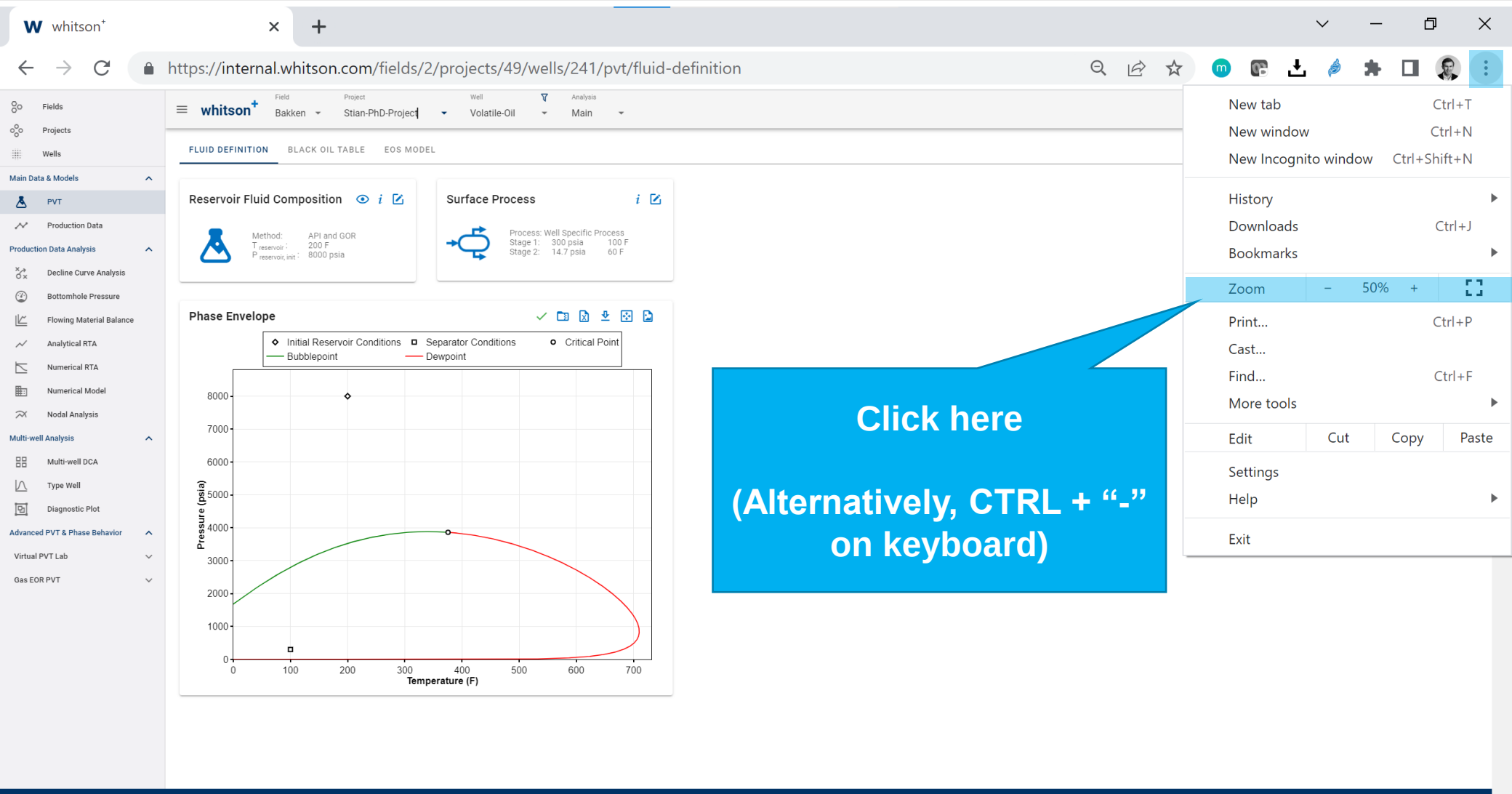
whitson+: Set Zoom to 70-80%



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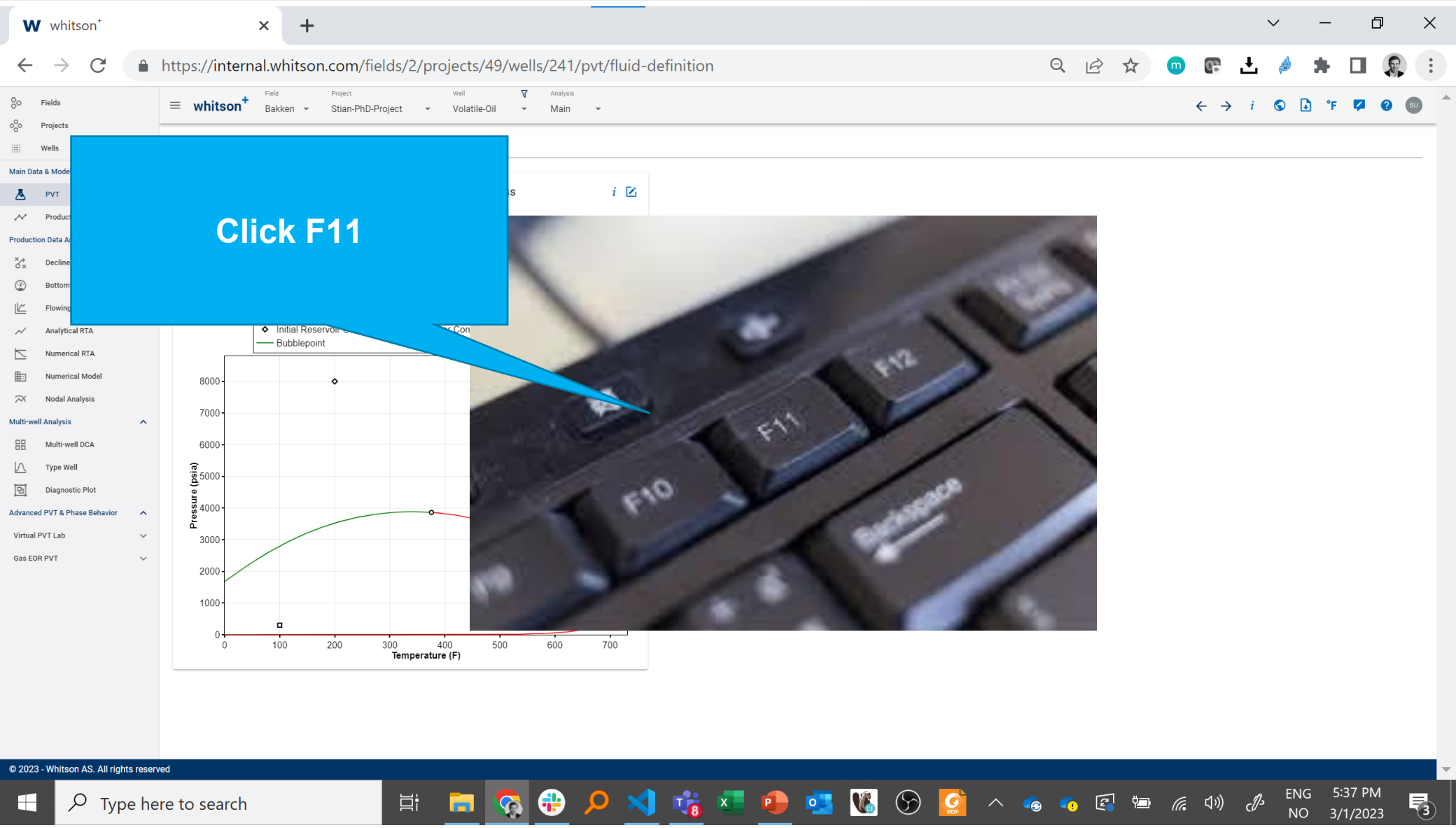
whitson+: Maximize Screen by “F11”



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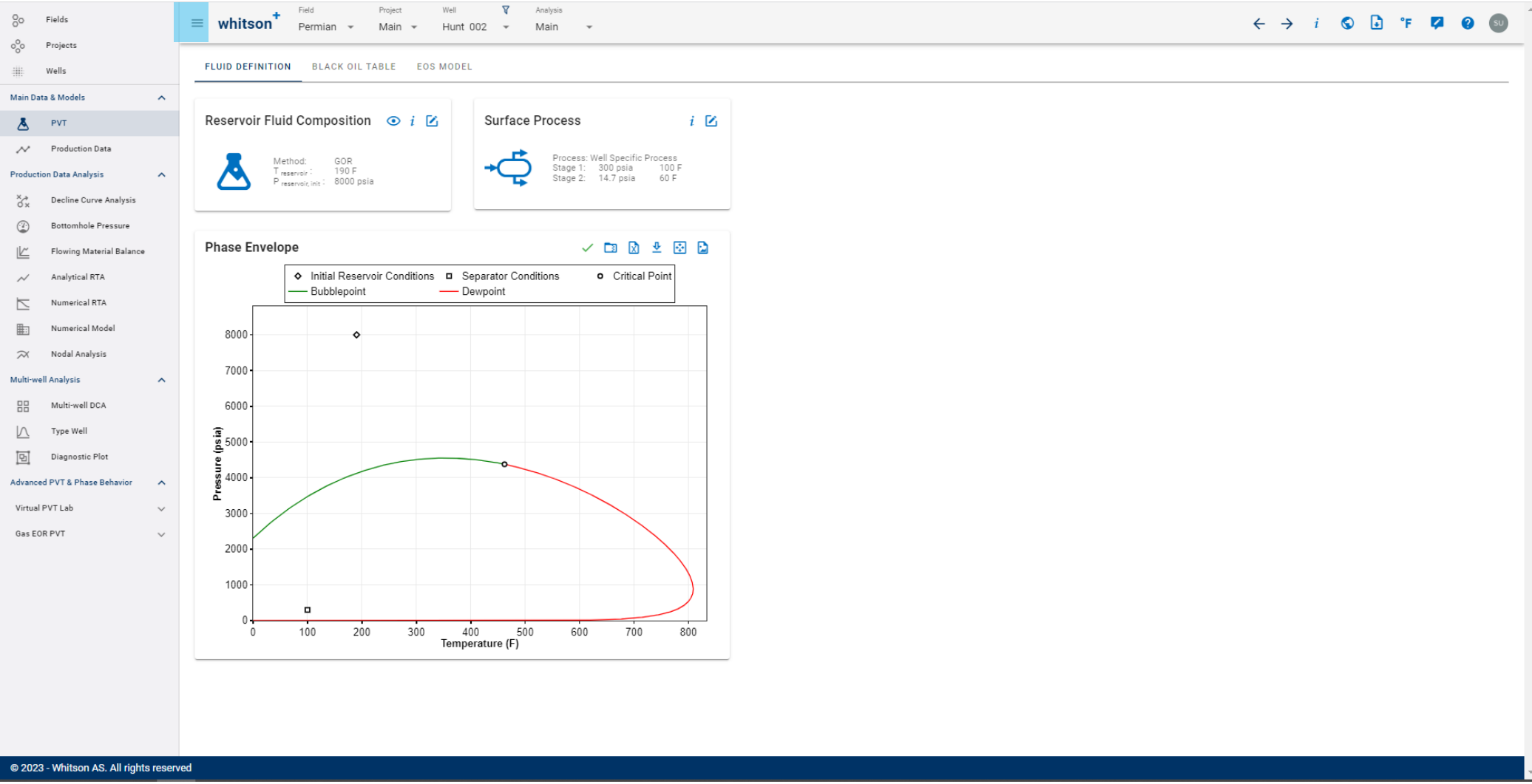
whitson+: More Screen Real Estate



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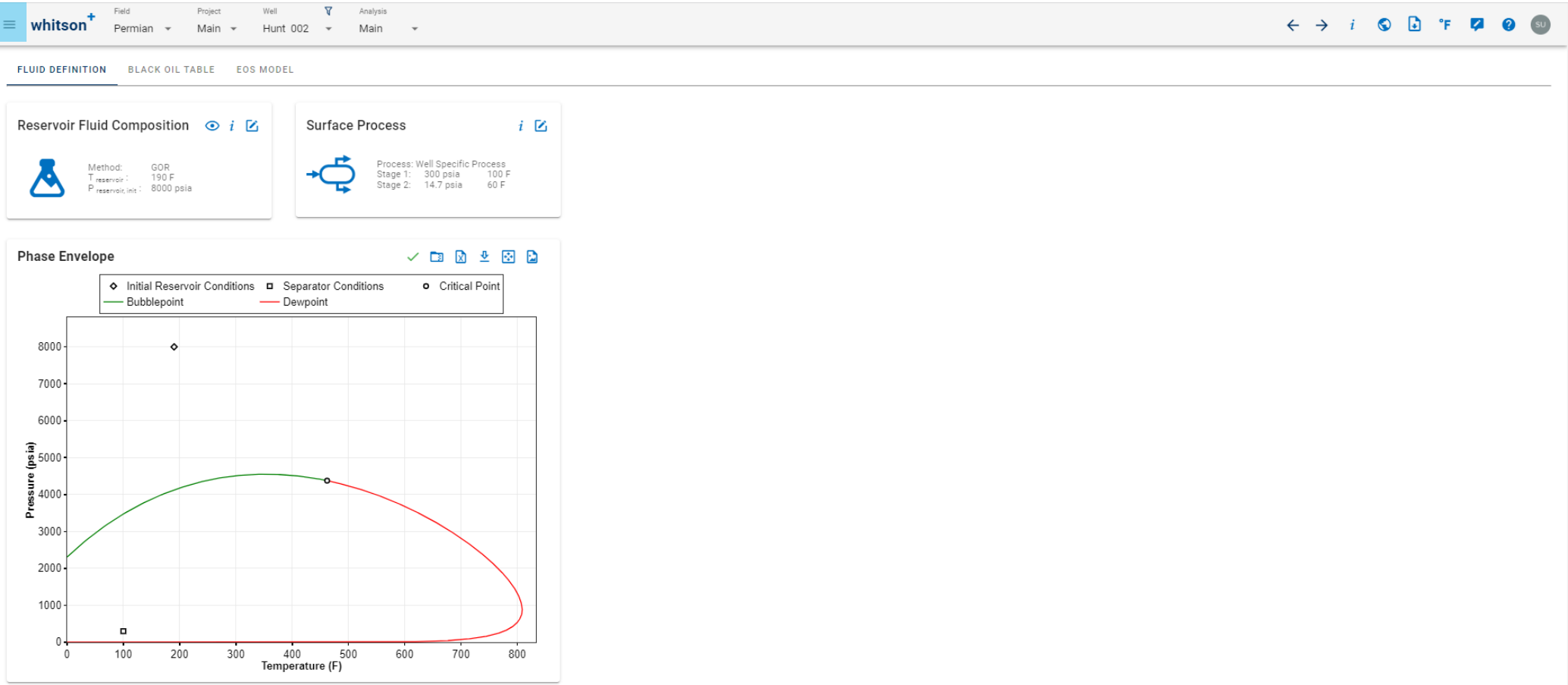
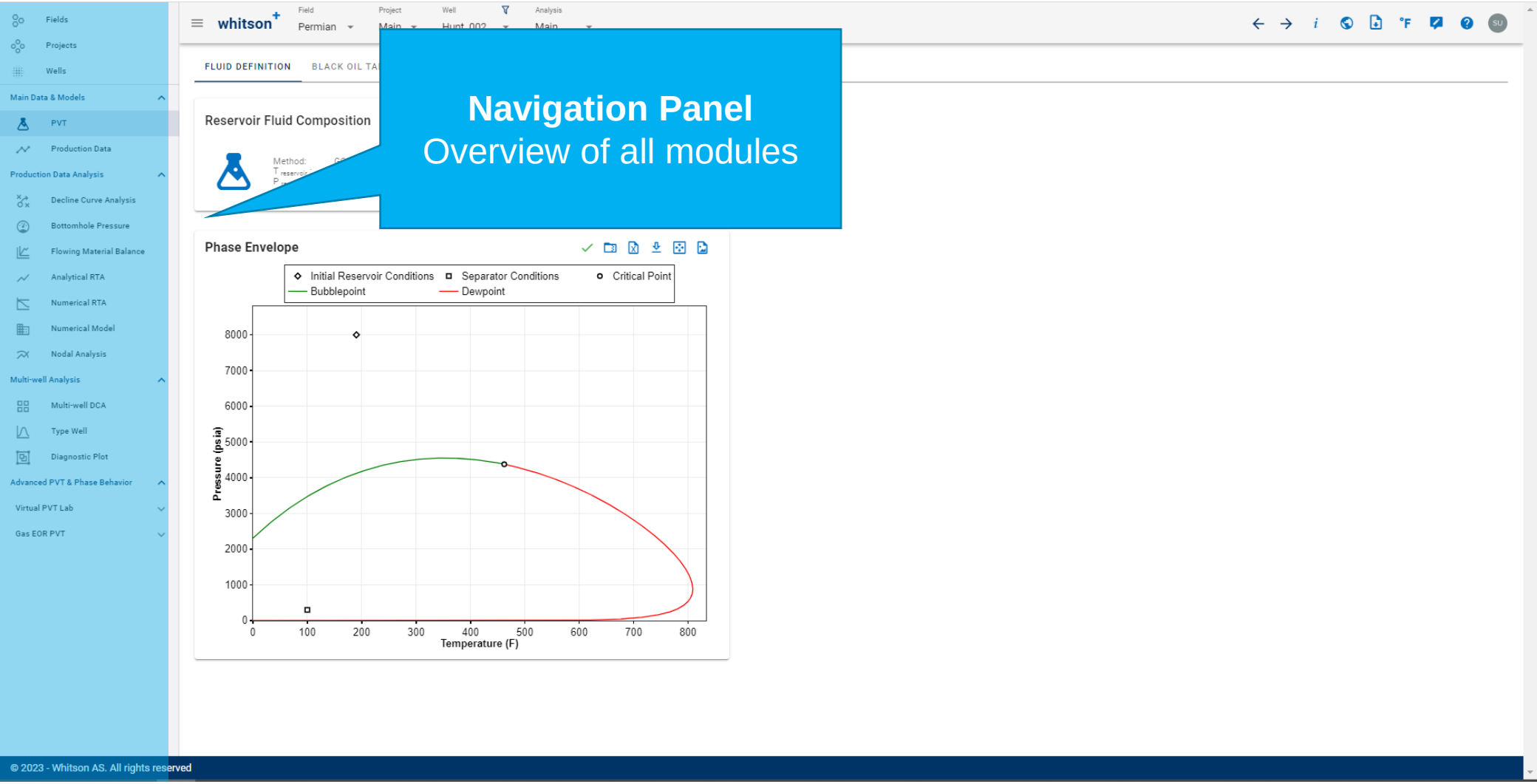
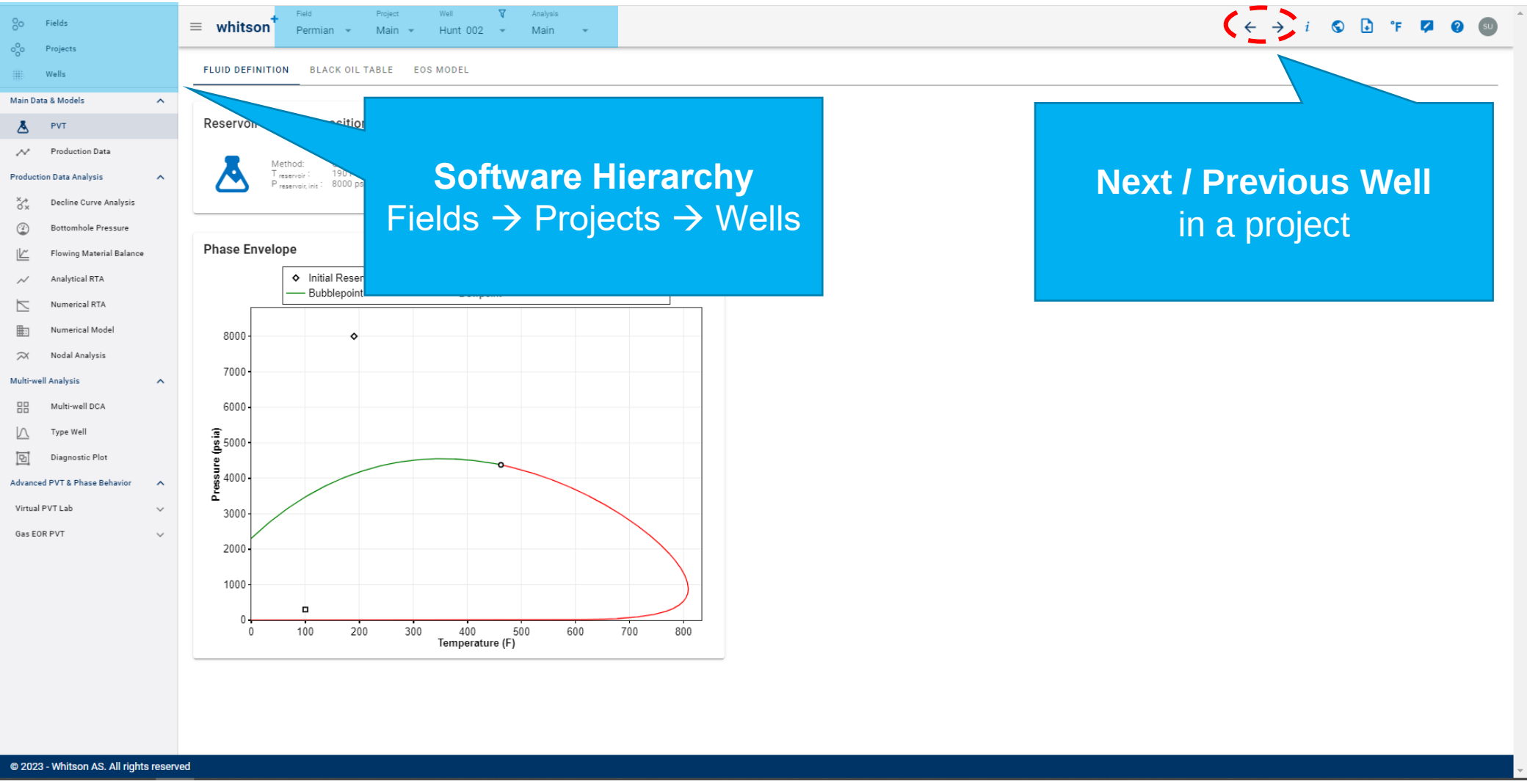
whitson+: More Screen Real Estate



whitson+: Navigation Panel



whitson+: Software Hierarchy



Software Hierarchy
Fields → Projects → Wells

Next / Previous Well
in a project

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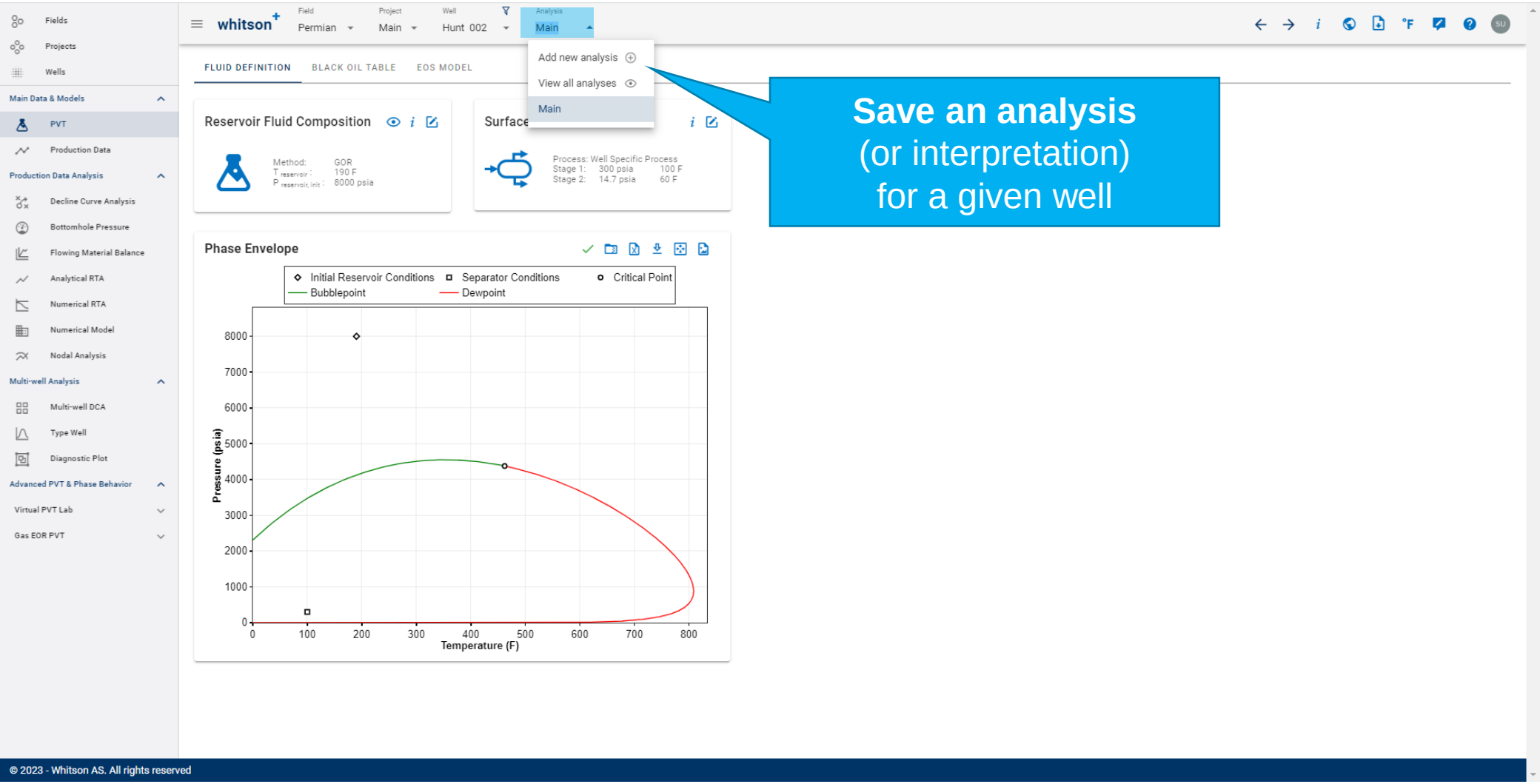
whitson+: Create Multiple Analyses for a Well



Save an analysis
(or interpretation)
for a given well

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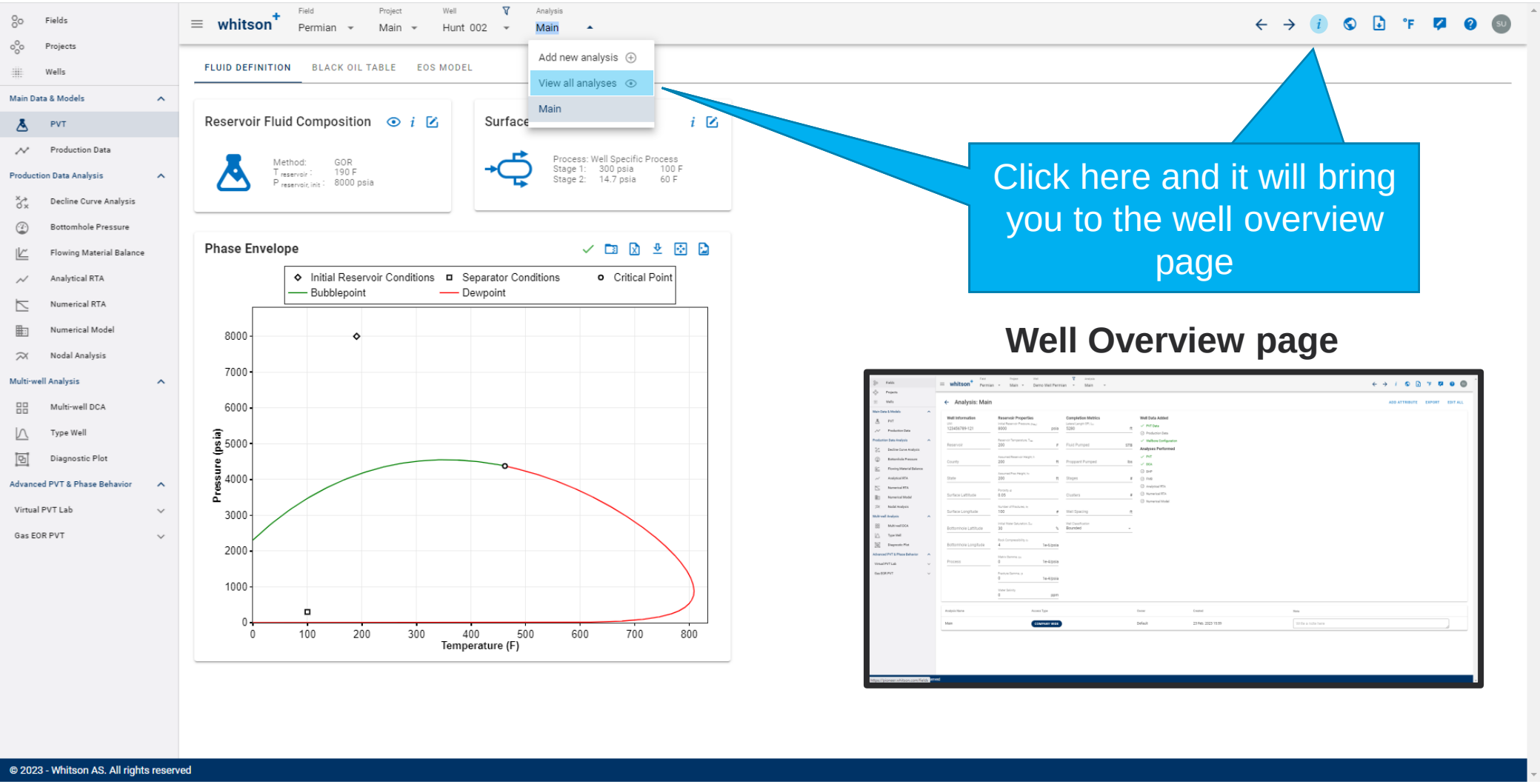
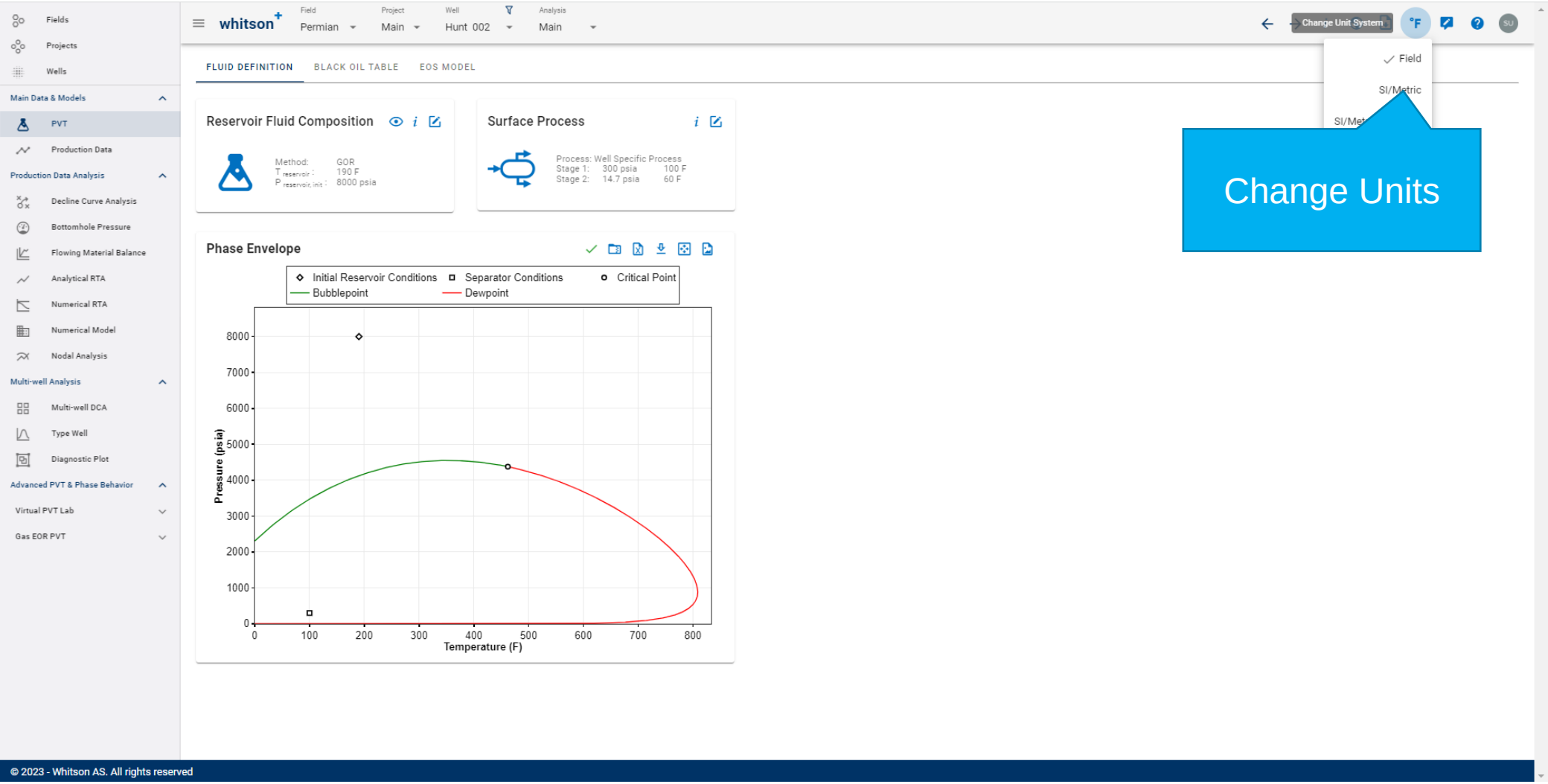
whitson+: Create Multiple Analyses for a Well



Click here and it will bring you to the well overview page

Well Overview page

whitson+: Change Units



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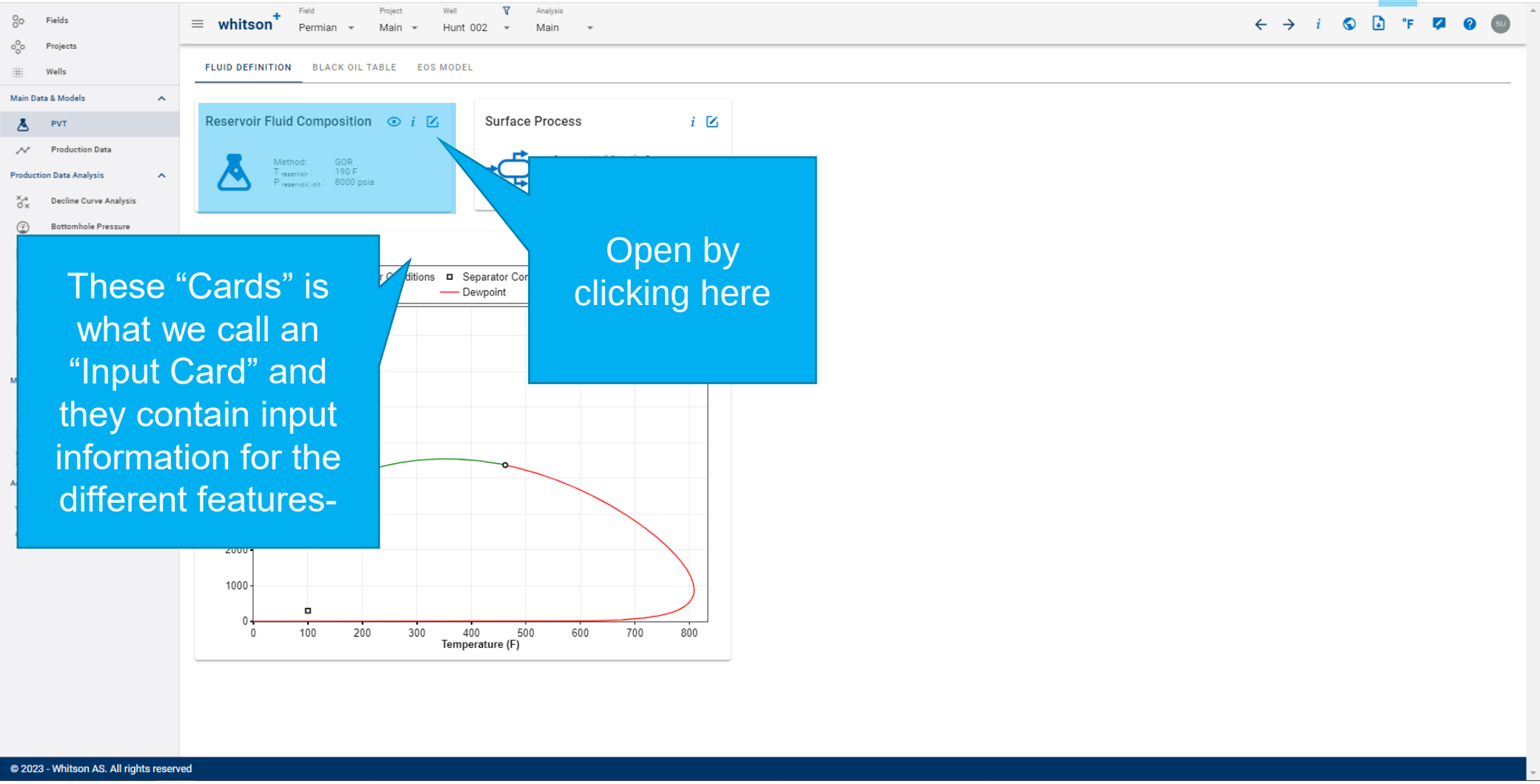
whitson+: Input Card



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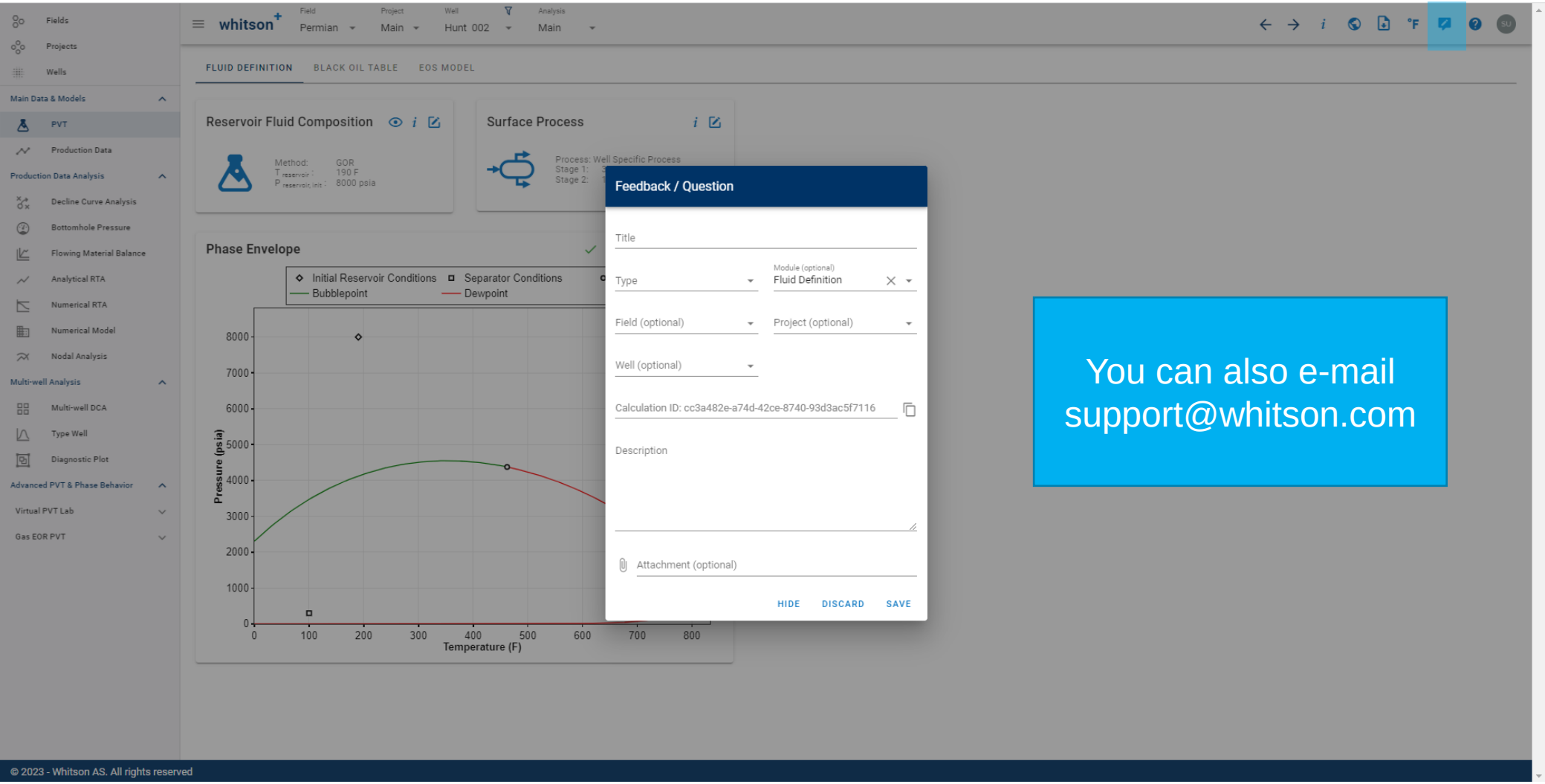
whitson+: Support Ticket



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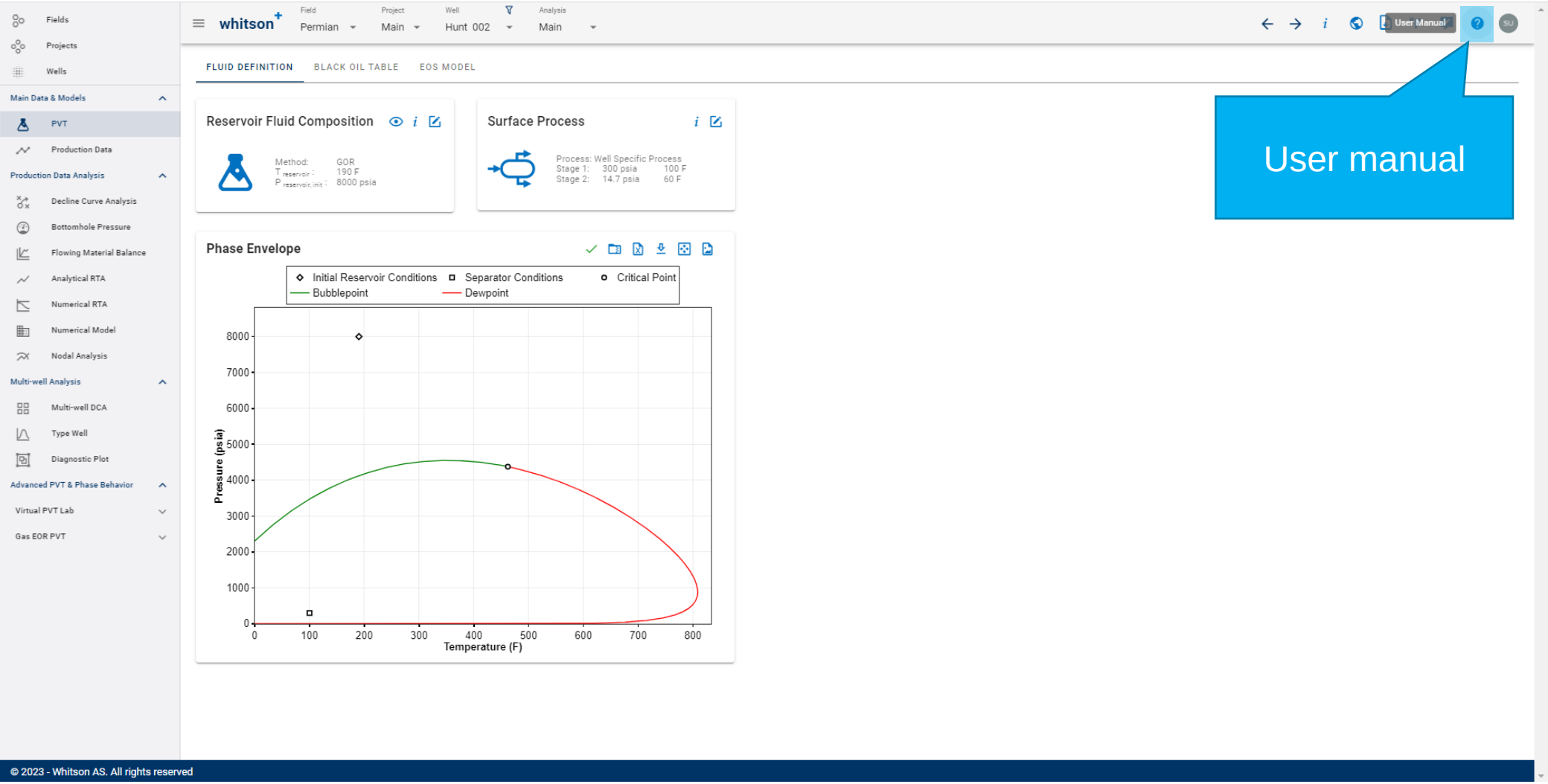
whitson+: Manual



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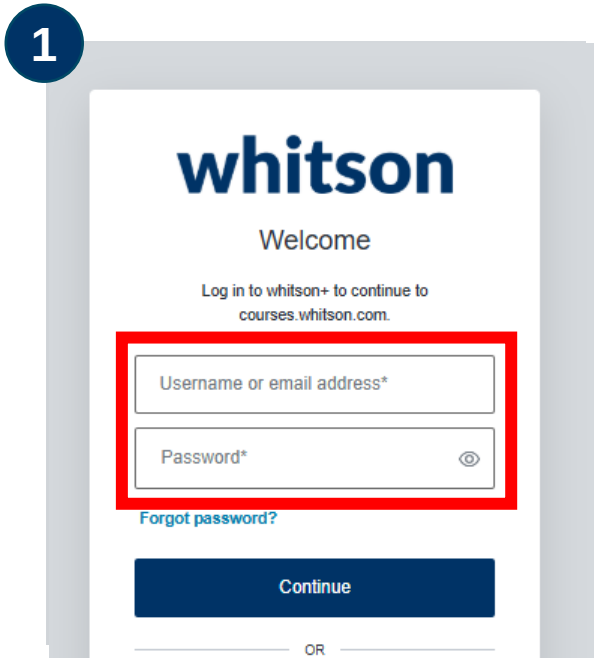
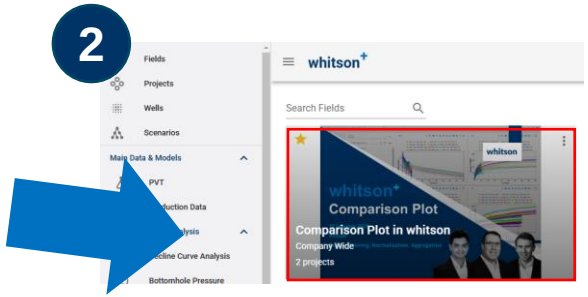
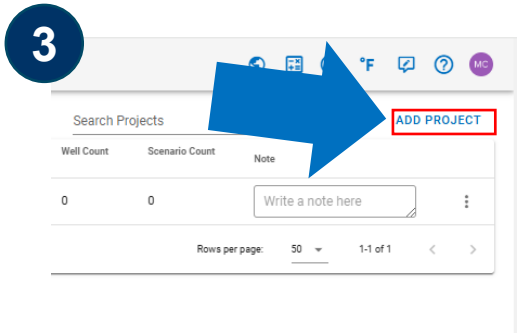
Important Shortcut: Refresh

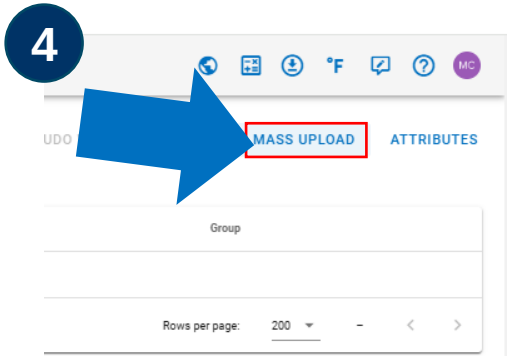
- Refresh shortcut: “CTRL + R”
- Use if you experience
  - Bad connection
  - The browser is “stuck”

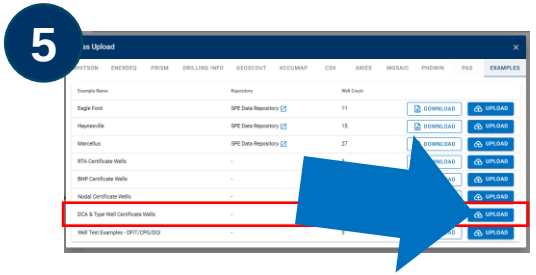
Do this Before Course Starts











1. Login

- https://courses.whitson.com/
- Username: Your e-mail
- Password: Comp2025*

2. Add project

- Click **‘Comparison Plot in whitson’**
- Add project named ‘YOUR NAME’

3. Upload Wells

- Click Mass Upload
- Go to ‘Examples’
- Click Comparison Plot Certificate Wells

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