

P2 Well Test



WELL TEST MANAGEMENT, MULTIPHASE FLOW RATE CALCULATION & REPORTING

P2 Well Test provides a web based user interface that allows operators and engineers to plan, execute, capture, calculate, and analyze well test data in a consistent manner, independent of any specific control system and/or data historian.

IMPROVED EFFICIENCIES

Improved data accuracy

Streamlines the well test initiation, validation & approval process

Integrated approval & validation workflow

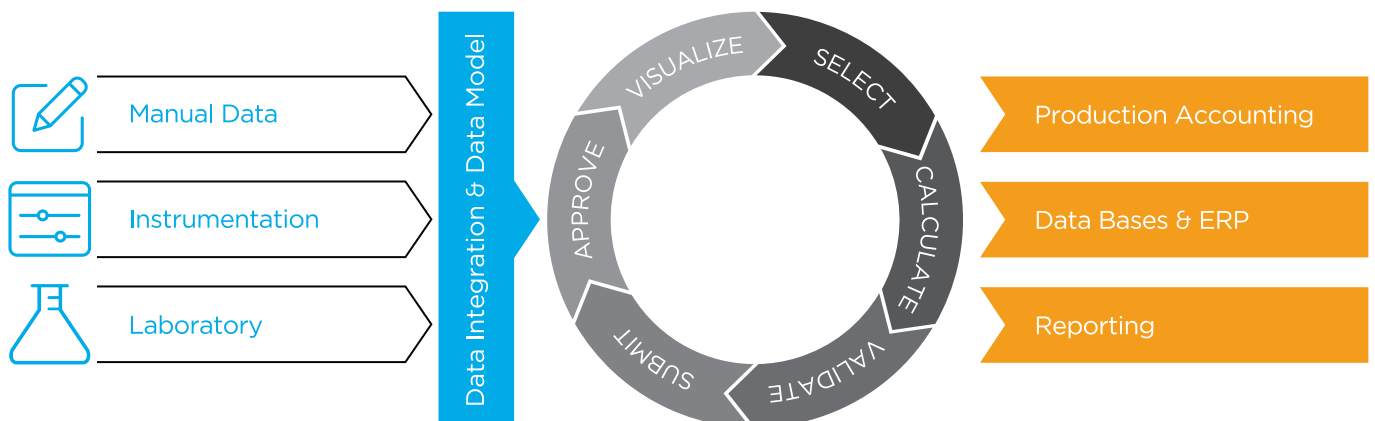
GREATER VALUE

Real time or retrospective testing

Removes manual data processing

Full audit trail

The well test process is one of the most critical functions in an oil and gas business. Test results are used for analysis, forecasting, and end of month production reconciliation and allocations, which form the input to a number of key production decisions and management processes.



Benefits

ENABLES operators and engineers to perform well tests across multiple control system environments over the intranet

REMOVES the implicit overhead incurred by solutions deployed within the control domain

STREAMLINES the well test initiation, validation and approval process

ELIMINATES error-prone and time-consuming manual data entry/manipulation process

LEVERAGES structure and data source integration available in P2 Server and provides seamless integration with P2 Operational Intelligence

ENSURES regularity compliance with well test scheduling and full auditing of well test dates, data, results and approval processes





Features

- Abstraction of the well test process from the 'Control System' domain to the company intranet
- Abstraction of the well test process from the well test data sources (e.g. utilise multiple historians, databases etc. as sources for well test data)
- Automatic scheduling of well tests based on well priority
- Default library of test methods and multiphase flow rate calculations such as Test Separator, MPFM and supports manual entry of test results
- Interfaces to the P2 Server Data Dictionary, utilizing P2 Server hierarchies and templates
- Ability to perform multistep well test (e.g. multiple choke settings in a single physical well test)
- Ability to perform comingled well tests
- Ability to perform well tests automatically in line with or retrospectively of the physical well test (e.g. based on well valve status)
- Tests approval and validation workflows
- Capturing of lab results for each test performed (or integrate to LIMS system to obtain qualities)
- Ability to automatically submit approved test results to external system (e.g. for allocation or reporting purposes)
- Support comprehensive users security configurations
- Full audit trail



P2 Well Test Interface

- 1 Actual well test period
- 2 Raw well test data (well & test equipment parameters)
- 3 Select stabilized period, using the date time picker or by moving hairlines in the trend
- 4 Laboratory/Analyzer results captured here

- 5 Previous & current well test results
- 6 Submitter and Approver details & comments

No. of Previous Results: 3

Comingled Well Test Subtraction Wells

Subseq	Selected Period	Duration (hrs)	Choke (D.54)	FTHP (Psi)	FTHC (DegC)	P50 (Psi)	T50 (DegC)	Sep Oil Rate (Bbl/Day)	Sep Water Rate (Bbl/Day)	DP (Inches H2O)	Gas Rate (m3/Day)	Sep Liquid Rate (Bbl/Day)	Net Oil Rate (Bbl/Day)	W/C (%)	Produced GOR (l/v)
% Diff From Last Relevant Well Test															
1	04-Aug-2012 03:45	6.00	280.00	671.66	53.43	84.07	35.06	1909.20	249.13	82.00	153158.00	2158.30	1756.46	12.42	540.45
2	03-Aug-2012 10:40	6.00	280.00	148.04	53.40	84.12	42.87	687.50	1032.57	65.00	462790.00	993.60	7000.66	13.16	462.93
3	03-Aug-2012 12:32	6.00	280.00	150.44	53.39	84.12	42.80	694.20	1137.30	63.00	425800.00	1012.50	1897.87	13.04	403.63
4	03-Aug-2012 12:47	6.00	280.00	230.52	53.38	84.12	42.78	668.85	822.40	69.00	430770.00	992.84	1005.89	14.44	440.38

Well	Selected Period	Duration (hrs)	Choke (D.54)	FTHP (Psi)	FTHC (DegC)	P50 (Psi)	T50 (DegC)	Sep Oil Rate (Bbl/Day)	Sep Water Rate (Bbl/Day)	DP (Inches H2O)	Gas Rate (m3/Day)	Sep Liquid Rate (Bbl/Day)	Net Oil Rate (Bbl/Day)	W/C (%)	Produced GOR (l/v)
Schola-C-1	03-Aug-2012 03:00 - 03-Aug-2012 09:00	6.00	80.00	288.92	52.97	84.12	38.30	3433.30	888.94	82.00	139460.00	4322.04	3158.46	21.96	306.56

Manual Entry

Engineers Name: _____

Zone: _____

Office Base Diameter: _____

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Submitter's Name: _____

Submission Time: 05-Oct-2012 16:58

Submitter's Comments: _____

Approver's Name: _____

Approval/Rejection Time: 05-Aug-2012 09:50

Approver's Comments: _____

An Industry Tradition

P2 Well Test was created by the same team that developed P2 Explorer, an industry-leading production solution delivering visualizations and diagnostics and trusted by resource companies around the world for over 20 years.