

FEATURE LIST

XSPOC is a full-featured control and data acquisition system that supports an array of hardware devices.

Open Database Standard

XSPOC uses Microsoft SQL Server, which allows easy integration with customer databases without duplication of effort.

Integrated with RODSTAR and CBALANCE

In addition to providing automatic expert diagnostic analysis for each well, XSPOC allows you to launch CBALANCE and RODSTAR directly from XSPOC for complete optimization of your rod pumping systems.

Client/Server Architecture

XSPOC is designed for use on a network with unlimited number of simultaneous users.

Scalable

XSPOC can be used to automate fields with few wells or with thousands of wells (currently used in the largest automation system in the world in a California oilfield with over 3500 wells).

Data History Graphs

XSPOC displays pump efficiency, runtime, production rate, or any other collected or calculated value. Graphs can include events such as well maintenance and values calculated by XDIAG such as fluid level, gearbox loading, etc.

Full Well Control

XSPOC allows you to remotely startup or shutdown any well or groups of wells, update and backup POC parameters, and a lot more.

Statistical Process Control (SPC)

XSPOC use Statistical Process Control (SPC) to automatically signal when a critical parameter goes outside statistical limits.

Automatic Well Control

XSPOC automates well control in response to facility alarms or other conditions. It can also control wells to minimize electrical usage.

Call Outs / Alarm Notifications

XSPOC can automatically notify you of alarm or shutdown conditions that require immediate attention using Theta's xsDialer module. This notification can be done with telephones, pagers or e-mail.

Supports All Modern POC Hardware

Real-Time Dial-In Support

WANT TO TRY IT OUT?

We want to convince you that XSPOC is the best field automation solution for your company. Please call us to find out more.

30-DAY TRIAL

We offer a low cost 30-day field trial so you can experience the benefits of XSPOC for yourself and with your own wells. If you decide to license XSPOC, the cost of the 30-day trial is credited towards the purchase of the XSPOC license.

CONTACT US

Theta Enterprises is an industry leader in the development and application of rod pumping optimization and automation software. Please contact us for more information on our products and services.

We can be reached by phone:

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Or on the web:

www.gotheta.com

XSPOC

Smart Well Automation

XSPOC is a comprehensive well management system that fully integrates all of Theta Enterprise's software in a powerful and easy to use package. It uses modern communication technologies to link real-time data to Theta's state of the art diagnostic and design tools. XSPOC is not just for pump-off controllers either. It supports nearly all oilfield automation hardware including RTU's/PLC's, submersible pump controllers, flow controllers, etc. Take a look at the powerful features and it will be easy to understand why our customers are so excited about XSPOC!



IT'S EASY

XSPOC is very easy to use. In fact, most users find they can use XSPOC right away with very little training. In XSPOC you can simultaneously view a list of wells, surface and downhole dynamometer cards, control setpoints for the well, and an expert diagnostic analysis report. The wells can be grouped by pump problem, or in any way you choose. Many of the screens are easy to customize so XSPOC can be tailored to meet your specific needs.

IT'S SMART

XSPOC contains the powerful XDIAG expert diagnostic analysis software. Using XDIAG, XSPOC provides automatic expert diagnostic analysis of every well, every day. XDIAG uses pattern recognition and artificial intelligence to diagnose the pump condition. It also calculates fluid level, energy consumption, system efficiency, counterbalance moment needed to balance the unit, etc. The expert report created by XDIAG tells you the pump condition and if there are any problems.

IT'S SUPPORTED

Theta takes pride in providing you with superb technical support. Our support plan allows unlimited phone calls to answer questions and to get help with any problem you may have. The support plan also provides you with all software updates and bug fixes.

IT'S COMPATIBLE

XSPOC is the only system of its type that is built entirely on an open SQL database (Microsoft's SQL Server). This allows XSPOC to fit in nicely with existing data systems. Also, Microsoft Excel or Access can be used to get to the XSPOC data directly. XSPOC uses all modern communication techniques to bring information into the XSPOC system (serial, radios, Ethernet, internet, CDPD, satellite, etc.)

Card Viewer

The card viewer is the heart of XSPOC. This is where you can see detailed information about how your rod pumping well is performing. You do not have to be a dynamometer expert because the analytical expertise is built into XSPOC. Just take a look...

Navigation

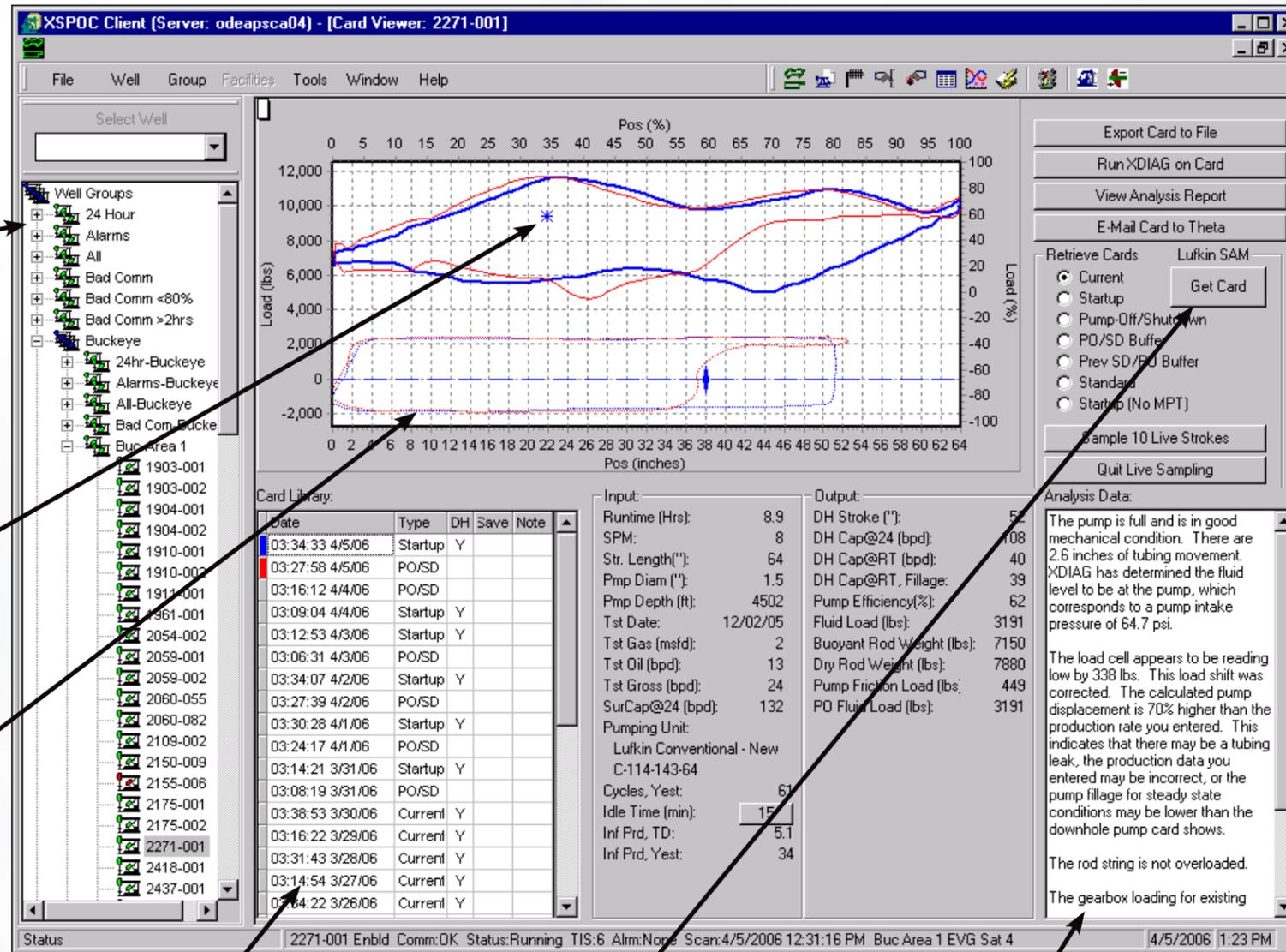
You can navigate XSPOC's well groups using an interface that is similar to the Windows File Explorer. You have complete control over how wells are grouped. You can group wells by virtually any condition you can imagine, including area of responsibility, geographical location, pumping condition, alarm condition, overloading, etc.

POC Setpoints

The POC control points can be modified directly on this screen by simply clicking on the point and dragging it to the desired location. XSPOC automatically downloads the new setpoint to the controller.

Downhole Card

The calculated downhole card is displayed below the measured surface card. This card is used in the analysis of the pumping system. You can also have XSPOC display RODSTAR's predicted dynamometer card on this screen.



Card Library

Click here to display the dynamometer card you want to view. An unlimited number of cards can be collected and stored in this library. Shown here are not only the cards the user collects, but all the cards that are automatically retrieved by the system every night. You can also annotate the cards with your own comments and permanently save them with a click of the mouse.

Dynamometer Card Collection

This section provides real-time data collection for the user who desires to collect and analyze data on demand. Any of the cards or card buffers that are stored in the POC are available right here and are displayed for you in seconds after clicking on the mouse. Dynamometer cards are also collected and analyzed by the system automatically every night, on every well.

Expert Analysis

A comprehensive report in plain English is provided as part of XSPOC's diagnostic output. Here you will find detailed and accurate information about how the well is operating and if there are any problems with the pump, rods, or gearbox.

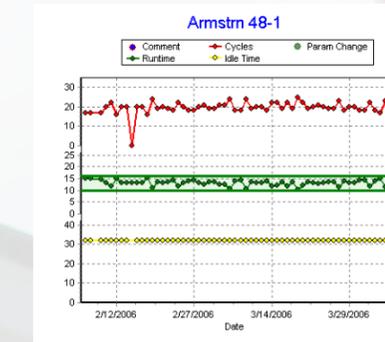
- What is the fluid level?
- Is the well pumped off?
- Is the pump worn out?
- Is the load cell reading too high or too low?
- Are the rods overloaded?
- How much money can you save by balancing the pumping unit?

These questions plus many more are answered here. The built-in XDIAG module uses advanced pattern recognition algorithms that contain thousands of downhole pump card patterns to accurately determine the pump condition.

XSPOC provides what you need.

Here are a few examples of the useful XSPOC screens.

Not only is information presented in an understandable format, but all of the information that you need is right at your fingertips.



Trending

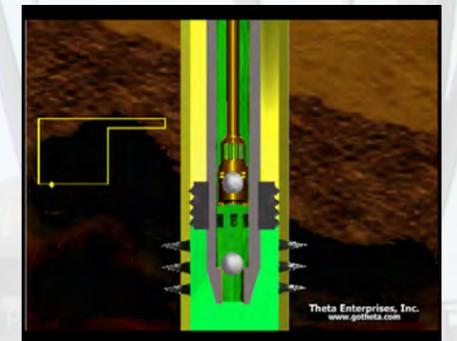
Trends for any controller data, calculated data, and user input data are all collected here. Upper and lower control limits can be placed on any trended value automatically with SPC or can be manually adjusted. A powerful feature of the graphs is that any well activity (such as workovers, simulation jobs, control parameter changes, etc.) can be displayed here as well. These events show as annotated text on the graph.

Well	Group	Status	Alarm	Scan	Time	Pressure	Flow	Temp	Notes
Crane1	ALL Crane	Running	OK	4/5/2006 12:31:16 PM	120	100	100	100	
Crane2	ALL Crane	Running	OK	4/5/2006 12:31:16 PM	120	100	100	100	
Crane3	ALL Crane	Running	OK	4/5/2006 12:31:16 PM	120	100	100	100	

Group Status

The group status screen shows the current state of your wells. Included here are things like run status, communications status, alarms, and runtime. This screen is user configurable and every user can customize this screen as desired. Any value stored in the database is available for display here.

Well	Group	Status	Alarm	Scan	Time	Pressure	Flow	Temp	Notes
Crane1	ALL Crane	Running	OK	12/12/2005 12:00:00	120	100	100	100	
Crane2	ALL Crane	Running	OK	12/12/2005 12:00:00	120	100	100	100	
Crane3	ALL Crane	Running	OK	12/12/2005 12:00:00	120	100	100	100	



Reporting

You can easily get useful reports that can be printed on demand. XSPOC can also automatically print the reports based on well groupings and exceptions every day. Export filters are provided so the reports can be put into other formats. The reports can also be exported to HTML so that they can be available via an internet browser.

Educational Animations

Theta Enterprises has developed unique animations that clearly explain different pump problems or conditions such as fluid pound, leaking traveling or standing valves, unanchored tubing, pump hitting down, etc. These are the same animations that are used in Theta's Rod Pumping Optimization course.