What's new in PERFORM 7.50!

1 Worst-Case Discharge scenario report for offshore wells:

New directives from B.O.E.M.R.E. (formerly MMS) , effective June 18 , 2010, requires all offshore operators to provide a Worst Case Discharge report which includes the maximum flow rate, duration of flow, and all assumptions made pertaining to the calculation of a worst case discharge scenario. This directive is applicable to wells that are in the drilling phase, and existing wells that are currently producing from U.S. offshore fields. IHS PERFORM introduces this new report and updated methodologies which will provide the necessary information to help you comply with these directives. We are also in contact with B.O.E.M.R.E. to make sure this report will satisfy any requirements that fit within the scope of PERFORM's modeling capabilities.

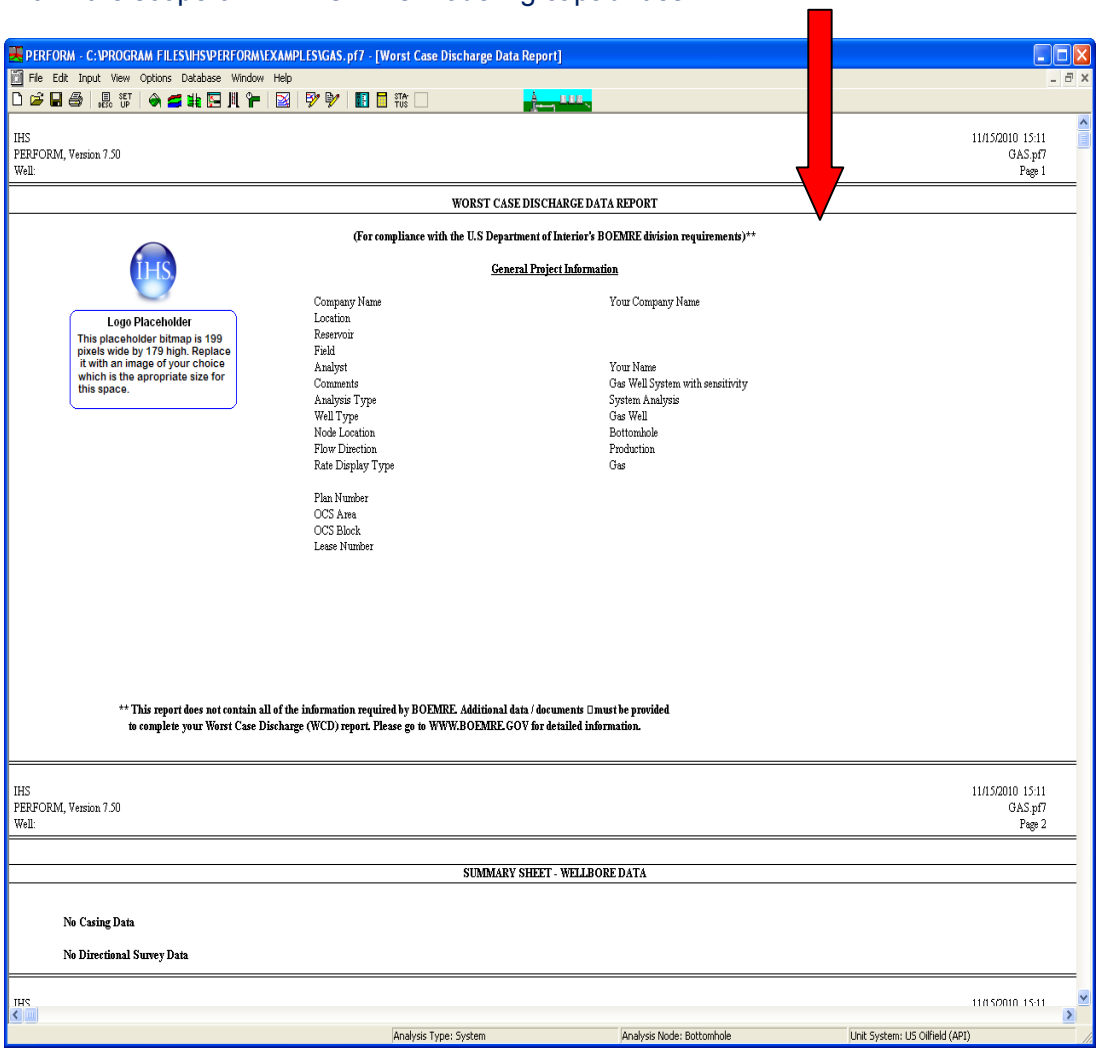


Fig 1: Sample WCD report generated by PERFORM to submit to B.O.E.M.R.E.

This report is available in the "Report Selection" dialog of PERFORM v 7.50 after running a well performance model.

2 Gas well unloading using gaslift

Most gas wells have liquid loading as the number one problem (99% are loaded up with water). Recent developments in unconventional hydraulically fractured horizontal gas wells can lead to load up issues within days of starting production. For example, wells that are producing in the range of 500 Mscf/d to 1000 Mscf/d can easily drop to 100 Mscf/d range and eventually die if no actions are taken to unload the wells. Gas lifting these wells (to remove the water) is a popular method because of its effectiveness and relative cheaper cost when compared to other alternatives. Designing a gas lift system with optimum valve spacing for the operating and unloading valves is a challenge when converting a new well to a gaslift well, and gas wells that have existing valves already in place will require optimization in terms of operating valve depths, injection gas rate and corresponding pressures. To assist operators working in the natural gas production and face liquid loading problems, IHS PERFORM has updated its capability to design and optimize gas lifting systems for unloading gas wells.

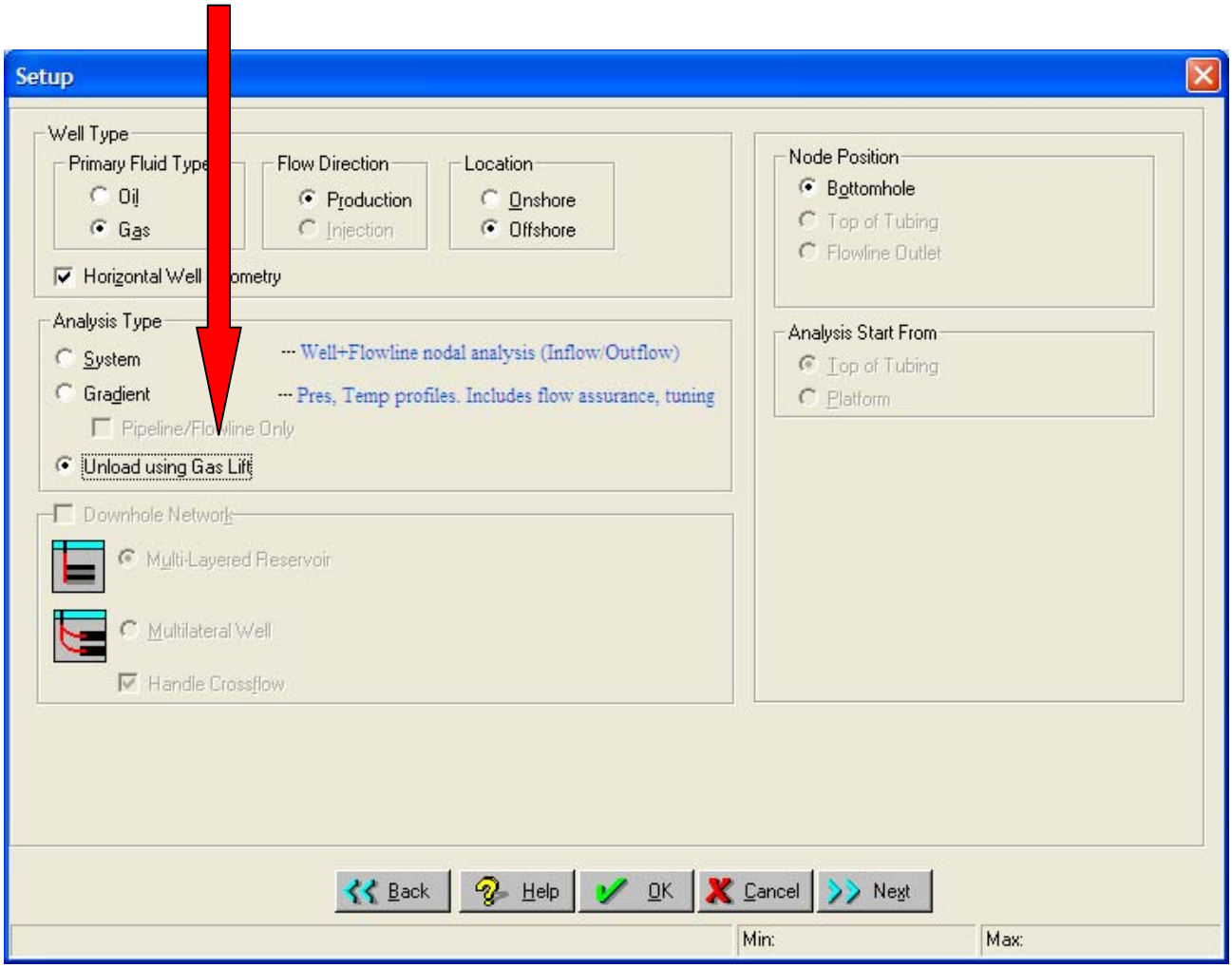


Fig 2: Set up a gas well case to do gaslift calculation

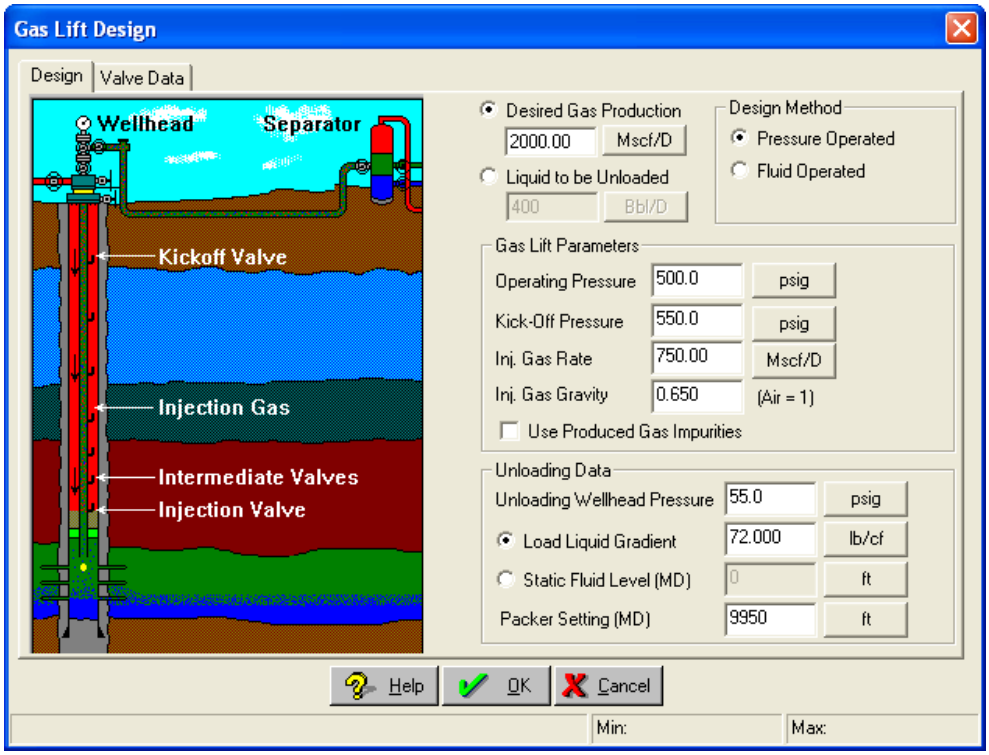


Fig 3: Specific details of gas lift design, including port size and valve depths, based on desired production.

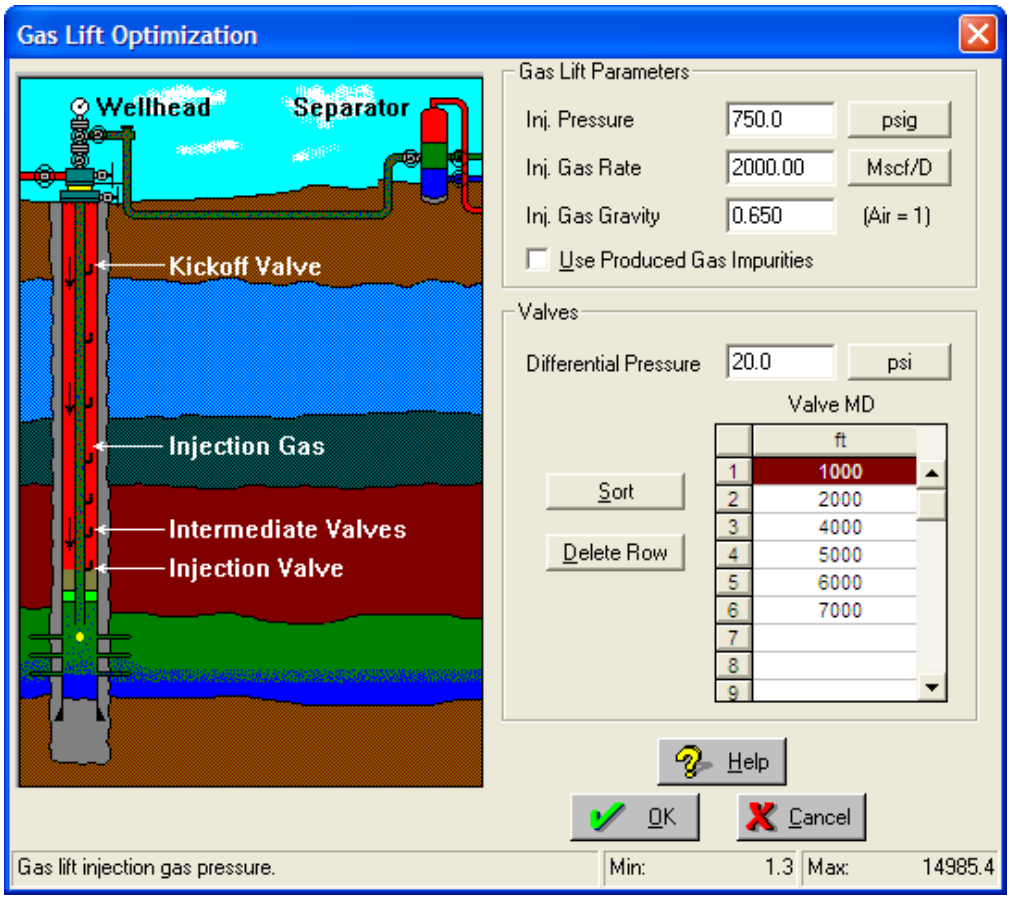


Fig 3: Optimization – identifies ideal injection depth, injection pressure, and rate for gas wells with existing valves.

3. New utility to manage borrowed network licenses

Service companies and major operators have assets that are spread worldwide. An engineer's travels can take them to different locals for short periods of time, where they may not have access to their company network to utilize PERFORM remotely. To assist these companies, IHS PERFORM introduces a license borrowing manager, which provides in-house control over license checkout duration, from a pool of **network licenses**. Company IT/Application managers will have the ability to assign temporary mobile licenses to any user for a specific number of days.

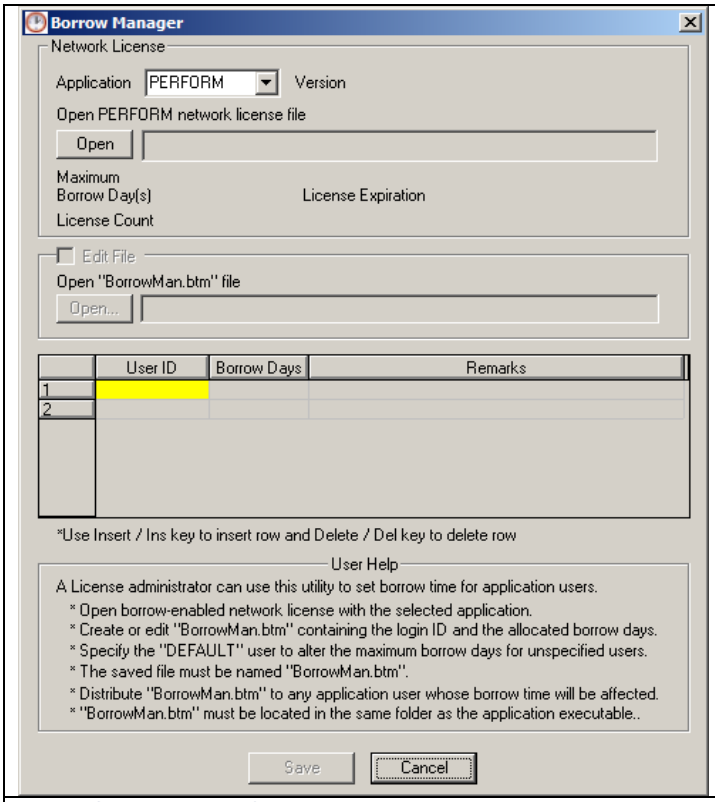


Fig 4: Set up dialog for the application manager to create borrow license file

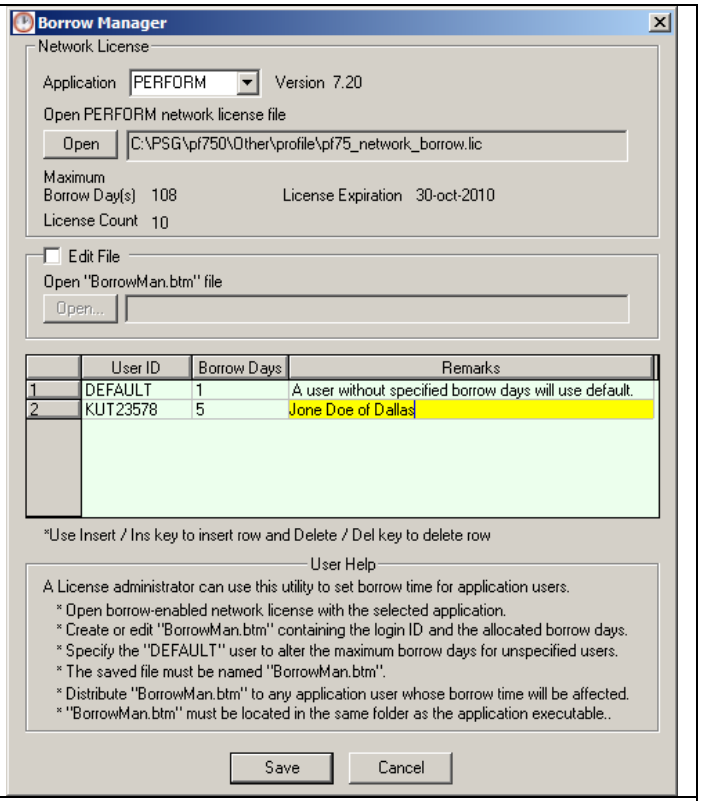
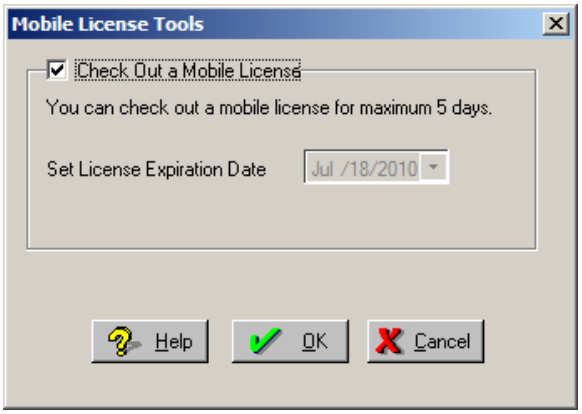


Fig 5: Set up dialog for the application manager to specify license borrow time for a user.

The user license borrowing process in PERFORM:

- Select "Mobile License Tools" from the Help menu to view borrow mobile license dialog.

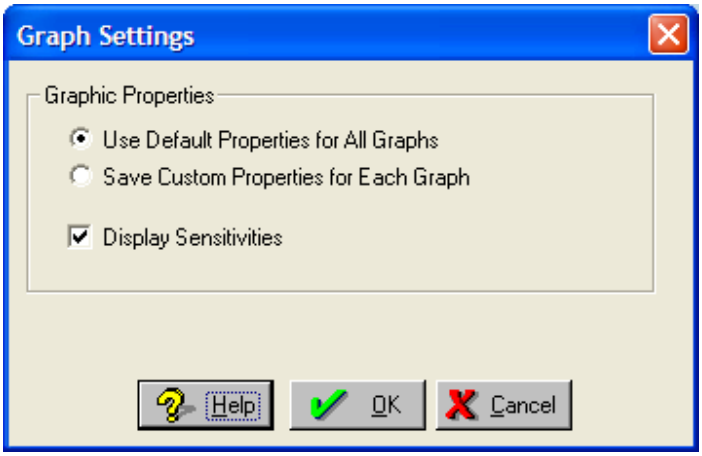


- Select "Check out a Mobile License" checkbox, and click "OK". The checkout process will complete when the user exits PERFORM.

- The application manager must distribute the ‘BorrowMan.htm” configuration file in order to manage their users borrow time.

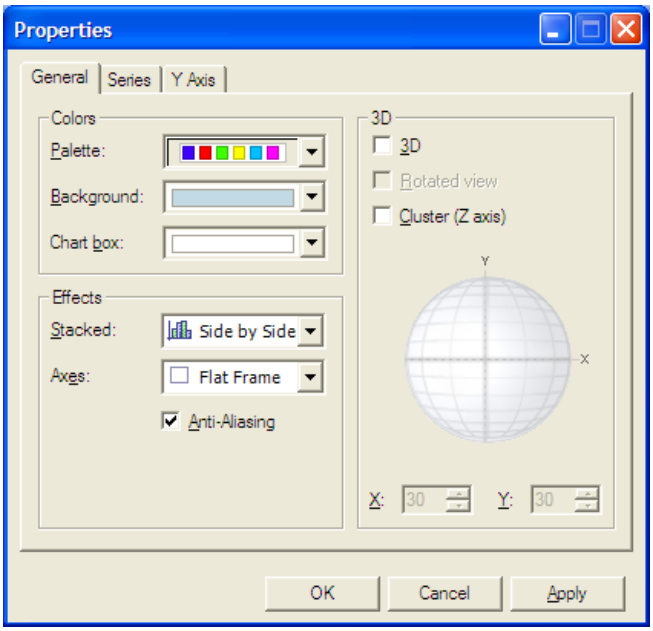
4. Other key Enhancements

- Complete sensitivity information display on graphs. (Request from GN-Russia)
  All current sensitivity parameters are displayed (instead of displaying one inflow and one outflow sensitivity parameters in graphs). User can show or hide sensitivities by selecting “Display Sensitivity” checkbox on the “Graph Settings” dialog.



- Modified Russian words and sentences
  Updated user interface to reflect accurate translations on user interface and reports based on the Russian users feedback.

- Edit graph labels / legends and plot data.
  An “Edit Title and Legends” dialog is added to the Graph tool bar on each graph. User can click it and modify the title and legend entries on the graph. X and Y axis data (including decimal points) of a plot can be edited from graph properties (Put mouse on the axis>right click> Select Properties dialog) and save.



- Modified Wellbore Dialog

  An “Artificial Lift” group is created which includes Gas Lift, Coiled Tubing, Velocity Strings, Pump, and GLR in tubing option to clarify natural vs. artificially lifted wells.

  “Water Depth at Well Location” is added for offshore wells to separate water depth from the wellhead position on the sea floor.

- Custom Excel Data Import

  XML data import functions for PERFORM (and SubPUMP). Use Microsoft Office macros to automate the data mapping process.