OVERVIEW
Managing the performance of onshore assets is a challenging task of organizing people and data. A new dashboard system is proving to be a cutting-edge solution for identifying production optimization opportunities, decreasing downtime, and reducing operational expenditures to maximize asset value.

The task of managing asset performance is complicated by significant variations across the asset in such factors as the type of artificial lift type, and the quality and availability of data and even manpower. Efficient performance improvement demands a well-defined process and technology.

CHALLENGES
» Identifying optimization opportunities
» Decreasing downtime
» Reducing operating expenditures

SOLUTION
» Leverage DecisionSpace® Production Monitoring software application to integrate multiple sources of real-time and historical data from the field

RESULTS
» Tank battery dashboard provides one-stop, on-screen Integrated Operations Center resource, effectively streamlining access to consistent, in-context information from more than 2,000 tank batteries and associated wells

CHALLENGES
Anadarko Petroleum Corporation’s (APC’S) producing and operating assets involve complex operating conditions using multiple applications and fragmented data. Collaborating and performing standard processes require combining tools. The result is multifold, and typically includes an inefficient use of time, substandard data analysis, higher training costs, increased risk of incorrect decisions, and missed opportunities.

To address these challenges, APC and Landmark worked jointly to streamline the business processes of an Integrated Operations Center. These processes involved facility surveillance, facility management, and field staff communications. The streamlining also supported an exception-based management philosophy focused on cases that deviate from the norm.

Tank Battery Dashboard Targets Efficiency in Integrated Operations Center
STREAMLINDED BUSINESS PROCESS ORGANIZES PEOPLE AND DATA TO OPTIMIZE OPPORTUNITIES, DECREASE DOWNTIME, AND REDUCE COSTS
ONSHORE NORTH AMERICA

Figure 1. A tank battery on a geographic information system (GIS) map
The collaboration objective was the development of an Integrated Operations Center dashboard for tank battery monitoring. The development leveraged Landmark’s DecisionSpace® Production Monitoring software application capabilities and integrated multiple sources of real-time and historical data from the field to provide a one-stop, on-screen Integrated Operations Center resource.

The tank battery dashboard addressed many efficiency and performance hurdles. Challenges included the variety of information types, the number of wells, and the overall data volume. In addition, the dashboard had to integrate a variety of data sources and frequencies, and provide versatile display methods through a user-friendly interface. The solution also had to be web-based to ensure sustainability, expandability, and cost-effective accessibility.

**SOLUTION**

The resulting dashboard monitoring system was successfully deployed in one of APC’s onshore assets. Using configurable, easy-to-analyze visualizations, the dashboard is effectively streamlining access to consistent, in-context information from more than 2,000 tank batteries and associated wells. The initial implementation included:

- Daily historical and real-time oil, natural gas, and water volume graphs for wells connected to the battery
- Daily historical and real-time tank battery volumes and rates from all produced phases
- Frequency of alarms grouped by type
- Tabs displaying work orders, comments, artificial lift data, well test information, and tank level readings

**RESULTS**

Key performance indicators for the new solution are still being defined, but early performance supports a broad scope of efficiency gains from faster, more informed asset management. Time typically spent searching for data across multiple sources is now being applied toward optimizing operations. It is expected that these efficiencies will benefit many activities, such as more accurate analysis, earlier detection of mechanical issues, and better dispatching of personnel.