Customer Profile

Denbury Resources Inc. (NYSE: DNR) is a growing, dividend-paying, domestic oil and natural gas company headquartered in Piano, Texas. The company has 468.3 MMBOE of estimated proved oil and natural gas reserves as of December 31, 2013, of which 83% is oil. Denbury's primary focus is on enhanced oil recovery utilizing CO_2, with operations focused in the Gulf Coast and Rocky Mountain regions.

Challenges

Before implementing the Perillon solution, Denbury managed its EHS program with multiple "homegrown" Access databases and Excel spreadsheets. Data collection was inefficient, compliance task-tracking was limited with no email alerting, and reporting on historical data and trends was a very manual, ad hoc process. Information, such as audit & inspection data, was gathered in spreadsheets and re-entered into databases, creating a duplication of effort and an increased exposure to data entry error. There was no capability to collect data on mobile devices. Information was stale and management decision-making was reactive, relying on one highly knowledgeable administrator to provide business continuity. The risks were building: data QA/QC issues, time-consuming processes reducing available time to focus on strategic initiatives, and potential loss of institutional knowledge with employee turnover.

Business Objectives

Denbury was in search of a more flexible EHS management system that would align with their workflow processes and fit their data structure to smooth legacy data migration. The company needed a system that was capable of serving a diverse user community of varied skill level, geography and job function. The new solution needed to be simplistic in design, intuitive to use, and vendor-hosted to minimize the burden on Denbury's IT organization. Specific requirements included robust dashboard reporting, offline data capture with mobile devices and email alerting. The new system had to be affordable with a quick implementation cycle and be "shovel ready," as Denbury did not have the time or budget to customize a system from scratch.

Solution

Denbury Resources selected the Perillon WorkSpace solution in December 2013, following a review of several vendor options available on the market. A key decision factor was Perillon's ability to deliver a comprehensive and integrated Environmental and Safety solution, affordably. The WorkSpace system was implemented efficiently, due to its standard architecture, providing the flexibility needed to align to Denbury's existing management processes.

Perillon's modular system allowed Denbury to roll out the solution in phases, aligning with the company's available in-house resources. Denbury first formed a core Environmental Management Information System (EMIS) team to define standards, requirements and data definition, with which Perillon collaborated to develop a Solution Configuration Document that established a "blueprint" for the implementation plan, including migration of 7 years of legacy data.

Phase 1 of the Perillon system was initially deployed throughout Denbury's enterprise in Q2 of 2014, focused on Compliance and Incident Management and Audits and Inspections, followed by Mobile Data Collection on Apple iOS

AT A GLANCE

CHALLENGES

- Error-prone data double-entry from spreadsheets into multiple databases
- Limited compliance tracking; no reporting on historical trends ("last day = only data")
- No mobile capability – field data transposed from paper to spreadsheets
- No email-alerts
- Risk of losing institutional knowledge with employee turnover

SOLUTION

- Perillon WorkSpace system implemented in phases across Denbury enterprise
- Centralized EMIS system, streamlining data output and reporting
- Self-configurable dashboards providing never-before-seen trend data and visibility
- Mobile capability for on-the-go and offline data capture
- Email notifications to key stakeholders

RESULTS

- All objectives met, within budget
- 50% total savings in time resources
- Dramatically improved business continuity
- Eliminated re-keying of data and other old "legacy" habits
- Enterprise-wide engagement and connectivity

devices. With Perillon INCIDENTrak and TASKTrak, Denbury tracks two types of incidents: spills and safety issues—both requiring timely notification to need-to-know employees. Perillon's ASSESSMENTrak module allows Denbury staff to build question templates with response options, including setting logic to trigger findings and action items. With the Perillon GOpak mobile application, Denbury staff conducts field assessments using iPad minis. All information gathered is visualized in dynamic dashboards, providing Denbury with insight on data trends and highlighting any areas needing improvement. Phase 2 of the Perillon system is focused on complex Environmental Data Management with extensive reporting. With the experience gained in Phase 1, Denbury staff is able to self-configure the SourceTrak environmental data management module, with guided assistance from Perillon staff, if needed.

Efficiency Gains

The Perillon system proved to be a highly efficient solution for Denbury, meeting all company objectives within budget. All goals established by the initial implementation timeline were reached, making for a smooth transition from Denbury's old system. The new Perillon system increased Denbury's data collection efficiency, facilitated streamlined output reporting, and was easily deployed to the entire HSE staff of 35 people. The GOpak mobile solution further simplified information collection for the enterprise; Denbury now conducts joint HSE/Operations audits and inspections, saving a significant amount of time and eliminating re-keying of data. Denbury found the most valuable feature of their new system to be Perillon's dynamic dashboards; easily self-configured, these drill-down dashboards provide trend data the enterprise never had before and have significantly increased management visibility.

By centralizing its EHS program, Denbury has dramatically improved its business continuity and data management efficiency. The company's core HSE team members have freed up 50% of their time. Perillon's modular design not only enabled a phased implementation, but it facilitated widespread user adoption in stages. Perillon's SaaS system has had virtually no impact on Denbury's IT organization.

Key lessons learned included appointing key staff members as "champions" for specific implementation components, defining a rollout plan with a phased implementation and identifiable milestones, and incorporating hands-on training for users with clear expectations for using the new EMIS.

> *"The time savings in the core HSE team was at least 50%, and that does not include the time saved with dashboard reporting. What used to take days or weeks to pull together in reports can now be done in seconds with Perillon's dashboards."*
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> *– Randy Robichaux, CSP, REM*
> *Director of Environmental, Health & Safety*
> *Denbury*

Example Perillon PERFORMANCETrak Dashboards