


PERMIAN OPERATOR ACCELERATES ACQUISITION DATA ONBOARDING WITH **GROOPER** AI-POWERED LAND DATA EXTRACTION



Despite digital oilfield advances, the oil & gas business still runs on paper. Nowhere is the paper data problem more pervasive than the land and legal department where physical filing rooms overflow with critical lease records that are the heart of an operator's business. It's an inefficient way to store and access such mission critical information.

Asset acquisitions and divestitures are commonplace in the oil & gas industry. Whether acquiring another operator's assets for a specific region or acquiring their entire business, buyers face an even tougher paper data problem. Following an acquisition, the buyer all too often receives hundreds or even thousands of

lease files related to the asset purchase. This leaves land, accounting, and other departments with a poorly organized mix of physical documents that contain the vital information needed to assume operation of newly acquired assets, cut checks to interest owners, and manage risk.

Having acquired significant acreage in the Permian Basin, a leading producer faced a daunting acquisition data onboarding challenge. Leveraging modern digitization services and intelligent document processing technology, the operator rapidly processed its large backlog of unstructured acquisition data and lease records.

2,231
leases loaded

218
leases loaded per day

307
boxes of acquisition data received

467,142
pages of acquisition documents

92%
TIME SAVED



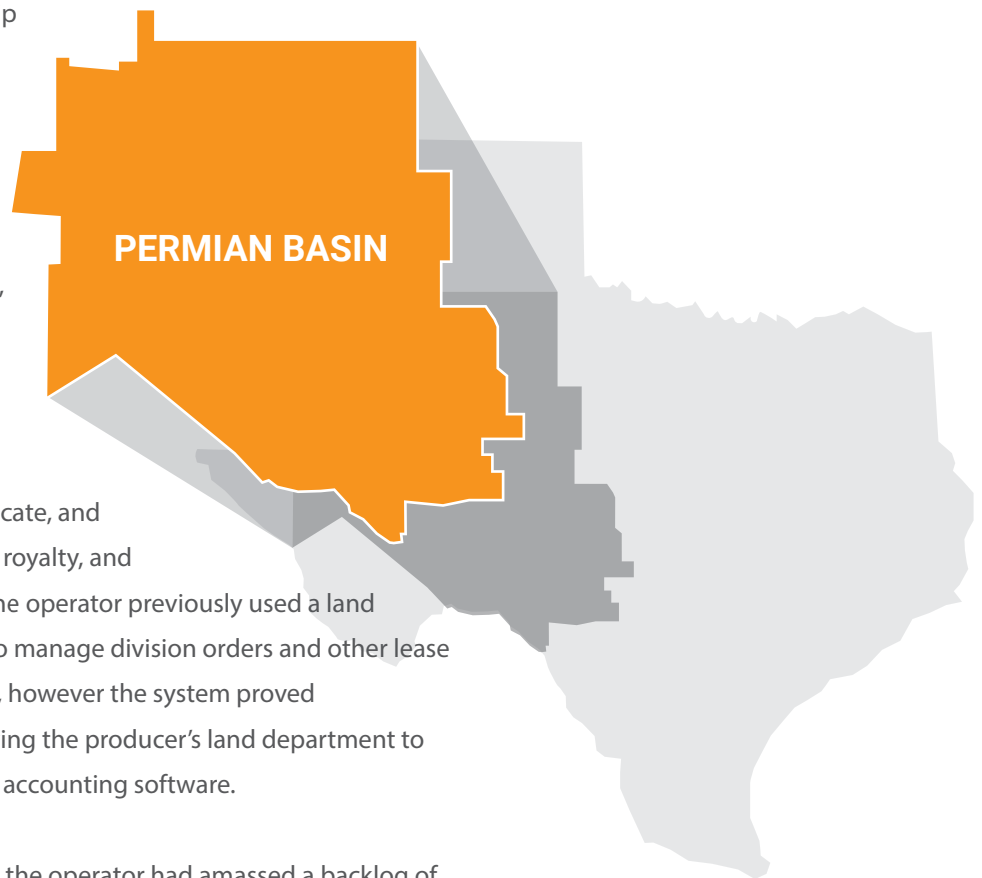
Business Situation and Paper Data Challenge

The operator is a large-cap independent oil & gas producer headquartered in Midland, Texas. The company has extensive operations across the Permian Basin, the epicenter for the US Shale Revolution and primary driver for domestic production growth. Consequently, West Texas and Eastern New Mexico have seen a massive increase in leasing activity in the past two decades, requiring operators to maintain large volumes of land and legal records.

As with other operators in the region, the producer's land and accounting department face multiple challenges in managing land data and documents. Driven by unprecedented drilling and production momentum in the Permian Basin, leases have become more complex than ever. Labyrinthine ownership structure, multiple depths, and shorter-term leases require ongoing records management and analysis. And with the speed of operations accelerating in the Permian Basin, land teams are struggling to keep pace.

The operator utilizes commercial accounting software to track, allocate, and disburse payments to its mineral, royalty, and non-operated interest owners. The operator previously used a land management software product to manage division orders and other lease data required to process revenue, however the system proved cumbersome and unreliable, leaving the producer's land department to manually enter lease data into its accounting software.

Following a series of acquisitions, the operator had amassed a backlog of more than two thousand leases related to its assets in the Permian and the San Juan Basin, representing half a million pages of lease documents. The operator wanted to rapidly process and load this large volume of unstructured data for more efficient reporting and analysis.





Accelerating Acquisition Data Onboarding

Working with a third-party document scanning consultant, the operator digitized its physical files. However, files were not classified according to its corporate data standards, requiring lease analysts to manually classify each lease file and extract metadata. Adding complexity, each lease file contains a unique mix of documents – title opinions, memorandums, assignments, deeds, and more – in varying vintages and formats. This makes quickly finding required data elements within a scanned document, such as pooling clause or royalty rate, a time and resource intensive process. The operator turned to BIS for their expertise in rapidly extracting structured data from unstructured sources and documents. BIS offers oil & gas companies a turnkey service that leverages the latest digitization techniques, a quality control center staffed by information management specialists, and intelligent document processing

technology that utilizes machine learning to intelligently recognize complex land data types. The result is a complete end-to-end solution that starts with the digitization of physical documents at the BIS Data Migration Center (DMC) and ends with structured lease data ready for analysis.

The operator sent 467,142 pages of lease information to the BIS-operated DMC, consisting of varying digital formats and file types. These files were processed using high speed OCR techniques to create a machine-readable version of each lease record.

In preparation for the data extraction phase, BIS worked with the operator's land team to build a document taxonomy and lease model. Grooper, an intelligent document processing technology developed by BIS, utilizes the operator's specific document taxonomy to rapidly classify each document according to the operator's asset structure and intelligently extract key metadata, such as lease name, payee information, and interest decimals.

Output from Grooper is then validated at the DMC to ensure data integrity. The final result is an SQL data extraction file generated by Grooper and quality controlled by BIS staff ready to be loaded directly into the operator's accounting database.



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Top Business Benefits

The operator estimates that a lease analyst contractor would normally spend at least thirty minutes coding one lease, not including the time required to load scanned images into its document management system. Assuming one hour per lease and two contractors, the producer would normally be able to load up to 16 leases per day, requiring 145 days to load the 2,321 lease files from its extensive backlog. However, leveraging the BIS managed document conversion service and Grooper, the producer was able to load as many as 218 leases per day and process all of its acquisition files in less than two weeks, resulting in a 92% reduction in the time required using traditional methods.

92%
TIME SAVED

BIS and Grooper transformed the large backlog of unstructured land data and documents into actionable information in days rather than months. As a result, the operator's land department was able to rapidly analyze lease information, provisions, and ownership. And the company's accounting team were able to rapidly onboard division orders and other data required to process monthly revenue. Plus, by eliminating the need to manually process leases using contractors, the operator was able to cut G&A costs associated with processing acquisition data.

What's more, the operator has deployed the Grooper intelligent document processing software internally following the initial data migration project. Grooper is used daily by the company's land staff to process the volume of lease records related to its ongoing drilling and field development initiatives. Using standard scanning equipment and Grooper, a single lease analyst can now process up to 15 lease files per day, a considerable improvement over previous methods.

Importantly, Grooper enables the operator to keep pace with complex and increasing lease activity in the Permian Basin. And for future acquisitions, the operator can rely on BIS to rapidly onboard large volumes of land records and any other critical business information it relies on.

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The Grooper Data Extraction Advantage

The operator reports that one of the most impressive features of Grooper is its ability to intelligently identify and extract complex land and legal information, such as pooling clause and ownership details. Grooper achieves this through advanced natural language processing (NLP) that utilizes machine learning to not only read lease files but understand the context and meaning of metadata. Unlike other NLP

products that require the software to be extensively “trained” on target vocabularies and result in 50% or worse error rates, Grooper requires minimal or no training while delivering up to 99% accuracy. Equally important is the BIS track record of co-owning success with their customers. The operator staff involved in the selection process indicate that a major factor in their decision to partner with BIS was their demonstrated ability to deliver what they promise for oil & gas companies as well as

other industries where Grooper technology is actively used. BIS and Grooper continue to power land records data extraction at the operator, one of the most critical pieces of the operator’s business. Recognizing the value that Grooper data extraction brings to any department, the producer is already evaluating the use of Grooper for other areas of its business.



If you’d like to learn how to use Grooper intelligent document processing to streamline your organization’s workflows, contact us today.



www.grooper.com