



# Optimizing Plunger Lift and Eliminating Inefficiency with a Unified Monitoring Platform

A WellAware Case Study

## Introduction

Escondido Resources operates wells all across the prolific Eagle Ford Shale in South Texas. The oil and gas company uses horizontal drilling technologies to maximize production and minimize environmental impact. However, engineers and field staff had to collect data by hand and visit sites in person to monitor well performance and adjust artificial lift settings. As a result, maintaining wells, especially older wells that produced relatively low value for the company, grew more cumbersome, which is ultimately why Escondido decided to invest in an oil and gas remote monitoring system. WellAware helped Escondido integrate various services under a single platform and streamline its data collection processes so that workers can make better and faster decisions about well operations.

## Table of Contents:

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<b>The Challenge:</b> Manual Data Collection Too Slow for Real-time Needs	3
<b>The Solution:</b> One Integrated Solution with Automated Data Feeds	4
<b>The Result:</b> Better Data and Decision-making at a Lower Cost	5

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### **About the Operator:**

About the Operator: Escondido Resources is a private, Texas-based oil and gas company founded in 2004. For 17 years, Escondido has focused its exploration, production, and development efforts on the Eagle Ford Shale in South Texas. The company currently oversees 200+ drilling locations across more than 40,000 acres in three counties: Webb, La Salle, and McMullen.



## The Challenge: Manually Collected Data Too Few and Far Between

While Escondido had robust physical technology for drilling and operating new wells, they lacked modern data acquisition technology to enable better decision making. Senior Production Engineer Christian Carroll didn't have the real-time visibility he needed to make confident decisions about well adjustments, especially on older wells operating on plunger lift.

Christian relied on field staff to manually collect production data and then send key metrics along for review. The problem was that he often wouldn't receive data until the following day, and the data he did receive, particularly about plunger performance, lacked the resolution necessary to understand how the artificial lift system performed. While he could propose adjustments, he often felt like he was working in the dark. His recommendations would be outdated and perhaps off target because the data review cycle took so long and the data quality was lacking.

Escondido also had a data reliability problem. Though some wells did have existing remote monitoring infrastructure, it was prone to failure. Radios would go out, pressure readings would disappear, and field workers were left picking up the pieces. Christian wanted to save his field staff from doing so much troubleshooting, but he was hesitant to bring on a new gauger- and add a full time salary to the books - just to fill the gaps.

To complicate matters further, Christian was struggling to optimize new and old well performance simultaneously. Some of Escondido's older assets and technology didn't integrate well with the latest systems. Consequently, field workers had to spend a disproportionate amount of time maintaining older wells, which were less valuable to the company's bottom line.

Christian knew he needed to make a change. So he began to look for a remote monitoring solution that would address all of these, empower his team rather than add complexity, and - most importantly - fit within his already-constrained budget.

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*When I first joined Escondido, what I noticed was the physical technology was good, but the data acquisition was lacking.*

*– Christian Carroll,  
Senior Production  
Engineer*



## The Solution: An Integrated Platform with High-Resolution Data

Christian found WellAware while searching for a solution to gauge Escondido's tanks automatically. He learned that WellAware had a robust portfolio of oil and gas capabilities while evaluating the company's tank level monitoring offering and decided to pilot the technology.

Shortly after seeing WellAware in action, Christian decided it was the right platform for Escondido. WellAware offered a cost-effective, equipment-light way to collect rich data from dispersed assets. WellAware was also flexible enough that Christian could make changes down the road after installation, if needed.

Furthermore, WellAware was able to bring several of Escondido's other field monitoring technologies under one roof. Escondido was previously using Sentry, ZD SCADA, and Freewave, as well as a third-party vendor to create ad-hoc reports.

Now all of this data comes through WellAware without Christian having to purchase new battery equipment or upgrade existing tools.

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*I'm getting data faster  
and I'm getting more  
data. Having more  
data helps my job  
every single day.*

*– Christian Carroll,  
Senior Production  
Engineer*

## The Results: Better Decision-Making at a Lower Cost

Today, Christian and his team are getting more data faster than ever before, thanks to WellAware's oil and gas remote monitoring solution. Christian can make better decisions based on real-time data and doesn't have to force field workers to collect field data manually from remote sites. He also didn't have to hire a new \$100k/year pumper to manage more than 60 older wells.



Whereas it used to take up to three or four days to configure a single well, Christian can now do it in less than a day. WellAware sensors transmit field data every five minutes, which is valuable for Escondido's continuous lift applications. Christian no longer has to worry about shut-ins causing damage or missing clear signs that things aren't working properly.

Additionally, Christian's team can now capture downtime data to better understand productivity across all Escondido wells. Low pressure readings from WellAware devices alert Christian that valves or plunger arrival sensors might be failing. Christian can also chart data to assess how different components are performing in the field. For instance, he can easily see when plungers are arriving or determine if he needs to change after-flow times.

Aside from Christian and his field engineers, other Escondido employees use WellAware regularly too. The company's COO uses WellAware to search for misinformation, especially related to new wells. The marketing and sales teams analyze data to get spot values for sales and volume numbers. Foremen use the platform to determine what field staff should address.

Looking ahead, Christian is excited to go deeper with WellAware and take full advantage of its capabilities, particularly around automated alarming and safety management. By setting up the right triggers, Christian anticipates saving even more money on equipment repairs, incidents, and costly downtime.

***Want to learn more about WellAware's remote oilfield monitoring capabilities and solutions?***

Check out our oil and gas remote production monitoring solution.

**Get Started**



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