KECO

Successful OxyHound Field Trial:
OxyHound Outperforms Electrochemical Analyzer in O2 Measurement

PROJECT BACKGROUND

KECO was approached by a **leading VRU manufacturing company** that suffers from the typical problems associated with the use of Electrochemical cells for the detection of low levels of O2 in gas.

The test consisted of running the KECO OxyHound analyzer alongside an Electrochemical analyzer at an upstream site. The project aims to compare the performance and accuracy of the two analyzers and monitor O2 levels in the gas stream.

INSTALLATION & TRIAL

The installation team completed the setup on July 9th. They mounted the KECO OxyHound analyzer on a stand and connected it to the same sample point as the problematic Electrochemical analyzer using a tee and valve. They ran the necessary power and communications, programmed and calibrated the analyzers, and then started the trial.

Both analyzers' readings were fed into the VRU company's SCADA system, which sampled the data every two minutes and exported it to a CSV file. Their team periodically validated the analyzers, while the KECO team accessed the OxyHound readings remotely and received the CSV file.

The trial lasted 35 days. **It was a success.**

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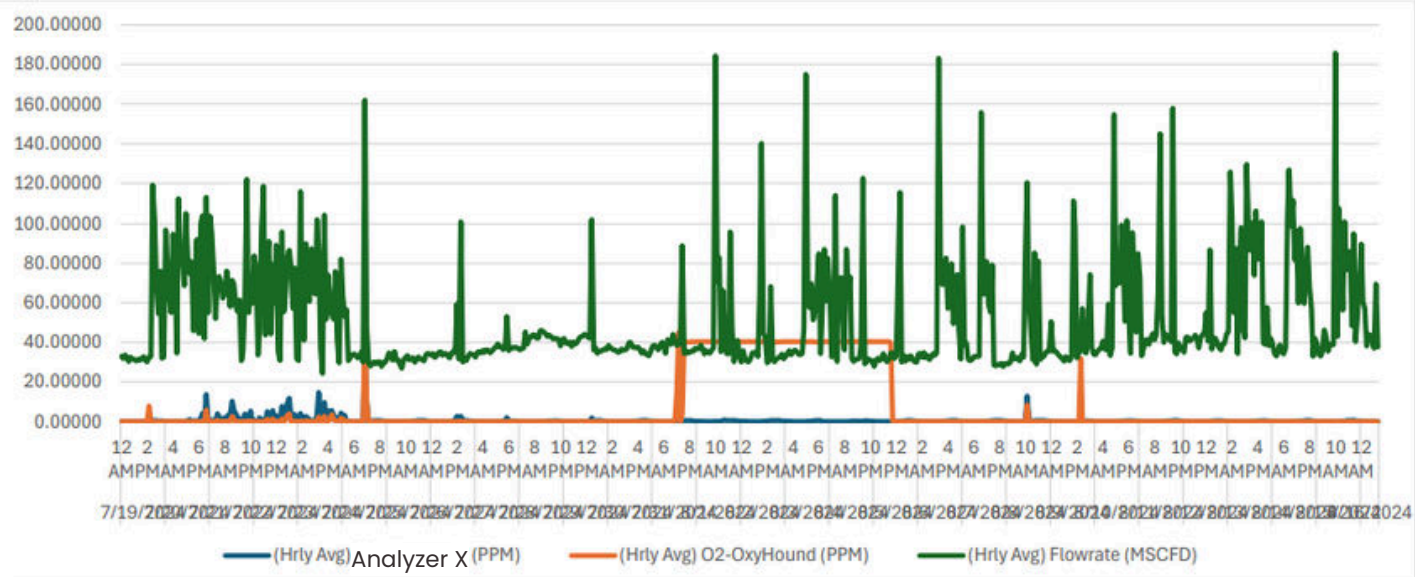
RESULTS



Value	Analyzer X (PPM)	OxyHound (PPM)	Flowrate (MSCFD)
Min	0.000	0.000	24.333
Max	31.188	50.198	185.817
Med	0.107	0.000	38.358
Avg	0.536	6.996	50.545

LONG-TERM COST ANALYSIS

**consideration: cost of replacing electrochemical cells at $200 each*

✅ **OxyHound** uses a non-consumptive quench luminescence technology, requiring minimal maintenance and no regular consumables. Long-term expenses are low, with only occasional maintenance or sensor recalibration needed.

❌ **Electrochemical Analyzers** rely on cells that react with oxygen to produce a current. These cells typically need replacement at least twice a year and every time liquids reach the sensor, which amounts to around $1,000.00 per year in sensor cells. Over 10 years, cell replacement costs total $10,000. Additional maintenance may include more frequent calibrations compared to luminescence-based systems.

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FEATURES & BENEFITS OF OXYHOUND

- Utilizes **quenching luminescence technology** to measure oxygen levels, which is a non-consumptive technique that does not require regular replacement of sensing elements or frequent calibrations.
- Not sensitive to ammonia, carbon monoxide, and sulfur dioxide.
- Simple, robust design with a touch screen interface and flame arrester vent.
- Can measure H2S or CO2 in the same analyzer as the O2 sensor.
- Easy calibration with a standard O2 Cal gas bottle.
- Remote access and monitoring via KECO Cloud Connect feature.

CLIENT FEEDBACK

"We are grateful for the chance to evaluate the OxyHound gas detection system at our installation site. **The system's performance and features have made a strong impression on us, as has your dedication to customer service and support.** We see the potential value of the OxyHound system for future use in our operations and are very much interested in exploring its possibilities down the road."

— **Clint T.** *Assets and Systems Manager | Leading VRU Manufacturing Company*

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