



## Expro Excellence

# Onshore mobile testing unit, environmentally friendly MultiTrace technology reduces production rate uncertainties to less than 4%

## Production



### Objectives and background

- Expro was approached by Badr El deen Petroleum company (Bapetco) to provide the MultiTrace technology for wet gas meter calibration
- Expro has an established relationship with Bapetco providing well testing services. Bapetco has experience in using Tracer technology in its Obayed wells. They have been using this technology since 2014, Expro did not provide this service in Egypt at this time
- Tracer technology is environmentally friendly, with non-hazardous tracers injected into the production stream at a known concentration and flow rate. After dilution, a sample is collected from the flow line and measurement of the tracer concentration is used to calculate the different flow rates. The Multi-Tracer technology can be used for independently measuring gas, oil and water flow rates in single or multi-phase flow environment
- Without the tracer readings, Bapetco would not have been able to use the data from the Venturi meters on each well

### Expro Excellence

- Expro set up a mobile testing unit and MultiTracer items were attached with a crane, saving the customer time and logistic costs in mobilisation instead of using separate equipment
- Expro trained the Egyptian engineering team on a tight timeframe. Technology specialists were used from both Europe and Malaysia to conduct onsite and offsite training
- Our solution allowed one well to be tested every day for nearly two months. This was made possible by stocking sufficient spare parts during the project
- Expro trained and used local staff for this project and the team successfully deployed new technology for this onshore application

### Value to the client

- The MultiTracer allowed Bapetco to have regular testing of gas wells on their various field in order to re-calibrate. The permanently installed metering system accurately followed production changes at the well and allowed remedial actions to be taken instantaneously
- Bapetco was very satisfied with the Obayed field results, reducing the production rate uncertainties to less than 4%
- On average, the testing period by MultiTrace per well takes between 4-6 hours. This solution improves both time and saving costs compared to a conventional separator
- Both Expro and DNV measured values through the flow loop for condensate and water between  $\pm 3.5\%$  and  $\pm 4.5\%$
- The MultiTrace technology was tested in parallel with a third party test separator in two wells, the difference in total liquid flow rate measurement values were less than  $\pm 5\%$
- The MultiTrace technology is easy to operate, environmentally friendly, with a small footprint, and only two people are required for operation
- MultiTrace allowed the customer to undertake more regular testing of liquid produced on gas wells to re-calibrate

### Cost saving



### Contact

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