

Using OMMICA THPS analysis to work smarter in Kazakhstan



BACKGROUND

A large oilfield in Northwest Kazakhstan has been using THPS to manage iron sulphide issues. The field is a high pressure, sour system, which has been generating a lot of wastewater containing SRB, iron ions, and H₂S, which has resulted in the drop-out of bacterial deposition and iron sulphide, particularly in wastewater pipelines.

For operational reasons THPS was chosen to manage the deposition issue. The pipeline operator required that the THPS levels be monitored, to determine how the process was working, and had suggested the commonly used iodometric titration method.

CHOICE OF OMMICA

The field scientist who would be running the THPS testing had previously had unsatisfactory experiences using the iodometric method, finding it cumbersome.

They decided to look for something better, to find “smarter ways instead of harder ones”.

Researching the currently available options for analysing THPS brought them to OMMICA; they contacted us for assistance, and we got them set up with all the requirements (kits, additional consumables, spec, heater and pipette) in order to run the testing. All within 5 weeks of first contact.



Simple, onsite analysis of
THPS, MEG and methanol

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TESTING PROCESS

Prior to the pipeline treatment, the wastewater, THPS 75% stock, and the THPS working solution (~ 7% were all tested.

Samples were taken and analysed every 3 hours while the pipeline was stopped for treatment (over a couple of days), to give a clear idea when the THPS had been spent enough (and thus enough of the iron sulphide removed) to finish the soaking process, and restart the pipeline.

Time was of the essence, as every hour of standby costs the operator \$millions (as well as the \$kk cost of the THPS solution).



CUSTOMER FEEDBACK

- Very easy to use, user-friendly
- Crystal clear instructions with pictures
- Designed for average guys on the field, not overwhelmed with scientific jargon
- Looked like high-level professionals in the eyes of the client
- Everyone was impressed:
 - Chemist's boss
 - Operating company's engineers
 - Operating company's Upper Management
- Scientist found it was something they could use well and effectively while being scrutinised, like something they'd been doing for years

