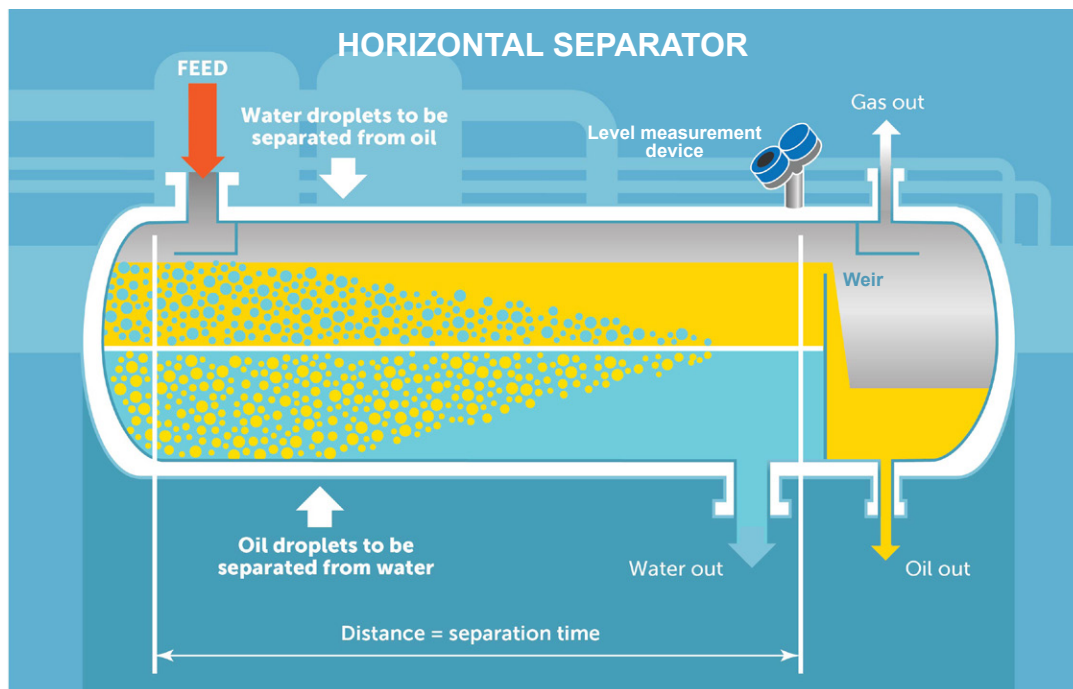


### CUSTOMER PROFILE

**INDUSTRY:** Upstream Oil & Gas (E&P) and Petrochemical  
**LOCATION:** O&G wellsites and ethylene plants  
**APPLICATION:** Horizontal separators

### ICEBREAKER

*“If Magnetrol can enhance visibility to emulsion (rag) layer dynamics, would this improve overall separator efficiency while reducing operational costs?”*



### CHALLENGES

Lack of control of the emulsion layer in the separator means fluctuations in lift costs per BOE:

- Not accomplishing primary goal: removing water from oil
- Reduced separator efficiency and equipment uptime
- Increased cost of demulsifiers to break down rag layer
- Transmitter may not be specified for interface versus total level
- Potential buildup on existing contacting devices
- Direct impact to the overall dehydration process, liquid storage, and water treatment systems

### SOLUTION

Magnetrol® level devices optimize separator performance by keeping tighter control of the emulsion layer

- Recommend device close to the weir to maximize retention time which assists oil-water separation
- Thinner rag layer optimizes level device performance
- Single transmitter design for total level and interface
- Enhanced diagnostics for buildup detection (paraffins or asphaltenes)
- Low power to cycle up and down quickly (O&G E&P)
- Breadth of transmitters by SG/API gravity

### RESULTS

Better level measurement and tighter control of the emulsion layer

- Separator optimization due to accurate representation of water in oil (top of emulsion)
- Reduced cost for demulsifiers (cost is an estimated \$1.5–\$2K USD per ton)
- Increased downstream equipment uptime due to improved oil-water separation
- Reduced maintenance due to reliable signal and enhanced diagnostics
- Simplified commissioning and training with communication through desired protocols