

# TRUE SUCCESSES

## REVENUE INCREASED \$800,000 WITH PRODUCT EXCHANGE

### Challenge

The client required a solution to improve oil-in-water carryovers. The current production was 244m<sup>3</sup> of oil and 8,000<sup>3</sup> of salt water. Oil-in-water carryovers with the incumbent demulsifier/corrosion program were averaging 1,250 ppm, equating to approximately 8m<sup>3</sup>/day of lost oil.

### Solution

Emulsion tendency testing performed by PureChem showed that changing the demulsifier and the corrosion inhibitor could reduce the oil in water carryovers. Test results are shown here.

Corrosion Inhibitor	Corrosion Inhibitor Concentration (ppm)	Time to Break	Interface Quality	Water Quality
None	—	> 10 min	N/A	N/A
CC-103	1,000	1 min	Good	Good
CC-103	2,500	1.5 min	Good	Good
CC-103	5,000	> 10 min	Poor	Poor
CC-1005	1,000	< 1 min	Good	Good
CC-1005	2,500	< 1 min	Good	Good
CC-1005	5,000	< 1 min	Good	Fair

PureChem exchanged the incumbent demulsifier with DM-368, which reduced injection rates. The corrosion inhibitor program was replaced with CC-1005.

### Benefit

With the revised chemical program, carryovers decreased to 250 ppm, resulting in a production increase of 6m<sup>3</sup>/day. This escalation in production translates into an increased annual revenue of approximately \$800,000 (based on \$65 per barrel of oil). Additionally, reducing the injection rates on the demulsifier will save the client approximately \$50,000 in chemical costs annually.

### Area

SE Saskatchewan

### Formation

Midale

### Form of Lift

Rod Pump

### PureChem Product

DM-368 and CC-1005



Figure 1: CC-103 Emulsion Tendency Test Results



Figure 2: CC-1005 Emulsion Tendency Test Results