

PRODUCED WATER REFERENCES

CTOUR™ PROCESS

OFFSHORE REDEVELOPMENT PROJECT

LOCATION: NORWEGIAN SEA
EQUIPMENT: 8" CTOUR produced water system
APPLICATION: Injection of condensate in order to simplify extraction of oil in produced water
PERFORMANCE: 35,000 BWPD

PROCESS FLUID
FLOW RATE: 20083 BPD
INLET PRESSURE: 14 (barg)

INJECTION FLUID (CONDENSATE):
FLOW RATE: 396.8 (BPD)
INLET PRESSURE: 14 (barg)

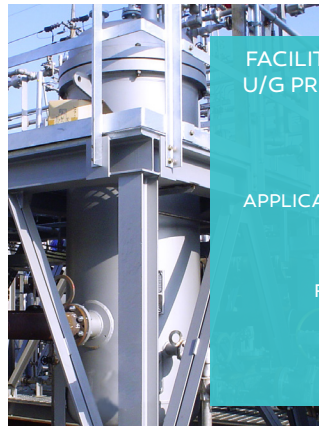


TORR™ PACKAGES

FACILITY UPGRADE & RELOCATION OF
U/G PROCESS PIPING FOR GATHERING
CENTRES
LOCATION: MIDDLE EAST
EQUIPMENT: 7 TORR Skids

APPLICATION: Produced water treatment and
polishing
CAPACITY: Total of 260 MBPD

FLOW RATE: 20,000 - 60,000 BWPD
OIW FEED: 500 - 2000 PPM
OIW OUTLET SPEC: < 50 PPM
AVG OIW OUPUT: < 25 PPM



INDUCED GAS FLOTATION

FPSO INSTALLATION

LOCATION: GULF OF MEXICO
EQUIPMENT: Vertical IGF
APPLICATION: Produced water treatment

3.1 M VESSEL DIAMETER VESSEL

FLOW: 33,000 BWPD

OIW INLET: 200 PPM

OIW OUTLET: < 29 PPM



OSORB® MEDIA

OFFSHORE TREATMENT FOR DISCHARGE

LOCATION: NORTH AMERICA
Management of offshore excursions

10-18 API OIL

High asphaltene concentrations

TEMPERATURE: 79°C



HYDROCYCLONE & IGF

TGT FPSO FIELD DEVELOPMENT

LOCATION: ASIA PACIFIC
EQUIPMENT: Deoiling Hydrocyclone & IGF

APPLICATION: Produced water treatment

PERFORMANCE: 82,500 BWPD treated to
25MG/L OIW



PWT PACKAGE

HUB DEVELOPMENT PROJECT

LOCATION: ASIA PACIFIC
EQUIPMENT: Produced Water Treatment
(Hydrocyclones, IGF, Degasser & Desander)

PERFORMANCE: 19,300 BWPD treated to
25MG/L OIW (CONDENSATE)

61,000 BWPD) treated to 25MG/L OIW
(CRUDE)

