



CLEAN OIL
BRIGHT IDEAS

Hydraulic Oil Port Side Cranes, Drilling Rig

CJC™ Application Study

Application Study
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CUSTOMER

Noble Drilling Sedco Dubai (L.L.C.), Drilling
Rig "Jimmy Puckett"

THE SYSTEM

Drilling Rig, Port Side Cranes
Crane Type: National DNS 60
Oil Type: Hydraulic Oil, ISO VG68
Oil Volume: 1,500 L (400 gal)

THE PROBLEM

Noble has experienced problems with the operation of the port side cranes such as failing in the hydraulic motors and cylinders leaking. This due to oil degradation (oxidation) and particles in the oil, causing expensive down time on the cranes.

THE SOLUTION

CJC™ Fine Filter HDU 15/25 PV, 120 L/h with
CJC™ Filter Insert BG15/25.
Dirt holding capacity 1.5 L of dirt and approx 1 kg of varnish.

FINANCIAL BENEFITS

Since installing the filters, Noble has experienced no hydraulic failures on the cranes, meaning no down time.

ENVIRONMENTAL BENEFITS

The life time of the oil has increased and the oil does no longer need to be changed. This results in cost savings for new oil and no costs for disposal of the used oil.

THE TEST

The first filter was installed on the port side crane, and a sample was taken before start up of the filter and again one week after.

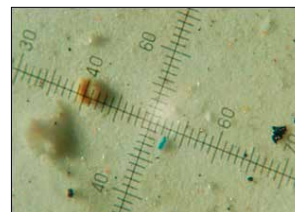
THE RESULT

The particle count was ISO 20/18/16 or equivalent of circulating more than 90 kgs of dirt a year through the system. After one week this was reduced to **ISO 16/15/12** or equivalent of circulating 11 kgs of dirt a year.

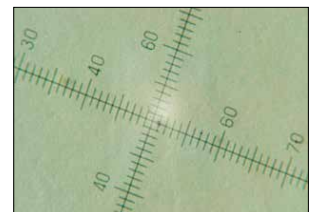


The Drilling Rig, "Jimmy Puckett", Noble Corporation

OIL SAMPLE



Oil sample - **BEFORE**
CJC™ Filtration



Oil sample - **AFTER one week**
CJC™ Filtration

THE RESULT

	At start up	After one week
Particles, > 2 µm	615,680	56,562
Particles, > 5 µm	233,956	20,784
Particles, > 15 µm	35,454	2,264
ISO Code, 4407	20/18/16	16/15/12