

Protecting our environment over 50 years



Background:

Our customer operates an oil refinery with two bay API type separators. These had skim pipes installed however these were inefficient and flooded in high rainfall and the customer needed to reduce operator headcount. The Vikoma T14 oil skimming systems replaced the skim pipes and as it is an automatic system with very little manual input, enabled a headcount reduction. Varying liquid levels were overcome with a floating system which typically collects 2000 tonnes oil per annum with less than 2% water content.

Feedstock	 Oil/water stream, mainly from crude oil storage areas plus some process plant cleaning water.
Oil on separator	- Product and crude, approx. 50cSt viscosity.
Separator area	- Zone 1.
Problem	 Oil quantities very variable. The skim pipes flood during high rainfall, usually large liquid variations in the API separator as well as extremely high water content in the slops. Reduced operator availability.

Objective: Customer objective 1 Feedback	Continuous operation with minimal operator input. Skimmer is operating automatically and no manual input.
Customer objective 2 Feedback	Floating skimmers c/w on-board pumps required in order to cope with liquid level variations. 2 T14 floating oil skimmer c/w on-board pumps installed.
Customer objective 3	Low parts per million (PPM) level required in the discharge from the separator to secondary treatment.
Feedback	Recovered oil with <2% free water content (98% oil) achieved.
Customer objective 4 Feedback	Maximum biannual maintenance checks. Biannual maintenance checks, skimmers operating for many years with minimal down time for maintenance.
Customer objective 5 Feedback	Skimmer mooring system required in order to keep the floating skimmer in position. Skimmer fitted with stainless steel mooring arms in order to keep them in the required position in the separator bays.
Customer objective 6 Feedback	Fast removal of all surface oil required. Continuous oil removal with typical annual recovery of over 2000 tonnes.

Solution:

Vikoma installed two T14 floating skimmers c/w fixed mooring system, one in each bay of the API separator.



T14 floating skimmer c/w onboard recovered oil discharge pump. Skimmer mooring system to hold the skimmer in the required postion in the separator bay.



For further details please contact your local Vikoma partner or contact us directly on sales@vikoma.com