



**Thermographic inspection of:
Executive and operations snap-shot summary
Sample**

**Date
11 April 2009**

Executive Summary V13010 Test Separator

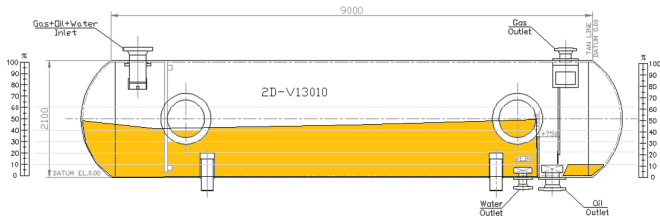
Inspection 1 - 16/09/08: This initial inspection is designed to capture the first thermograms which will be used as a baseline and reference point for each subsequent inspection. Trending between inspections can then take place in order to monitor the sediment levels within along with various temperature measurements.

Inspection 2 - 23/02/09: The level appears to have risen across the length of the separator by a small % only with the most significant change coming from the irregular shape of the level now found inside. These two findings illustrate that the irregular shape could be from the sand washing/jetting trials carried out on the separator between inspections whereby an estimated 8 tonnes of sand was aid to have been removed. Despite this removal, the level has risen slightly indicating that a significant volume, possibly above 8 tonnes, has been re-deposited in the meantime.

Inspection 3 (Insert date):

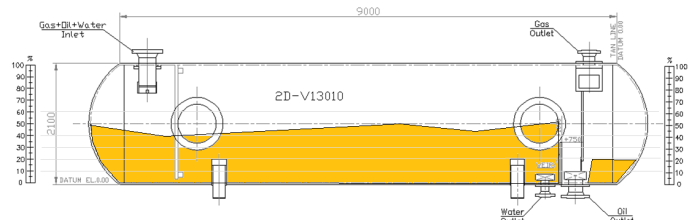
Inspection 4 (Insert date):

Inspection 1 Sediment Level – 16/09/08



	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	106	92	106	22

Inspection 2 Sediment Level – 23/02/09



	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	115	106	109	40

Inspection 3 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Inspection 4 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Executive Summary – V21210 HP2 Separator

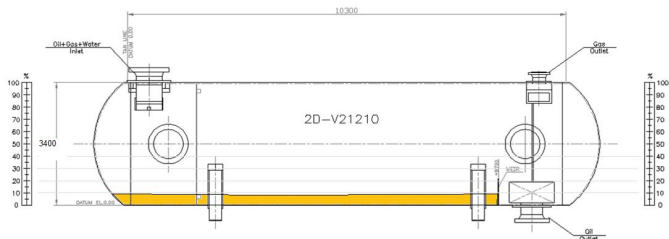
Inspection 1 23/02/09: This initial inspection is designed to capture the first thermograms which will be used as a baseline and reference point for each subsequent inspection. Trending between inspections can then take place in order to monitor the sediment levels within along with various temperature measurements. The sediment appears to follow a uniform level from inlet to the weir plate at a constant 8-9% capacity which equates to between 23cm and 27cm only.

Inspection 2 (Insert date):

Inspection 3 (Insert date):

Inspection 4 (Insert date):

Inspection 1 Sediment Level – 23/02/09



Inspection 2 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	27	20-23	22	0

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Inspection 3 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Inspection 4 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Executive Summary – V21220 LP2 Separator

Inspection 1 24/02/09: This initial inspection is designed to capture the first thermograms which will be used as a baseline and reference point for each subsequent inspection. Trending between inspections can then take place in order to monitor the sediment levels within along with various temperature measurements. The level shown in the interpretation below is more regular than what is found but the West elevation shows a more regular level than the East. The West shows a drop from 89-80cm from the dome after the North saddle where it rises slightly to 87cm before tailing off to the weir at 68cm. The East level differs slightly as it appears to dip after the North saddle from 84-62cm then it dips again after the centre junction point towards the South saddle from 62-50cm. It settles at the weir at an estimated 64cm. Below is an average of the two sets of readings.

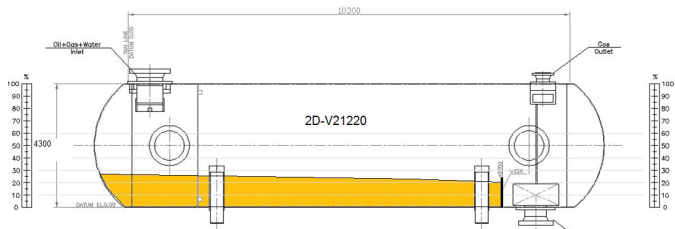
Inspection 2 (Insert date):

Inspection 3 (Insert date):

Inspection 4 (Insert date):

Inspection 1 Sediment Level – 23/02/09

Inspection 2 Sediment Level – (Insert Date)



	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	80	71 - 69	66	0

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Inspection 3 Sediment Level – (Insert Date)

Inspection 4 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

Executive Summary – V44010 LP Flare

Inspection 1 – 16/09/08: This initial inspection is designed to capture the first thermograms which will be used as a baseline and reference point for each subsequent inspection. Trending between inspections can then take place in order to monitor the sediment levels within along with various temperature measurements. The separator shows two distinct levels, the upper level is not believed to be due to any liquid or sediment but due to the low operating temp. of the separator and the curvature of the vessel. The second lower level found throughout the separator is believed to be a low sediment level which runs from the inlet at 23cm along the base remaining at a constant 11cm. There also appears to be a very light deposit in the outlet end measuring 4cm. This is difficult to substantiate though again due to the low operating temp.

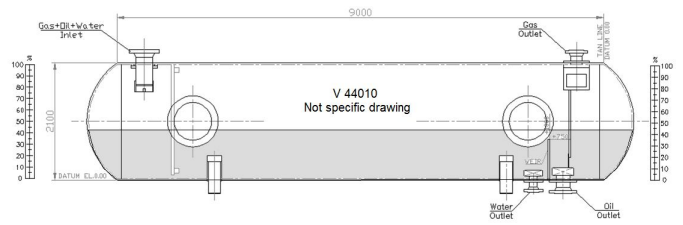
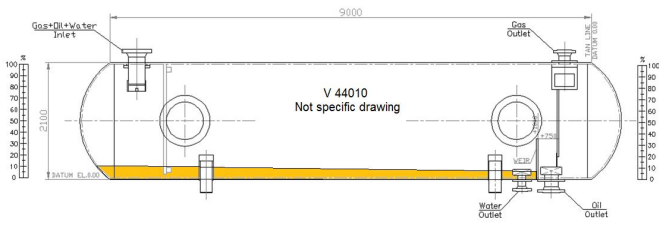
Inspection 2 - 25/02/09: The low operating temp. of the separator has made sediment level detection very difficult because there is not enough of a delta C to work with in order to show a level. The upper level is explained in the above conclusion whilst the lower level is suspected of showing the liquid in the separator. Instruments showed 40% which seems reasonable against the thermograms and also it holds steady throughout the separator which is in line with the characteristics of liquid.

Inspection 3 (Insert date):

Inspection 4 (Insert date):

Inspection 1 Sediment Level – 16/09/08

Inspection 2 Sediment Level – 25/02/09



	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	0.23	0.11	0.11	0.04

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)	0	0	0	0

Inspection 3 Sediment Level – (Insert Date)

Inspection 4 Sediment Level – (Insert Date)

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				

	Inlet	Centre	Weir	Outlet
Suspected sediment level (cm)				