

SGS INSPECTION SERVICES NIGERIA LIMITED

Measurement & Instrumentation Services

1 Wogu Street D/Line

P. O. Box 1154 Port Harcourt, Rivers State, Nigeria

Tel: 084-234481, 234783, 232961, 233508, 233558 :Fax: 084-238349, 232961, 233054



SGS

CALIBRATION CERTIFICATE

FOR THE BI-DIRECTIONAL PROVER LOOP @ EHRA FPSO

For

ESSO EXPLORATION AND PRODUCTION NIG LTD

Prover Serial No.

MDP - 580

Prover Diameter

30 " (Nominal)

Certificate No.

SGS/3945/63000021/07/13

The above calibration was carried out at the Metering Skid in EHRA FPSO between 29th and 31st July, 2013 using the **Master Prover / Master Meter Method**. The medium used was Crude Oil and the calibration was carried out in accordance with the principles outlined in the current API standard – Chapter 4.

We certify that we calibrated the above Prover loop and established the **Base Round Trip Volume** between the detector switches to be:

Detectors AVERAGE BASE VOLUME

1 & 3 16317.40948 S.I Litres @ 59 °F
16317.71298 S.I Litres @ 60 °F
102.63532 U.S. Barrels @ 60 °F

Detectors AVERAGE BASE VOLUME

2 & 4 15814.36773 S.I.Litres @ 59 °F
15814.66188 S.I.Litres @ 60 °F
99.47122 U.S. Barrels @ 60 °F

PROVER REPEATABILITY

Detectors:
Forward : 0.018%
Reverse : 0.012%
R/Trip : 0.012%

2 & 4
0.013%
0.014%
0.012%

For and on behalf of:
**SGS INSPECTION SERVICES
NIGERIA LTD**



Approved By:

**DIRECTOR OF PETROLEUM
RESOURCES**

This document is issued, on the Client's behalf, by the Company under its General Conditions of Service printed overleaf. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Clients instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGSPAPER
13518102

