

Accreditation Certificate

ConocoPhillips Whitegate Refinery Ltd

Whitegate, Midleton, Co. Cork

Testing Laboratory

Registration number: 258T

is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2nd Edition "General Requirements for the Competence of Testing and Calibration Laboratories" (This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

Date of award of accreditation: 13:04:2010

Date of last renewal of accreditation: 13:04:2010

Expiry date of this certificate of accreditation: 13:04:2015

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 

Dr Adrienne Duff

Chairperson: 

Mr Tom O'Neill

Issued on 13 April 2010

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent Laboratory:
Category A

CONOCOPHILLIPS WHITEGATE REFINERY LTD

Chemical Testing Laboratory

Initial Registration Date : 1-January-2005
Postal Address: ConocoPhillips Whitegate Oil Refinery
(Address of other locations as they apply) Whitegate,
Midleton, Co. Cork
Telephone: +353 (21) 4622256
Fax: +353 (21) 4661029
E-mail: kieran.murphy@conocophillips.com
Contact Name: Kieran Murphy
Facilities: Normally not available for Public testing

Schedule of Accreditation



Permanent Laboratory:
 Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
 - (b) a site laboratory
 - (c) a mobile laboratory or
 - (d) equipment from a mobile or site laboratory

Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

Glossary of Terms

Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.

Scope of Accreditation



ConocoPhillips Whitegate Refinery Ltd Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
716 Fuels	Analysing Heating Gases Constituents produced or used as energy sources in refineries.	
.01 Gaseous Fuels	Hydrogen 0.1 → 100.0 Mole % Carbon Dioxide 0.1 → 3.0 Mole % Nitrogen 0.1 → 59.8 Mole % Carbon Monoxide 0.064 → 1.5 Mole % Methane 0.1 → 100 Mole % Ethane 0.1 → 45 Mole %	DIN 51666 Method for Testing of Petroleum products Determination of composition for calculations refinery or heating gas carbon content and Calorific (Heating) Value by Gas Chromatography. Refinery Gas Analyser's use F.I.D & T.C.D./A.I.B. Detectors

Scope of Accreditation



ConocoPhillips Whitegate Refinery Ltd Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
716 Fuels		
.01 Gaseous Fuels	<p>Ethylene 0.1 → 12.5 Mole %</p> <p>Acetylene 0.1 → 5.0 Mole %</p> <p>Propane 0.1 → 100.0 Mole %</p> <p>Propylene 0.1 → 15.0 Mole %</p> <p>Propadiene 0.1 → 5.0 Mole %</p> <p>n-Butane 0.1 → 100.0 Mole %</p> <p>t-2-Butane 0.1 → 15.5 Mole %</p>	

Scope of Accreditation



ConocoPhillips Whitegate Refinery Ltd Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
716 Fuels		
.01 Gaseous Fuels	C-2-Butene 0.1 → 5.0 Mole % i - Butene 0.1 → 100.0 Mole % 1 - Butene 0.1 → 10.0 Mole % ISO → Butylene 0.1 → 5.0 Mole % 1.3 → Butadiene 0.1 → 15.5 Mole % n- Pentane 0.1 → 10.0 Mole % iso → Pentane 0.1 → 10.0 Mole %	

Scope of Accreditation



ConocoPhillips Whitegate Refinery Ltd Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
716 Fuels		
.01 Gaseous Fuels	<p>Cyclopropane 0.033 → 0.165 Mole %</p> <p>1 - Pentene 0.1 → 2.0 Mole %</p> <p>trans -2-Pentene 0.1 → 1.0 Mole %</p> <p>GS -2- Pentene 0.1 → 1.5 Mole %</p> <p>2-Methyl-2-Butene 0.1 → 1.0 Mole %</p> <p>C6 + (≥ C6) Included are all gaseous components containing six or more carbon molecules. n-Hexane is a common example of such a component. 0.05 → 0.5 Mole %</p>	

Scope of Accreditation



ConocoPhillips Whitegate Refinery Ltd Chemical Testing Laboratory

Permanent Laboratory:
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<p>716 Fuels</p> <p>.01 Gaseous Fuels</p>	<p>Carbon Content & Calorific (Heating) Value by calculation Carbon content units of g/100g of gas Calorific (Heating) Value units are KJ/100g of gas @ 15°C</p>	<p>DIN 51666 Method for Testing of Petroleum products</p> <p>Determination of composition for calculating refinery or heating gas carbon content and Calorific (Heating) Value by Gas Chromatography.</p> <p>Refinery Gas Analyser's use F.I.D & T.C.D./A.I.B. Detectors</p> <p>Calculations are described in clause 7 of the 2007-01 version of this standard.</p>