Type: Initial Accreditation

Certificate of Accreditation

This is to certify that

INSPECTION AND TESTS NIGERIA LIMITED

KM 1 ELEME-ONNE ROAD, OFF ELEME-JUNCTION FLYOVER, OPPOSITE BRISTOW QUARTERS, PORT HARCOURT, RIVERS STATE.
Has been assessed by the Nigeria National Accreditation System and meets the requirements of the International Standard

ISO/IEC 17020:2012

with demonstrated technical competence in the field of

Type A Inspection

for the specific services listed on the approved Scope of Accreditation.

On behalf of the Nigeria National Accreditation System:

Inspection
No. IN 0001

Issue date: FEBRUARY 14, 2025
Valid through: FEBRUARY 13, 2027

Scope of Accreditation

Type A Inspection Body

INSPECTION AND TESTS NIGERIA LIMITED

KM 1 ELEME-ONNE ROAD, OFF ELEME-JUNCTION FLYOVER, OPPOSITE BRISTOW QUARTERS, PORT HARCOURT, RIVERS STATE.

Schedule NO.: IN **0001A** **Issue No. 2: 14 02, 2025** **Valid to : 13 02, 2027**

Field of Inspection, such as: Product Design, Products (specified as Materials or Equipment), Installations, Plant, Premises, Processes, Services and Surveys	Type and Range of Inspection/Service Rendered (e.g. In-Service Inspection or Inspection of New Products)	Methods and Procedures, such as: Regulations, Standards, Specifications, Internal Procedures
Engineering Quality – **Non-destructive Examination:** **Radiographic Examination** of Welds, forged, cast and composite Materials.	• Gamma Ray Radiographic Testing • X-Ray Radiographic Testing • Initial Inspection • Fabrication • In-service Inspection • Repair	Codes/Standards a) ASME B31.1, (2018, 2020, 2022 Editions) b) ASME B31.3 (2018, 2020, 2022) c) ASME SECT. VIII, 2019 Edition, 2019 d) ASNT-SNT-TC-1A: (2020 Editions) e) AWS D1.1/D1.1M 24th Edition, 2020 f) ASTM E94/E94M: 2017 Edition, June 1, 2017 g) ASTM E 747: 2018 Edition, June 1, 2018 h) ASTM E 1032: 2019 Edition, February 1, 2019 i) ASTM E 1815: 2018 Edition, November 1, 2018 j) ASTM SE 1079: 2012 Edition, July 2012 k) ASME V: Non-Destructive Examination, 2019 l) API STD 1104 2013, 2021 Internal Procedure/Work Instruction Radiographic Examination Procedure (Doc. No.: ITL/PROD/RP/002, Rev.08)
Engineering Quality – **Non-destructive Examination:** **Magnetic Particle Examination** of ferromagnetic weldments, and other ferromagnetic materials	• Magnetic Particle Testing • Visual Testing • Initial Inspection • Fabrication • In-service Inspection • Repair	Codes/Standards a) ASME B31.1, (2018, 2020, 2022 Editions) b) ASME B31.3 (2018, 2020, 2022) c) ASME SECT. VIII, 2019 Edition, 2019 a) ASNT-SNT-TC-1A: (2020 Editions) b) AWS D1.1/D1.1M 24th Edition, 2020 a) ASME V: Non-Destructive Examination, 2019 Edition, 2019 b) API STD 1104 2013, 2021 a) ASTM E-709 2015 Edition, June 1, 2015 Internal Procedure/Work instruction

		Magnetic Particle Examination Procedure (Doc. No.: ITL/PROD/MPI/011, Rev.06)
Engineering Quality – Non-destructive Examination: **Ultrasonic Examination** of Welds, steel, metal alloys, Piping and Pipelines base materials, Flowlines, tanks and vessels	• Full Matrix Capture • Phased Array Ultrasonic Testing • C-Scan Inspection • Time of Flight Diffraction • Visual Testing • Manual Pulse-Echo Ultrasonic Flaw Detection • Initial Inspection • Fabrication • In-service Inspection • Repair	Codes/Standards a) ASME B 31.1, (2018, 2020, 2022 Editions) b) ASME SECT. VIII, 2019 Edition, 2019 c) ASNT-SNT-TC-1A: (2020 Editions) d) ASME B 31.3 (2018, 2020, 2022) e) ASME V: Non-Destructive Examination, 2019 Editions, Article 4 f) AWS D1.1/D1.1M 24th Edition, 2020 g) BS EN ISO 17640 2019 Edition, January 31, 2019 h) API STD 1104 2013, 2021 Internal Procedures/Work Instruction Ultrasonic Examination Procedure (Doc. No.: ITL/PROD/UT/012, Rev.: 05) Automatic Ultrasonic Testing (AUT) (ITL/PROD/UT/015; REV 03) Procedure for In-Service Corrosion Mapping (Carbon Steel) (Doc. No.: ITL/PROD/QP/051, Rev.: 02)
Ultrasonic Thickness Measurement of Welds, steel, metal alloys, Piping and Pipelines base materials, Flowlines, tanks and vessels	• Ultrasonic Thickness Gauging • Visual Testing • Initial Inspection • In-service Inspection • Repair	Codes/Standards a) ASME B 31.1, (2018, 2020, 2022 Editions) b) ASME SECT. VIII, 2019 Edition, 2019 c) ASNT-SNT-TC-1A: (2020 Editions) d) ASME B 31.3: Process piping, (2018, 2020, 2022 Editions) e) AWS D1.1/D1.1M 24th Edition, 2020 a) API STD 1104 2013, 2021 Internal Procedure Ultrasonic Thickness Procedure (ITL/PROD/UT/013) Rev.05
Engineering Quality – Non-destructive Examination:	• Penetrant Testing (Fluorescent and Visible)	Codes/Standards ASME SECT. 1 (2019 Edition, July 2019) b) ASME B 31.1, (2018, 2020, 2022 Editions)

Liquid Penetrant Examination on welds and non-porous materials	• Visual Testing • Initial Inspection • Fabrication • In-service Inspection • Repair	c) ASME SECT. VIII, 2019 Edition, 2019 d) ASNT-SNT-TC-1A: (2020 Editions) e) AWS D1.1/D1.1M 24th Edition, 2020 f) API STD 1104 2013, 2021 g) ASME B 31.3: Process piping, (2018, 2020, 2022 Editions) h) ASME V: Non-Destructive Examination, 2019 Edition, 2019 a) ASTM E165/E165M 2018 Edition, November 15, 2018 b) API STD 1104 21st Edition, September 2013 <u>Internal Procedure</u> Liquid Penetrant Procedure (Doc. No.: ITL/PROD/PT/018, Rev.: 05)
Engineering Quality – Non-destructive Examination: **Visual Examination** of fusion welds in metallic materials in the as-welded condition.	• Visual Testing - Initial Inspection - Fabrication - In-service Inspection - Repair	<u>Codes/Standards</u> a) ASME B 31.1, (2018, 2020, 2022 Editions) b) ASNT-SNT-TC-1A: (2020 Editions) c) AWS D1.1/D1.1M 24th Edition, 2020 d) API STD 1104 2013, 2021 <u>Internal Procedure</u> Visual Examination Procedure (Doc. No.: ITL/PROD/QP/037, Rev.:04)
Engineering – Mechanical: Inspection of “Lifting Appliances”, “Lifting Accessories” and “Lifted Equipment”	• Magnetic Particle Testing • Dye Penetrant Testing • Visual Testing • Load Test - Initial Inspection - In-service Inspection - Repair	<u>Codes/Standards</u> a) BS EN 13414:1-3 / ASME B30.9 b) BS EN 818-1 / ISO 3076 / ASME B30.9 c) BS EN 1492 PT 1, 2 & 4 / ASME B30.9 d) BS EN 1492 PT 1, 2 & 4 / ASME B30.9 e) BS EN ISO 3266/ f) ASME B18 15M / ASME B30.26 g) BS MA 47 / BS ISO 16625 h) BS EN 1677 i) ASTM A952/A952M j) BS EN 13155:2003+A2:2009 k) RR-C271DTYPE IV. BSEB13889/2-22 l) BS EN 13155

		m) Lifting and Allied Work Equipment (Safety) Regulations, 2018. Federal Republic of Nigeria Official Gazette, 2018 n) Department of Petroleum Resources- Guidelines and Procedure for Lifting Equipment and Lifting Operations, 2013) Internal Procedures Lifting Equipment Inspection Procedure (Doc. No.: ITL/PROD/QP/028, Rev.: 03)
Engineering – Mechanical: **Pre-& Post Weld Heat Treatment** (**PWHT**) of Welded pipes and plates	• Resistant Heating Process - Initial Inspection - Fabrication	Codes/Standards b) ASME SECT. VIII, 2019 Edition, 2019 c) ASME B31.3; 2018,2020,2022 Editions d) ASME B31.4, 2019, 2022 Editions e) ASME B31.8 2018, 2020, 2022 Editions f) API SPEC 6A, 21st Edition, November 2018 Internal Procedures 2.3Post Weld Heat Treatment Procedure (TL/PROD/QP/029) Rev. 04
Engineering – Mechanical: **Tank Inspection** (Carbon and low Alloy Steel Plate tanks)	• Visual testing • Ultrasonic testing • Leak Testing • Radiographic Testing • Magnetic Particle Testing • Cathodic Protection Survey - Initial Inspection - Fabrication - In-service Inspection	Codes/Standards a) API 510; Pressure Vessel Inspection Code: In-service Inspection, Rating, Repair, and Alteration (2014, 2022 Editions) b) API RP 576, 4th Edition, April 2017; Inspection of Pressure-relieving Devices c) API RP 577; 3rd Editions, October 2020 Internal Procedures Tank Inspection Procedure (Doc. No.: ITL/PROD/QP/035, Rev.03)
Engineering – Mechanical: Mechanical Inspection of Boilers, Rotating Equipment, Heating Ventilation and Air Condition (HVAC) Systems	• Visual Testing • Functional Tests Witness - Initial Inspection - Fabrication - In-service Inspection	Codes/Standards a) ASME B 31.1, (2018, 2020, 2022 Editions) b) ASNT-SNT-TC-1A: (2020 Editions) c) AWS D1.1/D1.1M 24th Edition, 2020 API STD 1104 2013, 2021

Engineering – Corrosion: Painting & Coating inspection of tanks, vessels, pipes, rigs	• Pre-coating Inspection (Visual Testing, Surface Profile Checks, Soluble Salts Extraction, Surface Cleanliness checks, Ambient Monitoring) • Post-coating (Coating Thickness Gauging, Adhesion Testing, Holiday Detection) - Initial Inspection - In-service Inspection - Repair	Codes/Standards a) NACE SP0188, 99th Edition, December 2006. b) NACE SP0169, 2013 Edition, October 4, 2013 c) API SPEC 5L, 46th Edition, April 2018 d) ASNT-SNT-TC-1A: (2020 Editions) a) ASTM D3359; 2017, 2022, 2023 b) API STD 1104 2013, 2021 c) ISO 8501-1; 2nd Edition, May 1, 2007 Internal Procedures • Blasting and Painting Procedure (ITL/PROD/QP/034, Rev.03) • Procedure for Direct Current Voltage Gradient Inspection (ITL/PROD/QP/042, Rev.: 01)
Engineering – Drilling Activities (Oil Country Tubular Goods): Inspection of Bottom Hole Assemble (BHA), Tubular and Drill Pipes	• Visual Inspection • Magnetic Particle Testing • Dye Penetrant Testing • Dimensional Check • Ultrasonic Inspection • Full Length Drifting - Initial Inspection - In-Service Inspection - Repair	Codes/Standards a) Standard DS 1-vol 1-6 Set, 5th Edition, August 2020 b) API RP 5A5, 7th Edition, June 2005 c) API RP 7G-2, 2nd Edition, October 2020 d) API RP 8B, 8th Edition, May 2014 e) API SPEC 8C; 5th Edition, April 2012 f) API SPEC 5CT, 10th Edition, June 2018 g) API SPEC 6A, 21st Edition, November 2018 Internal Procedures • Drilling Equipment Inspection Procedure (Doc. No.: ITL/PROD/QP/026, Rev.: 04) Procedure for Inspection of Tubular and Drilling Pipes (Doc. No.: ITL/PROD/QP/027, Rev.: 04)
Engineering – Asset Integrity: Technical Integrity Verification of Safety Critical Elements	• Desktop Verification • Visual Testing • Spot Witness - Initial Inspection	Codes/Standards a) ISO 55001:2014 Asset Management-Management Systems-Requirements

	- Pre-commissioning - Commissioning	b) UK HSE SCE management and verification inspection expectations; SPC/ENFORCEMENT/183 c) UK HSE SCE Safety Critical Elements Good Repair and Condition; SPC/Enforcement/175 <u>Internal Procedures</u> Technical Integrity Verification Procedure (Doc. No.: ITL/PROD/QP/049, Rev.:02)