

- ✓ NDT & Inspection
- ✓ Hydrostatic testing
- ✓ Weld qualification
- ✓ Concrete testing
- ✓ Mechanical testing
- ✓ Metallurgical services
- ✓ Chemical analysis & PMI
- ✓ Pressure plant inspection

## Magnetic particle test report

Report number LW21-1306-1 MT
Customer name Asme Welding Pty Ltd

Address 14 Industrial Drive Sunshine VIC Australia 3020

Requested by Kenny Nguyen

Purchase Order PO-1782

Accredited laboratory LMATS Melbourne Laboratory

Test date 14/07/2021

Job address LMATS Melbourne Laboratory

Job description Magnetic Particle Inspection of Welder Qualification Coupon

Identification DOW-034

Material grade ASTM A106/A106M-18 Grade B

Test specification AS/NZS 2885.2:2020

Test method AS 1171 - 1998 (Superseded)
Test type MT - Wet colour contrast

Test procedure TP-MT-01 (I1,R7)

Magnetization Magnetic Flow Method - AC

Test area Weld & associated HAZ surface only

Surface condition As welded

**Equipment** L004457 KDE KDE LED MT Yoke, L0528 Jining Fig. B2 MT Calibration block, L003572 Digital Lux Meter

Light meter

Consumables Background: DUBL-CHEK CP-2 Particle type: DUBL-CHEK BO-1

**Demagnetised** No

**Approved tester** Ben Ross (AINDT RT MT PT L2)

Test results Refer to Table 1 for test area identification and results





Accredited for compliance with -Testing

Signatory

(M.E.(Mech) B.Eng, ASNT L3 - UT MT PT, AINDT L2 PAUT UT ET RT MT PT)



Mir Katouzi 19/07/2021

Report no. LW21-1306-1 MT, Asme Welding Pty Ltd, Page 1 of 3, Format no. MF-RP-16 (Rev. OMS 5.0 20220226)

LMATS Pty Ltd
ABN: 41 107 100 925

ABN: 41 107 100 925

www.lmats.com.au
admin@lmats.com.au
1300 707 365

☐ Melbourne
☐ Sydney

☐ Brisbane
☐ Albury
☐ Newcastle

□ Perth

6 Techno Park Drive, Williamstown, VIC-3016 1C/137 Silverwater Road, Silverwater, NSW-2128 14/121 Kerry Road, Archerfield, QLD-4108 4/856 Leslie Drive, Albury, NSW-2640 2/22 Ironbark Close Warabrook, NSW-2304 3/52 Cocos Dr, Bibra Lake, WA-6163



## Table 1: Test area identification (provided by the client) and results (All dimensions are in mm)

Weld No.	Material Grade	Pipe size	Thickness	PQR/WPS No.	Welder name (ID)	Weld type	Weld Process	Discontinuities	Result
F35-L	A106	100 NB	6.02mm	WPS-FP-035	AP-052	Butt	GTAW	NUSID	С



**Test restrictions** 

Nil

**Comments** 

Nil

## Notes

- 1. All test and inspection items will be discarded after 6 weeks, unless retrieved by the clients representative
- 2. Samples, identification of samples and all job specific details were supplied by the client.
- 3. Any stated nominal pipe sizes and nominal thickness of the material were provided by the client.
- 4. Where applicable, the Measurement Uncertainty (MU) applies to the test results as per LMATS procedure. MU can be obtained by contacting one of the LMATS ISO 17025 accredited laboratory.
- 5. If this report does not specify acceptance criteria, then the test or inspection results should be referred to a competent authority for further action.
- 6. Refer to the attached revision notes (if this report is revised). This report shall not be reproduced except in full without approval of the issuing laboratory to ensure that parts of a report are not taken out of context. The client or their representatives shall not edit this report.
- 7. LMATS or its professional indemnity insurance provider do not indemnify the contents within this report or the conformity of a tested product unless the invoice for the reported work is paid in full within the agreed credit terms. Reports will be revoked if the invoice for the completed work is not paid in full.

## Abbreviations used in this report

A - No discontinuities detected

BT - Burn (melt) Through C - Comply

CP - Crater Pipe

DNC - Does Not Comply

EC - Elongated Cavity (hollow bead)

HiLo - Linear misalignment IC - Copper Inclusion

IL - Linear Inclusion (slag line)

IN - Inclusion

IO - Oxide Inclusion (wagon tracks)

IT - Tungsten Inclusion

KC - Crater crack

KL - Longitudinal crack

KT - Transverse crack

LI - lack of Inter-run fusion

LP - Incomplete root Penetration

LR - lack of Root fusion (missed edge)

LS - lack of Side fusion

NRRD - No Recordable Reflections Detected

NUSID - No unacceptable Surface Indications Detected

p.d. - Processing / film Defects

PG - Localized Porosity

PL - Linear Porosity

PU - Uniform Porosity

SED - Excessive Dressing (underflushing)

SGI - Incompletely filled Groove

SGS - Shrinkage Groove

SMG - Grinding Mark

SMH - Hammer Mark

SMT - Tool Mark (chipping mark)

SRC - Root Concavity (Suck back)

SSP - Spatter

SUC(e) - Undercut External

SUC(i) - Undercut Internal SXP - Excessive Penetration

WH - Worm Hole