

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

Radiography test report

LW21-1707-1 RT Report number

Customer name Asme Welding Pty Ltd

Address 117 Ingleston Rd Wakerley QLD Australia 4154

Requested by Vishnu Pavakkulath

Purchase order PO000790

Accredited laboratory LMATS Melbourne Laboratory

Test date 17/09/2021 to 20/09/2021

Job address 110 Maribyrnong St, Footscray, VIC 3011

Job description Radiographic Inspection of Various Welds

Identification Reference: 20-DOW-004, REQUEST No: DOW-004-NDT-006, ASME No: FRM QF20

API 5L Grade X52 Material grade

Test specification AS/NZS 2885.2:2020

Test method AS 2177-2006 (R2016) X-ray, AS 2177-2006 (R2016)

TP-RT-03 (I1,R6) **Test procedure**

Imaging film/device AGFA Structurix D7 (ISO 11699-1 C5, ASTM E1815 Cl. II)

Image processing Automatic, Viewer L002538

IQI type AS 2314 Fe(1) 10

Intensifying screens 0.02mm thick Pb at front and back

Surface condition As welded **Test equipment** X-ray L0550

Approved tester Kurtis Mears (AINDT L2 - RT MT PT VT)

Interpreted by Kurtis Mears (AINDT L2 - RT MT PT VT)





Accredited for compliance with ISO/IEC 17025-Testing

Signatory

(AINDT L2 - RT MT PT VT)

Kurtis Mears 20/09/2021

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3/52 Cocos Dr, Bibra Lake, WA-6163



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

Drawing No.	Weld No.	Material Grade	Pipe size	Thickness	PQR/WPS No.	Welder name (ID)	Weld Process	Technique	Radiograph No.	Interpretatio n	Density range	Required Sensitivity	Achieved sensitivity	Result
20-DOW-004- WM-02	FW003	API 5L X52M PSL2	150NB	7.11mm	FP-041	AP052	GTAW/MMA W	XR2/DWS	0-100, 100- 210, 210-320, 320-430, 430- 0		2.4 - 3.8	W12	W13, 2.2%	С
20-DOW-004- WM-02	TW006A	API 5L X52M PSL2	150NB	7.11mm	FP-041	AP052	GTAW/MMA W	XR2/DWS	0-100, 100- 210, 210-320, 320-430, 430- 0		2.4 - 3.8	W12	W13, 2.2%	С
20-DOW-004- WM-02	TW008A	API 5L X52M PSL2	150NB	7.11mm	FP-041	AP052	GTAW/MMA W	XR2/DWS	0-100, 100- 210, 210-320, 320-430, 430- 0		2.4 - 3.8	W12	W13, 2.2%	С



Test restrictions

Nil

Comments

Welds were compliant at the time of inspection.

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. 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)

GP - Gas Pore

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)

 ${\sf SGI-Incompletely\ filled\ Groove}$

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

End of LMATS report. Information included on the following pages (if any) was provided by the client or other parties.