

### Vickers Hardness test report

<b>Report number</b>	LS25-2139-01 HV
<b>Customer name</b>	Evermil Pty Ltd
<b>Address</b>	281 Princes Hwy Unanderra NSW Australia 2526
<b>Requested by</b>	Keith Sperring
<b>Purchase order</b>	PO-3085
<b>Accredited laboratory</b>	LMATS Sydney Laboratory
<b>Job address</b>	LMATS Sydney Laboratory
<b>Activity dates</b>	13/08/2025
<b>Item description</b>	Vickers hardness test on steel pipe
<b>Identification</b>	Samples 1-7
<b>Material grade</b>	ASTM A106/A106M-18 Grade B
<b>Test specification</b>	Client's Requirements - Report Results
<b>Acceptance criteria</b>	Report hardness values
<b>Test method</b>	AS 1817.1-2003 (R2017)-Vickers hardness test (ISO 6507-1:1997)
<b>Surface preparation</b>	Ground to P#1200 grit using SiC coated abrasives
<b>Hardness location</b>	Random locations at the C/S of the test specimen
<b>Hardness Scale</b>	HV10
<b>Hardness indenter</b>	136° pyramidal diamond indenter
<b>Test force</b>	98.07N (10kgf)
<b>Test temperature</b>	Ambient
<b>Approved tester</b>	Edward Chen (BEng Hons Materials Science and Engineering)
<b>Test results</b>	Refer to the following pages for specimen details and hardness values



Accredited for compliance with  
ISO / IEC 17025 - Testing

**Signatory**  
Edward Chen  
(BEng Hons Materials Science and  
Engineering)

Report issued on 13/08/2025

**Table 1: Test area / items identification (provided by the client) and results**

Item Identification	Specimen ID	Measured hardness (HV10)					Calculated hardness (HV10)			Test result
		Value 1	Value 2	Value 3	Value 4	Value 5	Avg.	Min.	Max.	
Sample 1	LS25-2139-01 HV-1	160	165	161	162	158	161	158	165	RP
Sample 2	LS25-2139-01 HV-2	154	162	163	159	155	159	154	163	RP
Sample 3	LS25-2139-01 HV-3	170	171	166	163	168	168	163	171	RP
Sample 4	LS25-2139-01 HV-4	164	164	162	160	164	163	160	164	RP
Sample 5	LS25-2139-01 HV-5	162	167	165	160	167	164	160	167	RP
Sample 6	LS25-2139-01 HV-6	163	163	167	159	161	163	159	167	RP
Sample 7	LS25-2139-01 HV-7	149	147	149	148	147	148	147	149	NA

Legend: C - Comply, DNC - Did not comply, N/A - Not applicable (Report measured values), RP - Report findings, P - Passed, F - Failed.

### Test restrictions

Nil

### Comments

Nil

### Normative general notes

1. Test and inspection items may be discarded after 6 weeks, unless alternative arrangements are made with LMATS.
2. Samples, identification of samples and all job specific details were supplied by the client. The test results relate only to the items tested or sampled.
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 LMATS ISO 17025 accredited laboratories.
5. Acceptance criteria is applied from the test specification. If the test specification does not include 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 has been 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.