

FLUORESCENT MAGNETIC PARTICLE AND DYE PENETRANT INSPECTION REPORT

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|------------------|------------------------------|------------------|---------------------|-----------------|
| JOB NO: | O755 | 777F Final Drive | REPORT No: | A2404-077 |
| CLIENT: | Hunter Valley Rebuild Centre | | TEST DATE: | 4 April 2024 |
| CONTACT: | Corey O'Connor | | ORDER NO: | PO2349 |
| LOCATION: | 27 Kyle St, Rutherford | | REPORT DATE: | 4 April 2024 |
| SUBJECT: | 100% of accessible surfaces | | TECHNICIAN: | Geoffery Abbott |

TECHNICAL DATA - MAGNETIC PARTICLE INSPECTION

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|-----------------------------|--------------------------|-----------------------------|--|
| Test Specification: | AS 1171-1998 | APEC Test Procedure: | APEC.NDT.008 |
| Material: | Carbon Steel | Test Method: | A.C. Sustained Magnetic Flow |
| Acceptance Standard: | Evaluation for cracking | Demagnetised: | No |
| Surface Condition: | Complies with clause 3.2 | Test Restrictions: | Painted surfaces not inspected. |
| Black Light: | Labino S/N: 18574 | Magnetising Unit: | Yoke S/N: MP4343 |
| Media: | Fluoro #0623602 | Lighting: | UV >10W/m ² at 380mm <20Lux |

TECHNICAL DATA - LIQUID DYE PENETRANT INSPECTION

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|-----------------------------|--------------------------------------|-----------------------------|--------------------------------|
| Test Specification: | AS 2062-1997 | APEC Test Procedure: | APEC.NDT.009 |
| Material: | Not specified | Test System: | Type 2, Method A, Form d, CI 1 |
| Acceptance Standard: | Evaluation for cracking | Lighting: | Natural > 1000lux |
| Surface Condition: | Machined | Test Restrictions: | NIL |
| Media: | Penetrant #27722 Developer #26322 | | |

EXAMINATION NOTES

A Fluorescent Magnetic particle Inspection was carried out on all accessible unpainted surfaces associated with 777F Final Drive components, to determine the extent of potential cracking. In addition, a Dye Penetrant inspection was carried out on bearing journals. Please refer to the following table and photographs for detail and inspection results. NOTE: A Black/White MPI was used on cracked areas for reference purposes.

EXAMINATION SUMMARY

| Description of Component Inspected | Results |
|---|----------------------|
| Job No: O755 Project: 777F Final Drive Item: Barrel | No cracking detected |
| Job No: O755 Project: 777F Final Drive Item: Spindle | No cracking detected |
| Job No: O755 Project: 777F Final Drive Item: Anchor Gear | No cracking detected |
| Job No: O755 Project: 777F Final Drive Item: Ring Gear | No cracking detected |



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 Non Destructive Testing



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Photo 1 - Overview of Hub inspected.



Photo 2 - Overview of Spindle inspected. Bearing journals sprayed white indicate extent of Dye Penetrant Testing.



Photo 3 - Overview of Anchor Gear.



Photo 4 - Overview of Ring Gear.

APEC Report Disclaimer

- a) Where only a percentage of the product has been inspected by the company, the company cannot and will not guarantee the serviceability or compliance of the remaining areas or items not inspected.
- b) Where results in this report have relied upon information provided by the client, the company cannot confirm the accuracy of this information. This information will be identified by *italic's*.
- c) When deviation is acknowledged and customer instructs to proceed with testing or calibration, the laboratory is to include a disclaimer in the report indicating that the results may be affected. (Example: UT AS2207 of a 5mm WT weld, client instruction to procedure
- d) Magnetic Particle Testing: To detect cracking - MU statement not required
- e) Penetrant Testing: To detected cracking - MU statement not required