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FLUORESCENT MAGNETIC PARTICLE AND DYE PENETRANT INSPECTION REPORT

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

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/m² at 380mm <20Lux

TECHNICAL DATA - LIQUID DYE PENETRANT INSPECTION

Test Specification:	AS 2062-1997	**APEC Test Procedure:**	APEC.NDT.009
Material:	Not specified	**Test System:**	Type 2, Method A, Form d, Cl 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

Geoffery Abbott
Technician ISO9712 Level 2
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Stephen Baillie
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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.