



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**NWW GREENWOOD**

Machine Id  
**DT820**

Component  
**Front Differential**

Fluid  
**SHELL SPIRAX HD 75W90 (4 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0102323	---	---
Sample Date		Client Info		29 Apr 2024	---	---
Machine Age	mls	Client Info		111673	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Not Changed	---	---
Sample Status				ABNORMAL	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	118	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	5	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>25	0	---	---
Copper	ppm	ASTM D5185m	>100	0	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

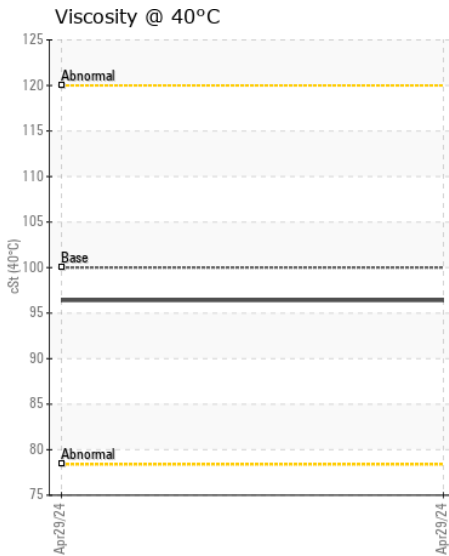
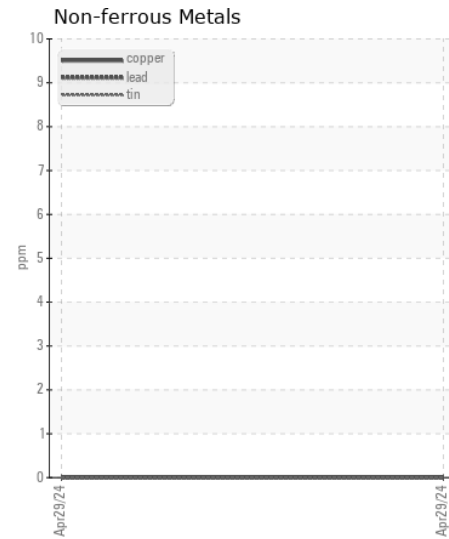
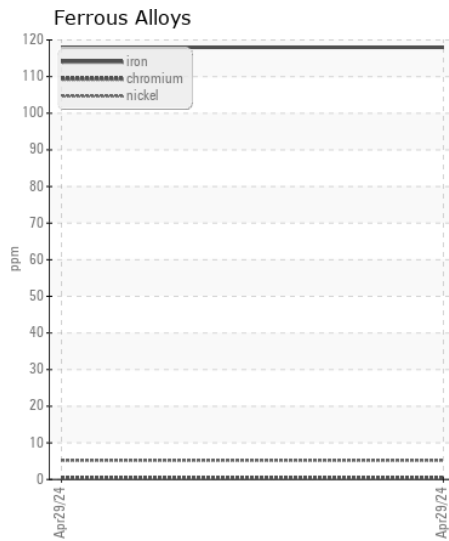
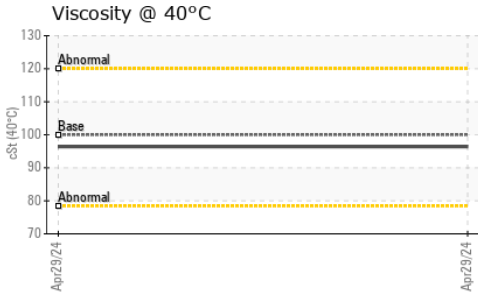
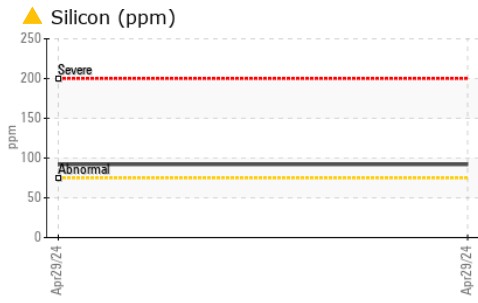
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>75	▲ 92	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>.2	NEG	---	---

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		245	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		6	---	---
Calcium	ppm	ASTM D5185m		30	---	---
Phosphorus	ppm	ASTM D5185m		1366	---	---
Zinc	ppm	ASTM D5185m		13	---	---
Sulfur	ppm	ASTM D5185m		29124	---	---
Visc @ 40°C	cSt	ASTM D445	100	96.4	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0102323  
**Lab Number** : 06175986  
**Unique Number** : 11022039  
**Test Package** : FLEET

**Received** : 10 May 2024  
**Tested** : 12 May 2024  
**Diagnosed** : 14 May 2024 - Sean Felton

**NW WHITE & CO - GREENWOOD DIVISION**  
 411 QUARRY ROAD  
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 US 29149

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)