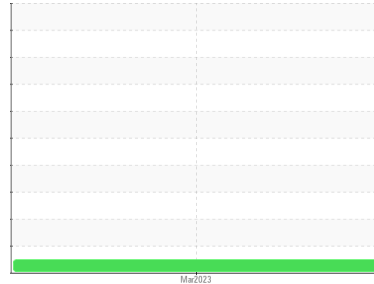




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**1 PRESS HPU (S/N 420-242)**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE 10 EXCEL 68 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

MPC (Membrane Patch Colorimetry) test indicates acceptable levels of varnish present. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0799236</b>	---	---
Sample Date	Client Info			<b>30 Mar 2023</b>	---	---
Machine Age	days	Client Info		<b>0</b>	---	---
Oil Age	days	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

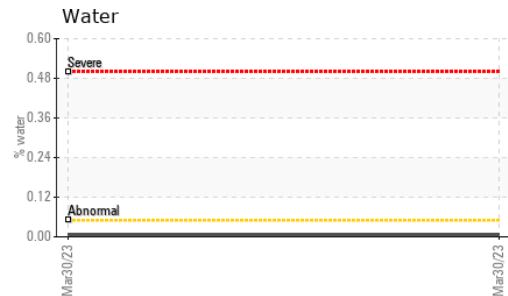
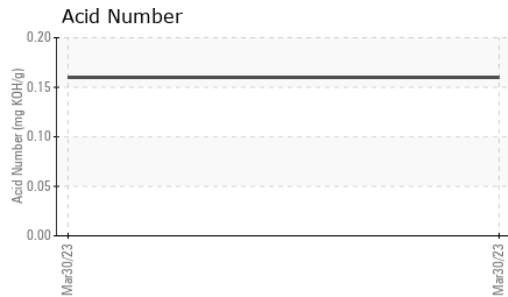
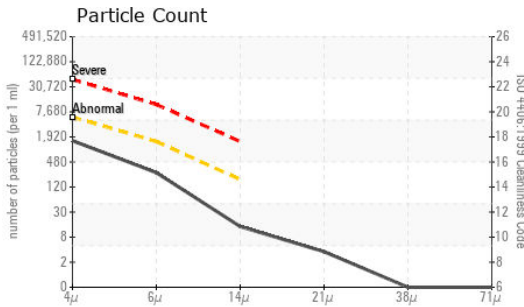
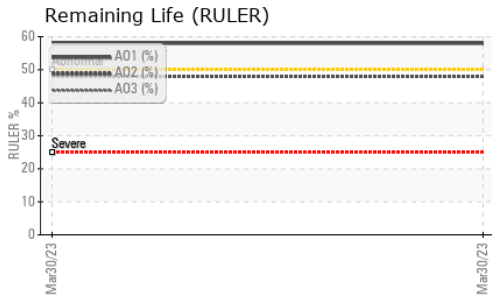
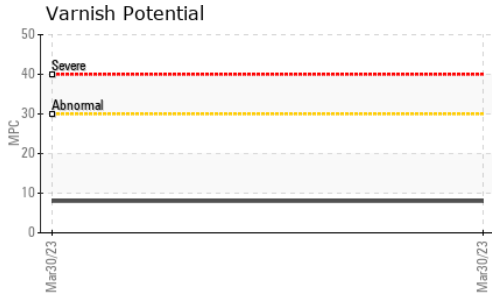
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>108</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>307</b>	---	---
Zinc	ppm	ASTM D5185m		<b>6</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>1090</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.006</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>66.1</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1367</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>234</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>12</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>3</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/15/11</b>	---	---



# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.16</b>	---	---
Anti-Oxidant 1	%	ASTM D6971	<b>58</b>	---	---
Anti-Oxidant 2	%	ASTM D6971	<b>48</b>	---	---
MPC Varnish Potential	Scale	ASTM D7843	<b>8</b>	---	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	---
Free Water	scalar	*Visual		<b>NEG</b>	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.4	<b>60.34</b>	---
Visc @ 100°C	cSt	ASTM D445	11.17	<b>9.88</b>	---
Viscosity Index (VI)	Scale	ASTM D2270	156	<b>149</b>	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				<i>no image</i>	<i>no image</i>
Bottom				<i>no image</i>	<i>no image</i>
MPC				<i>no image</i>	<i>no image</i>



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0799236 **Received** : 19 Apr 2023  
**Lab Number** : **05824355** **Diagnosed** : 01 May 2023  
**Unique Number** : 10432438 **Diagnostician** : Doug Bogart  
**Test Package** : AOM 1 ( Additional Tests: KF )

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)

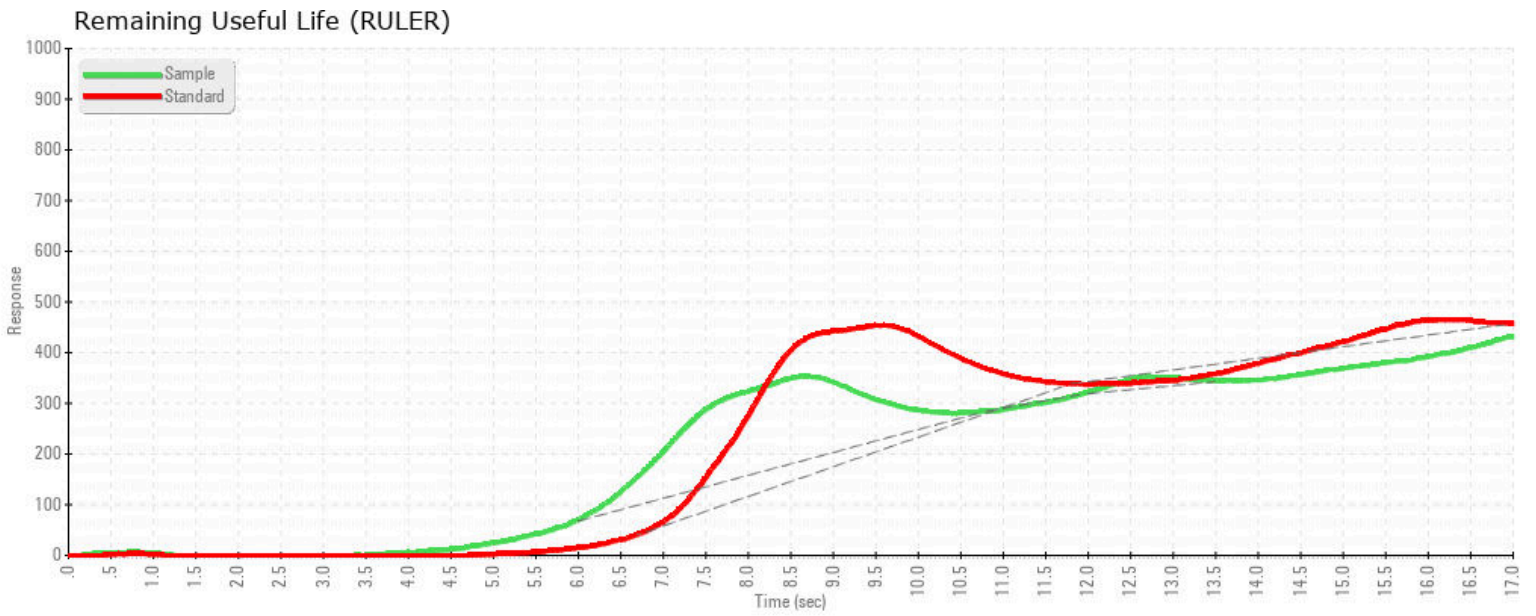
**INTERNATIONAL PAPER**  
 1785 Weyerhaeuser Road  
 VANCEBORO, NC  
 US 28586

Contact: DOUG WEIR

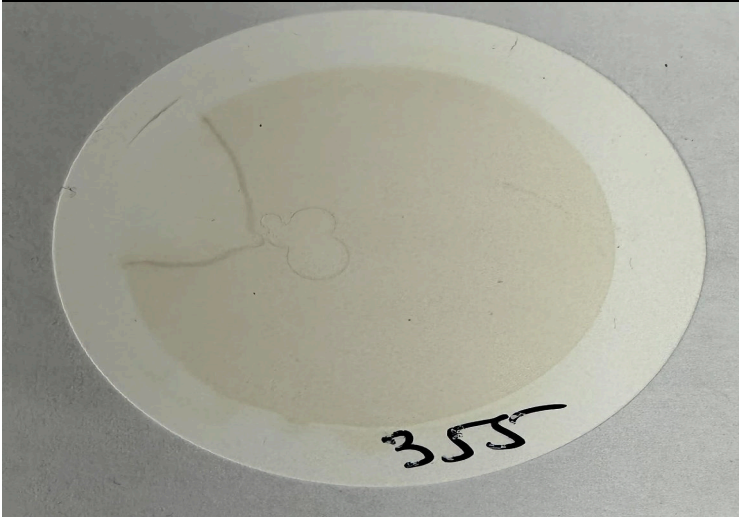
Doug.Weir@paper.com;jon.fazenbaker@wearcheck.com

T: (252)633-7350

F: (252)633-7761



MPC (Varnish Test)



Sample Color & Clarity



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