



# OIL ANALYSIS REPORT

Sample Rating Trend

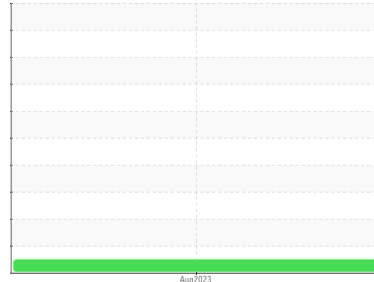
**NORMAL**



Machine Id  
**AF12-250-1320-0100 BOARD BREAKER HYDRAULIC UNIT**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE 10 EXCEL 46 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

### Fluid Condition

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>WC0824165</b>	---	---
Sample Date	Client Info	<b>15 Aug 2023</b>	---	---
Machine Age	yrs Client Info	<b>5</b>	---	---
Oil Age	yrs 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
PQ	ASTM D8184	<b>6</b>	---	---
Iron	ppm ASTM D5185m >20	<b>&lt;1</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>1</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>&lt;1</b>	---	---
Calcium	ppm ASTM D5185m	<b>107</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>421</b>	---	---
Zinc	ppm ASTM D5185m	<b>13</b>	---	---
Sulfur	ppm ASTM D5185m	<b>2041</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>1</b>	---	---
Water	% ASTM D6304 >0.05	<b>0.003</b>	---	---
ppm Water	ppm ASTM D6304 >500	<b>36.9</b>	---	---

## FLUID CLEANLINESS

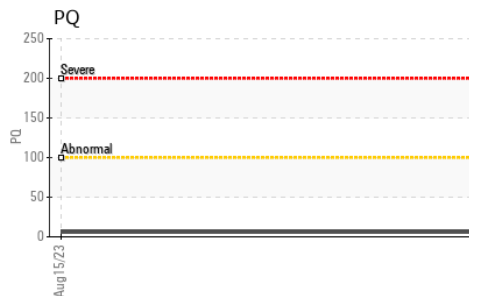
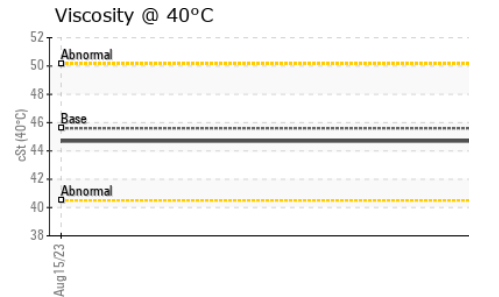
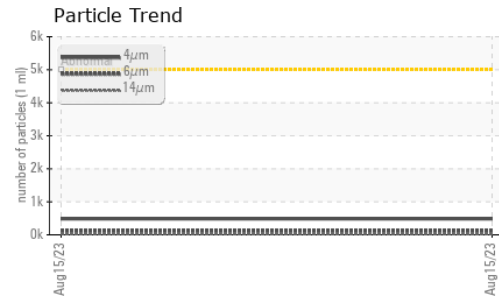
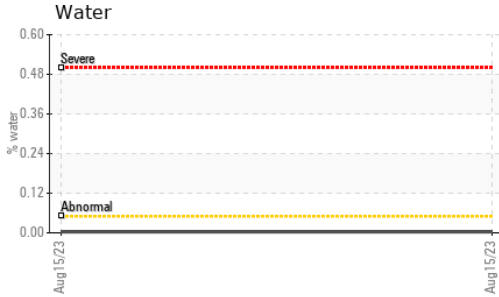
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>485</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>116</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>21</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>6</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>16/14/12</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.111</b>	---	---



# OIL ANALYSIS REPORT



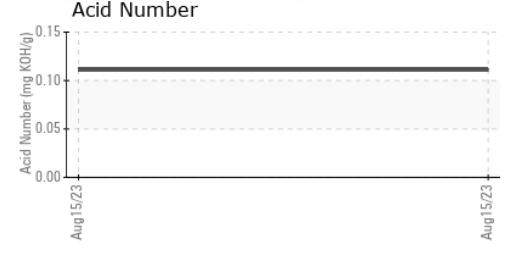
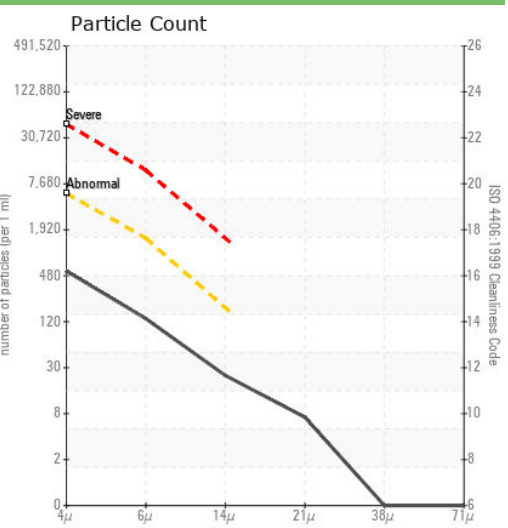
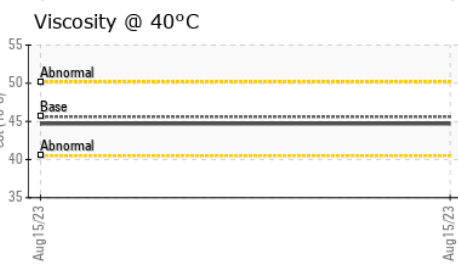
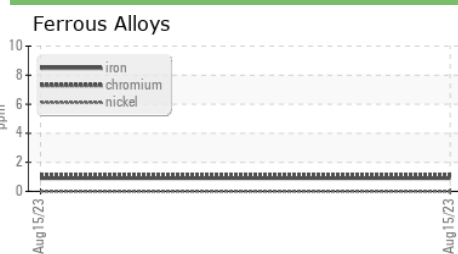
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.6	<b>44.7</b>	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0824165 **Received** : 24 Aug 2023  
**Lab Number** : **05934330** **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10619601 **Diagnostician** : Wes Davis  
**Test Package** : PLANT

**ARAUCO - GRAYLING**  
 5851 ARAUCO ROAD  
 GRAYLING, MI  
 US 49738  
 Contact: JOSEPH GREEN  
 joseph.green@arauco.com  
 T:  
 F:

Certificate L2367  
 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)