



# PROBLEM SUMMARY

Sample Rating Trend

ISO



Area

**unassigned**

Machine Id

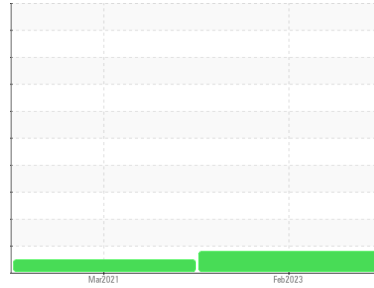
**[unassigned] HYDR\_015 Curing Line 1**

Component

**Hydraulic System**

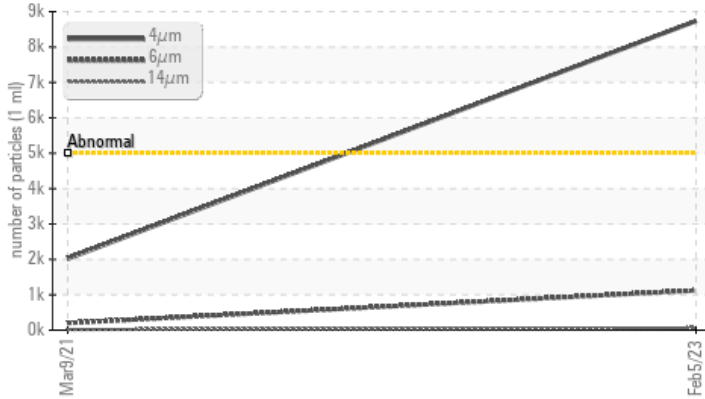
Fluid

**NOT GIVEN (500 LTR)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	---
Particles >4µm	ASTM D7647	>5000	▲ 8737	2019	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/17/13	18/15/11	---

Customer Id: NOKDAY  
Sample No.: WC0752528  
Lab Number: 05759390  
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**09 Mar 2021 Diag: Jonathan Hester**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

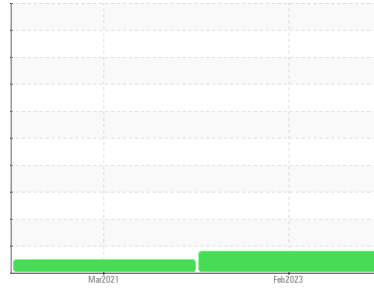
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**unassigned**

Machine Id

**[unassigned] HYDR\_015 Curing Line 1**

Component

**Hydraulic System**

Fluid

**NOT GIVEN (500 LTR)**

## 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

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

### 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>WC0752528</b>	WC0512313	---
Sample Date	Client Info		<b>05 Feb 2023</b>	09 Mar 2021	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ATTENTION</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>3</b>	<1	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	---
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >20	<b>7</b>	2	---
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>0</b>	1	---
Calcium	ppm	ASTM D5185m	<b>104</b>	102	---
Phosphorus	ppm	ASTM D5185m	<b>435</b>	424	---
Zinc	ppm	ASTM D5185m	<b>50</b>	49	---
Sulfur	ppm	ASTM D5185m	<b>2103</b>	1495	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>1</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---

## FLUID CLEANLINESS

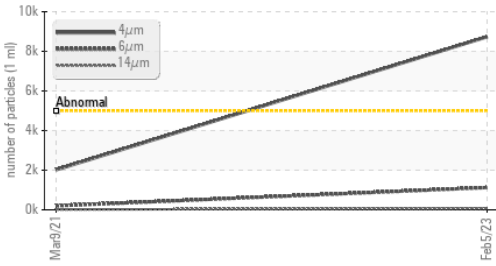
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 8737</b>	2019	---
Particles >6µm	ASTM D7647	>1300	<b>1122</b>	201	---
Particles >14µm	ASTM D7647	>160	<b>65</b>	16	---
Particles >21µm	ASTM D7647	>40	<b>17</b>	6	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/17/13</b>	18/15/11	---

## FLUID DEGRADATION

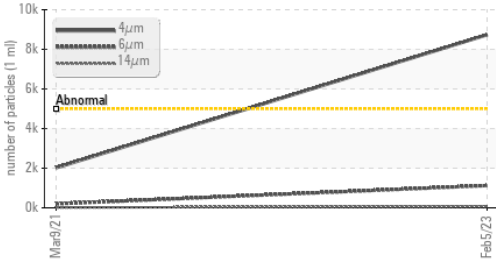
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.062</b>	0.098	---

# OIL ANALYSIS REPORT

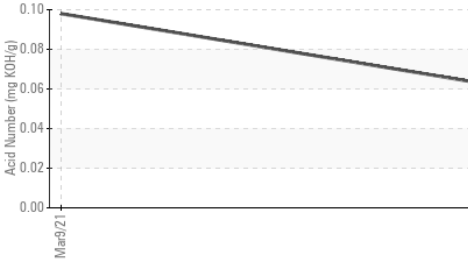
### ▲ Particle Trend



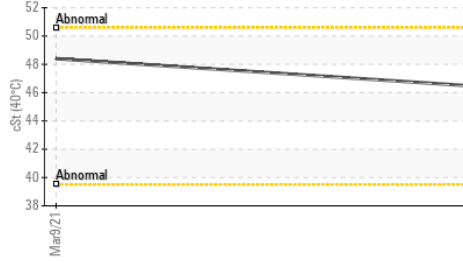
### ▲ Particle Trend



### Acid Number



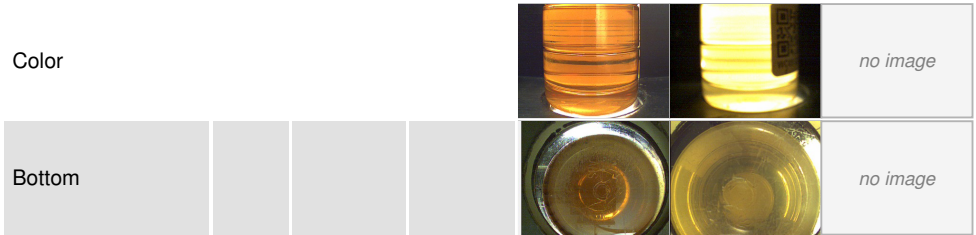
### Viscosity @ 40°C



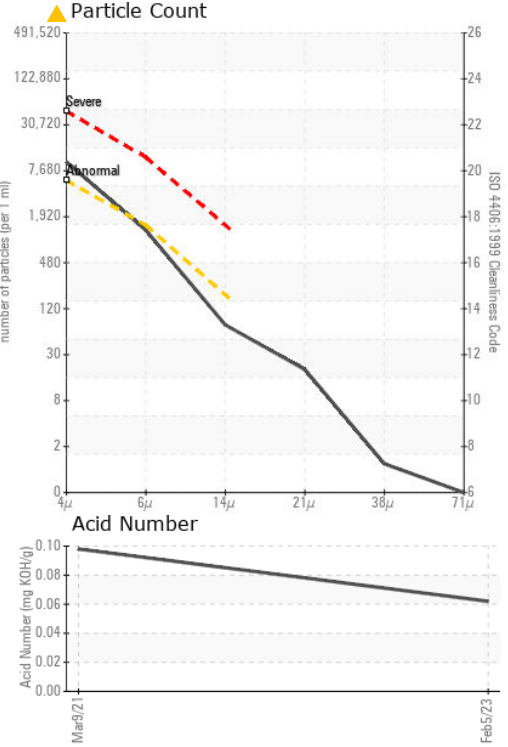
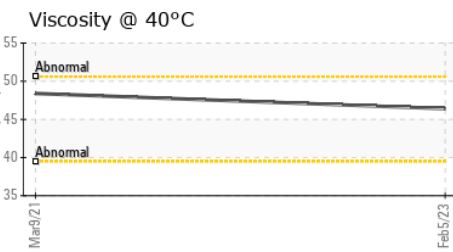
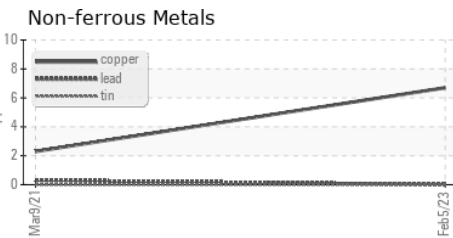
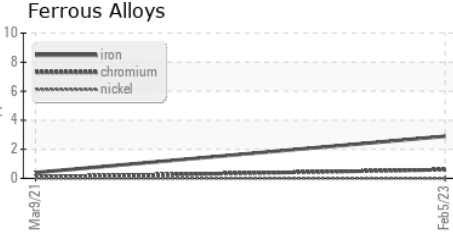
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	<b>46.4</b>	48.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0752528 **Received** : 06 Feb 2023  
**Lab Number** : 05759390 **Diagnosed** : 07 Feb 2023  
**Unique Number** : 10323997 **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT

**NOKIAN TYRES US OPERATIONS LLC**  
 520 NOKIAN TYRES DRIVE  
 DAYTON, TN  
 US 37321  
 Contact: CHRIS NAPIER  
 christopher.napier@nokiantyres.com  
 T: (423)457-3121  
 F:

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)