

# **PROBLEM SUMMARY**

#### Sample Rating Trend

### [] HYDR\_018 TREAD 2 HYDRAULIC SUMP 018 TREAD 2 omponent

## **Hydraulic System**

NOT GIVEN (--- LTR)







#### RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Else we recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

### PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	 
Silicon	ppm	ASTM D5185m	>15	🛑 113	 
Water	%	ASTM D6304	>0.05	<b>e</b> 2.43	 
ppm Water	ppm	ASTM D6304	>500	<b>e</b> 24300	 
Appearance	scalar	*Visual	NORML	🔺 HAZY	 
Emulsified Water	scalar	*Visual	>0.05	<b>6.2%</b>	 
Free Water	scalar	*Visual		<b>e</b> >10%	 

Customer Id: NOKDAY Sample No.: WC0701747 Lab Number: 05759393 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Fluid			?	We recommend that you drain the oil and perform a filter service on this component if not already done.			
Change Filter			?	We recommend that you drain the oil and perform a filter service on this component if not already done.			
Water Drain-off			?	We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid.			
Resample			?	We recommend an early resample to monitor this condition.			
Check Water Access			?	We advise that you check for the source of water entry.			

HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**

WATER

X

#### Machine Id [] HYDR\_018 TREAD 2 HYDRAULIC SUMP 018 TREAD 2 Component Hydraulic System

NOT GIVEN (--- LTR)

#### DIAGNOSIS

#### Recommendation

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Else we recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. Excessive free water present. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0701747		
Sample Date		Client Info		05 Feb 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	12		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	2		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m		24		
Phosphorus	ppm	ASTM D5185m		139		
Zinc	ppm	ASTM D5185m		22		
Sulfur	ppm	ASTM D5185m		2091		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>•</b> 113		
Sodium	ppm	ASTM D5185m		1		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.05	<b>e</b> 2.43		
ppm Water	ppm	ASTM D6304	>500	<b>e</b> 24300		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1470		
Particles >6µm		ASTM D7647	>1300	801		
Particles >14µm		ASTM D7647	>160	136		
Particles >21µm		ASTM D7647	>40	46		
Particles >38µm		ASTM D7647	>10	7		
Particles >71µm		ASTM D7647	>3	1		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/17/14		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35		



Particle Trend

Acid Number

Viscosity @ 40°C

6

Ē 5

ting 3k

0k

0.4

(B/H0.3

흥 0.10

0.00

55

50

<del>ှ</del> 45

\$ 40

35

30

ah 5/2/3

# **OIL ANALYSIS REPORT**

VISUAL







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)



eb5/23

ŝ

Laboratory

Sample No.

Lab Number

Unique Number

Contact/Location: CHRIS NAPIER - NOKDAY

christopher.napier@nokiantyres.com

F:

T: (423)457-3121