

PROBLEM SUMMARY

Sample Rating Trend

ISO

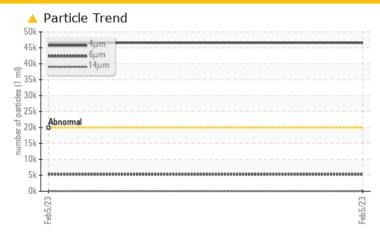


Machine ld EXTR-011 TREAD 2 EXTR-011 TREAD 2

Gearbox

GEAR OIL ISO 320 (--- LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 320. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS								
Sample Status			ABNORMAL					
Particles >4µm	ASTM D7647	>20000	46615					
Particles >6µm	ASTM D7647	>5000	<u>▲</u> 5312					
Oil Cleanliness	ISO 4406 (c)	>21/19/16	23/20/13					

Customer Id: NOKDAY Sample No.: WC0755637 Lab Number: 05759376 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

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 Filter			?	We recommend you service the filters on this component.		
Resample			?	We recommend an early resample to monitor this condition.		
Alert			?	Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.		
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.		

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

[] EXTR-011 TREAD 2 EXTR-011 TREAD 2

Gearbox

GEAR OIL ISO 320 (--- LTR)



DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 320. Please

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are notably high.

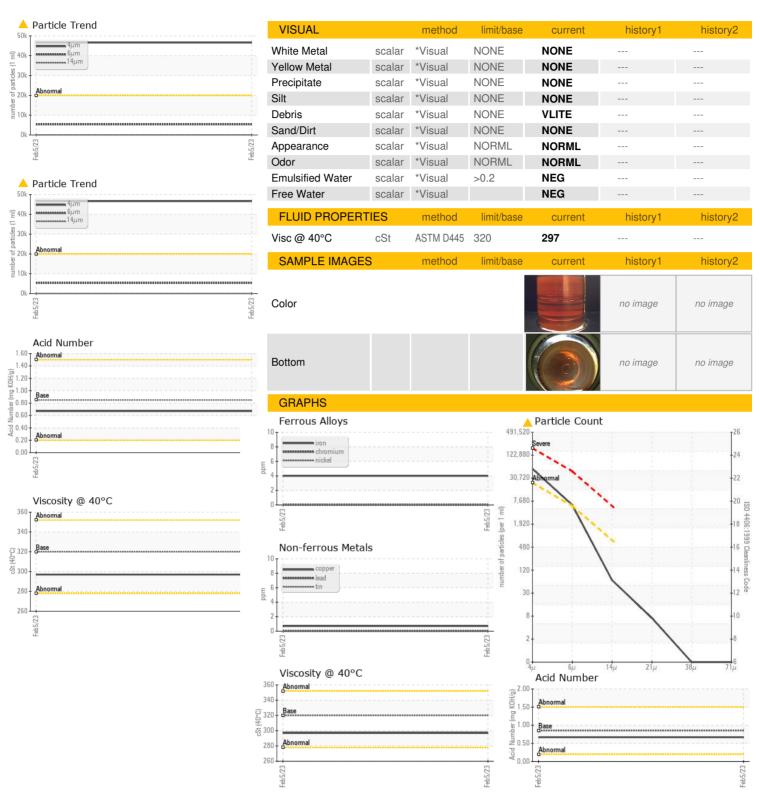
Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

				Feb2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0755637		
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				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	4		
Chromium	ppm	ASTM D5185m	>15	0		
Nickel	ppm	ASTM D5185m	>15	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	0		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>200	<1		
Tin	ppm	ASTM D5185m	>25	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	19		
Barium	ppm	ASTM D5185m	15	0		
Molybdenum	ppm	ASTM D5185m	15	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	50	0		
Calcium	ppm	ASTM D5185m	50	3		
Phosphorus	ppm	ASTM D5185m	350	320		
Zinc	ppm	ASTM D5185m	100	1		
Sulfur	ppm	ASTM D5185m	12500	19674		
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	3		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	46615		
Particles >6μm		ASTM D7647	>5000	<u>▲</u> 5312		
Particles >14μm		ASTM D7647	>640	58		
Particles >21µm		ASTM D7647	>160	6		
Particles >38μm		ASTM D7647	>40	0		
Particles >71μm		ASTM D7647	>10	0		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<u>23/20/13</u>		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.67		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: 10323983 Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 06 Feb 2023 : WC0755637 : 07 Feb 2023 : 05759376 Diagnosed

: Wes Davis Diagnostician

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)

NOKIAN TYRES US OPERATIONS LLC

520 NOKIAN TYRES DRIVE DAYTON, TN

US 37321

Contact: CHRIS NAPIER christopher.napier@nokiantyres.com

T: (423)457-3121