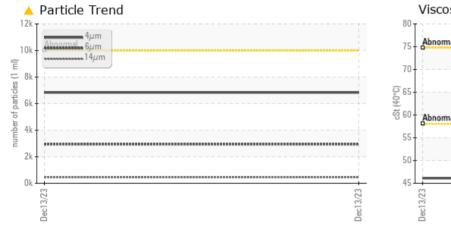


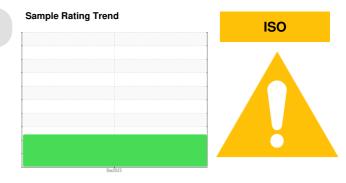
PROBLEM SUMMARY

NO UNIT WC0827901

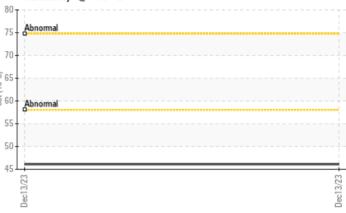
Non-Drive End Bearing Fluid NOT GIVEN (--- GAL)

COMPONENT CONDITION SUMMARY





Viscosity @ 40°C



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 advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. Please provide more complete information on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	
Particles >6µm	ASTM D7647	>2500	<u> </u>	
Particles >14µm	ASTM D7647	>160	450	
Particles >21µm	ASTM D7647	>40	<u> </u>	
Particles >38µm	ASTM D7647	>10	<mark>/</mark> 31	
Particles >71µm	ASTM D7647	>3	<u> </u>	
Oil Cleanliness	ISO 4406 (c)	>20/18/14	A 20/19/16	

Customer Id: NALGRA Sample No.: WC0827901 Lab Number: 02603215 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description	
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.	
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			?	Please specify the brand, type, and viscosity of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please provide more complete information on your next sample.	
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.	

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Ic **NO UNIT WC0827901** Component

Non-Drive End Bearing NOT GIVEN (--- GAL)

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 advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. Please provide more complete information on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

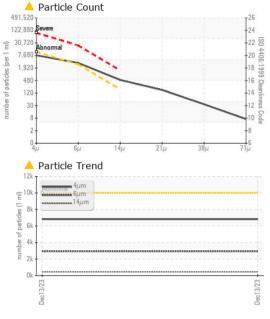
		-		Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0827901		
Sample Date		Client Info		13 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG		
WEAR METALS		ام م الجم معا		ouwront	late to must	biotom/0
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	limit/base	0		
	ppm	ASTM D8184*	>20			
PQ	ppm ppm	ASTM D8184*		0		
PQ Iron		ASTM D8184* ASTM D5185(m)	>20	0 <1		
PQ Iron Chromium	ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m)	>20 >20	0 <1 0		
PQ Iron Chromium Nickel	ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20	0 <1 0 0		
PQ Iron Chromium Nickel Titanium	ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20	0 <1 0 0 0		
PQ Iron Chromium Nickel Titanium Silver	ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20	0 <1 0 0 0 <1	 	
PQ Iron Chromium Nickel Titanium Silver Aluminum	ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20	0 <1 0 0 0 <1 0	 	
PQ Iron Chromium Nickel Titanium Silver Aluminum Lead	ppm ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20 >20	0 <1 0 0 0 <1 0 <1		
PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper	ppm ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20 >20	0 <1 0 0 <1 0 <1 0 <1 <1		
PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20 >20	0 <1 0 0 <1 0 <1 <1 <1 0		
PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Antimony	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20 >20	0 <1 0 0 <1 0 <1 <1 <1 <1 0 0 0		
PQ Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Antimony Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D8184* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 >20 >20 >20 >20 >20 >20 >20	0 <1 0 0 <1 0 <1 <1 <1 0 0 0 0		

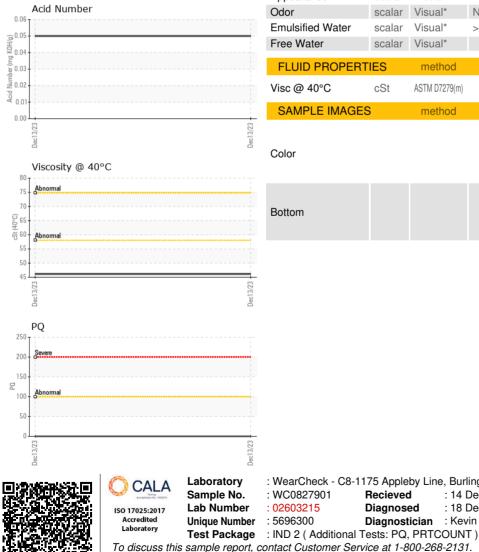
ADDITIVE5		method	iimivbase	current	riistory i	nistory2
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		0		
Calcium	ppm	ASTM D5185(m)		<1		
Phosphorus	ppm	ASTM D5185(m)		8		
Zinc	ppm	ASTM D5185(m)		4		
Sulfur	ppm	ASTM D5185(m)		645		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	0		

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OIL ANALYSIS REPORT





FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	6832		
Particles >6µm		ASTM D7647	>2500	2948		
Particles >14µm		ASTM D7647	>160	450		
Particles >21µm		ASTM D7647	>40	<u> </u>		
Particles >38µm		ASTM D7647	>10	A 31		
Particles >71µm		ASTM D7647	>3	<u> </u>		
Oil Cleanliness		ISO 4406 (c)	>20/18/14	A 20/19/16		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.05		
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*	>2	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		46.1		
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
				(
Color					no image	no image
Color Bottom					no image no image	no image no image

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F:

Contact: Phillip Winsor

philipwinsor@nlh.nl.ca T: (709)486-8714