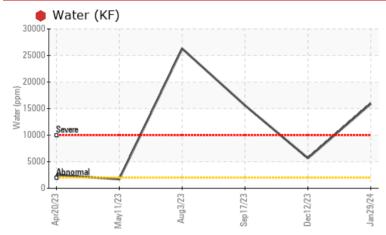


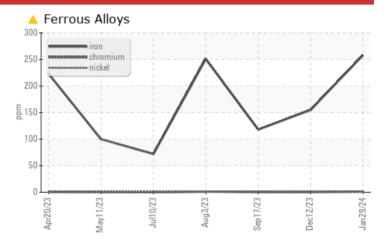
LINE 3 STOBER

Component Gearbox Fluid Gearbox Oil (--- QTS)

COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE		
Iron	ppm	ASTM D5185m	>200	<u> </u>	155	118		
Water	%	ASTM D6304	>0.2	e 1.59	0.567	• 1.56		
ppm Water	ppm	ASTM D6304	>2000	e 15900	6 5670	15600		
Emulsified Water	scalar	*Visual	>0.2	• 0.2%	0.2%	0.2%		
Free Water	scalar	*Visual		e >10%	NEG	NEG		

Customer Id: HORKNO Sample No.: WC0866802 Lab Number: 06074674 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 <u>jhester@wearcheckusa.com</u>

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 from the component if this has not already been done.		
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



12 Dec 2023 Diag: Jonathan Hester

We advise that you check for the source of water entry. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present 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

17 Sep 2023 Diag: Jonathan Hester



We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

03 Aug 2023 Diag: Doug Bogart



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. There is too much water present in this sample to perform a particle count.Gear wear is indicated. Appearance is milky. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.





OIL ANALYSIS REPORT

Sample Rating Trend

WATER

X

LINE 3 STOBER

Component Gearbox Fluid Gearbox Oil (--- QTS)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

A Wear

Gear wear is indicated.

Contamination

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.

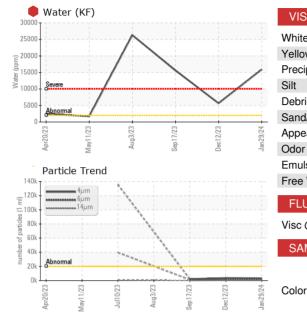
Fluid Condition

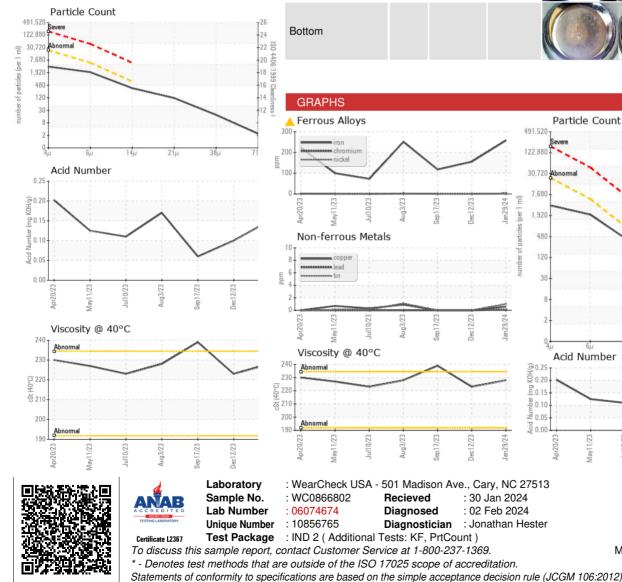
The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0866802	WC0866797	WC0820539
Sample Date		Client Info		29 Jan 2024	12 Dec 2023	17 Sep 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	4 258	155	118
Chromium	ppm	ASTM D5185m	>15	1	<1	<1
Nickel	ppm	ASTM D5185m	>15	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	0
Lead	ppm	ASTM D5185m	>100	2 <1	0	0
Copper	ppm	ASTM D5185m		<1	0	0
Tin		ASTM D5185m	>200	1	0	0
Vanadium	ppm ppm	ASTM D5185m	225	۱ <1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m		8	3	5
Calcium	ppm	ASTM D5185m		7	10	5
		ASTM D5185m		413	456	373
Phosphorus Zinc	ppm	ASTM D5185m		413	456	0
Sulfur	ppm ppm	ASTM D5185m		0 519	576	688
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm		>50	17	7	9
Sodium	ppm	ASTM D5185m	200	6	0	1
Potassium	ppm	ASTM D5185m	>20	2	1	0
Water	%	ASTM D6304		1.59	▲ 0.567	1.56
ppm Water	ppm	ASTM D6304		1.55	▲ 5670	15600
FLUID CLEANLIN		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	3271	3610	2157
Particles >6µm		ASTM D7647	>5000	1782	1967	1175
Particles >14µm		ASTM D7647	>640	303	335	200
Particles >21µm		ASTM D7647	>160	102	113	67
Particles >38µm		ASTM D7647	>40	16	17	10
Particles >71µm		ASTM D7647	>10	2	2	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/18/15	19/18/16	18/17/15
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.15	0.10	0.06
				0.10	0.10	0.00



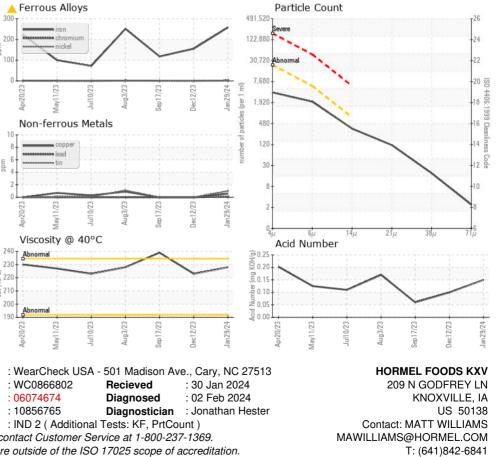
OIL ANALYSIS REPORT





VISUAL NONE NONE NONE White Metal *Visual NONE scalar Yellow Metal NONE NONE NONE NONE scalar *Visual Precipitate scalar *Visua NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE Debris *Visual NONE NONE scalar NONE Sand/Dirt scalar *Visual NONE NONE NONE NORML Appearance NORML NORML NORML scalar *Visua NORML NORML NORML Odor scalar *Visual NORML *Visual **Emulsified Water** scalar >0.2 0.2% 0.2% 0.2% Free Water scalar *Visual >10% NEG NEG **FLUID PROPERTIES** limit/base Visc @ 40°C cSt ASTM D445 228 223 239 SAMPLE IMAGES





Report Id: HORKNO [WUSCAR] 06074674 (Generated: 02/02/2024 20:23:13) Rev: 1

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