

## **PROBLEM SUMMARY**

## Sample Rating Trend

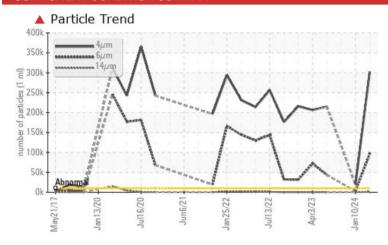
WH-100

B25970 - STORK GEARBOX #8 (3RD ON CHILL SECTION)

Gearbox

PETRO CANADA ENDURATEX WG 680 (--- GAL)

## COMPONENT CONDITION SUMMARY



## **RECOMMENDATION**

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS								
Sample Status			SEVERE	ATTENTION	ABNORMAL			
Particles >4μm	ASTM D7647	>10000	▲ 302399	19615				
Particles >6μm	ASTM D7647	>2500	<b>4</b> 96643	2361				
Particles >14μm	ASTM D7647	>320	<b>1163</b>	54				
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>25/24/17</b>	21/18/13				

Customer Id: HORAUS Sample No.: WC0894854 Lab Number: 06124884 Test Package: IND 2



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 ? Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type ? Information Required and micron rating with next sample. The air breather requires service. If unrated, we recommend that you replace with a **Check Breathers** ? suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather Check Seals Check seals and/or filters for points of contaminant entry.

## HISTORICAL DIAGNOSIS

10 Jan 2024 Diag: Doug Bogart

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.



## 29 Nov 2023 Diag: Jonathan Hester

SEDIMENT



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



## 25 Jul 2023 Diag: Don Baldridge

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.





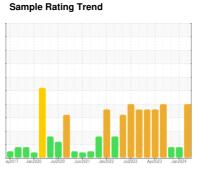
## **OIL ANALYSIS REPORT**

MH-100

# B25970 - STORK GEARBOX #8 (3RD ON CHILL SECTION)

Gearbox

PETRO CANADA ENDURATEX WG 680 (---





## **DIAGNOSIS**

### Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### **▲** Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

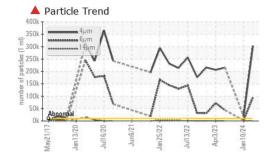
## **Fluid Condition**

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

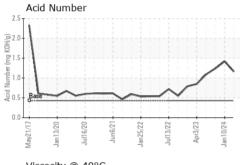
- GAL)		ay2017 Jan2	020 Jul2020 Jun2021	Jan2022 Jul2022 Apr2023	Jan2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0894854	WC0880594	WC0856019
Sample Date		Client Info		06 Mar 2024	10 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ATTENTION	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	10	21	46
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	8	13	13
Tin	ppm	ASTM D5185m	>25	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	0	0	0
Barium	ppm	ASTM D5185m	1	0	3	0
Molybdenum	ppm	ASTM D5185m	1	<1	0	0
Manganese	ppm	ASTM D5185m	1	<1	0	<1
Magnesium	ppm	ASTM D5185m	1	0	0	0
Calcium	ppm	ASTM D5185m	1	0	<1	<1
Phosphorus	ppm	ASTM D5185m	1	0	49	1
Zinc	ppm	ASTM D5185m	1	2	0	14
Sulfur	ppm	ASTM D5185m	3114	3127	3004	2450
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	1	1	<1
Sodium	ppm	ASTM D5185m		<1	0	1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>302399</b>	<u> </u>	
Particles >6µm		ASTM D7647	>2500	<b>▲</b> 96643	2361	
Particles >14µm		ASTM D7647	>320	<u> </u>	54	
Particles >21µm		ASTM D7647	>80	99	8	
Particles >38µm		ASTM D7647	>20	1	0	
Particles >71μm		ASTM D7647		0	0	
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>25/24/17</b>	21/18/13	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.43	1.16	1.42	1.24

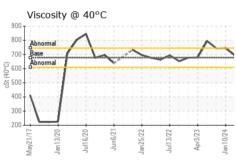


## **OIL ANALYSIS REPORT**



400k 350k	4μ1	- 12					
300k - 30				Λ			
200k -	11	1	Managa wa	1	$\checkmark \setminus$	~	
150k	3	1		1	7		
100k	5		_			1	2.14
	omal		Jun6/21	1	- 1		V



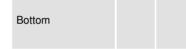


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG

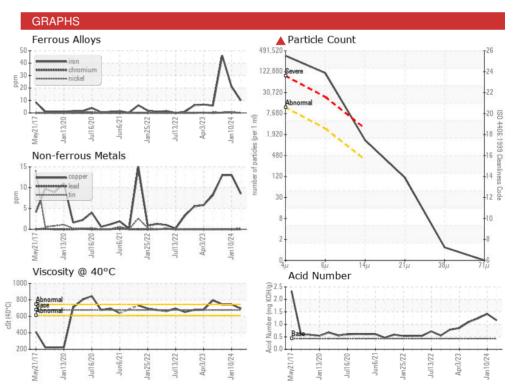
FLUID PROPER	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	676.7	692	745	743

SAMPLE IMAGES

Color











Laboratory Sample No.

: WC0894854 Lab Number : 06124884 Unique Number: 10939035

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed

: 22 Mar 2024 : 22 Mar 2024 - Wes Davis

: 21 Mar 2024

Test Package: IND 2 (Additional Tests: PrtCount) 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)

**HORMEL FOODS - AUSTIN** 

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Contact: RYAN LOWE rslowe@hormel.com

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Report Id: HORAUS [WUSCAR] 06124884 (Generated: 03/22/2024 07:35:16) Rev: 1

Contact/Location: RYAN LOWE - HORAUS