

PROBLEM SUMMARY

Sample Rating Trend

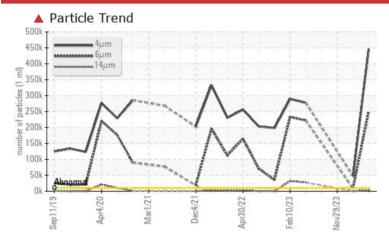
WH-100

B25970 - STORK GEARBOX #10 (DISCHARGE)

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	ABNORMAL	ABNORMAL		
Particles >4µm	ASTM D7647	>10000	446547	▲ 48218			
Particles >6µm	ASTM D7647	>2500	249230	▲ 8832			
Particles >14µm	ASTM D7647	>320	△ 3158	275			
Oil Cleanliness	ISO 4406 (c)	>20/18/15	26/25/19	23/20/15			

Customer Id: HORAUS **Sample No.:** WC0894856 Lab Number: 06124886 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.		
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.		
Check Breathers			?	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.		
Check Seals			?	Check seals and/or filters for points of contaminant entry.		

HISTORICAL DIAGNOSIS

10 Jan 2024 Diag: Wes Davis

A

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



29 Nov 2023 Diag: Jonathan Hester

WATER



We advise that you check for the source of water entry. 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 concentration of water present in the oil. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



25 Jul 2023 Diag: Don Baldridge

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.





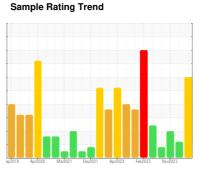
OIL ANALYSIS REPORT

WH-100

B25970 - STORK GEARBOX #10 (DISCHARGE)

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.

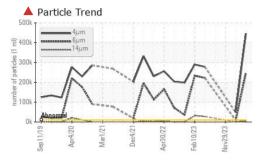
Fluid Condition

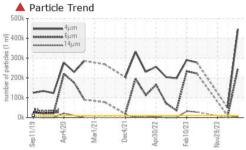
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

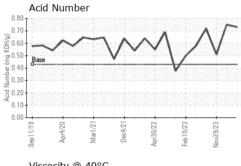
GAL)		вр2019 Ар	2020 Mar2021 Dec	2021 Apr2022 Feb2023 1	lov2023	
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0894856	WC0880593	WC0856023
Sample Date		Client Info		06 Mar 2024	10 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL
CONTAMINATION	J	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	6	8	7
Chromium	ppm	ASTM D5185m	>15	<1	<1	0
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	4	4	3
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	45	<1
Zinc	ppm	ASTM D5185m	1	0	0	0
Sulfur	ppm	ASTM D5185m	3114	3147	3134	2471
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	1	4
Sodium	ppm	ASTM D5185m		<1	0	1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	446547	<u>48218</u>	
Particles >6μm		ASTM D7647	>2500	4 249230	<u>▲</u> 8832	
Particles >14µm		ASTM D7647	>320	▲ 3158	275	
Particles >21µm		ASTM D7647	>80	<u> </u>	43	
Particles >38µm		ASTM D7647	>20	5	1	
Particles >71μm		ASTM D7647		2	0	
Oil Cleanliness		ISO 4406 (c)	>20/18/15	2 6/25/19	<u>\$\text{\Delta}\$ 23/20/15</u>	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.43	0.73	0.75	0.51

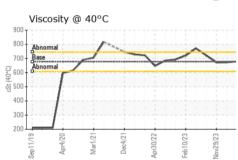


OIL ANALYSIS REPORT









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	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ HEAVY
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG

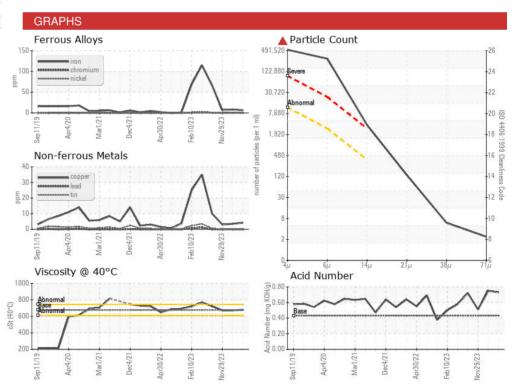
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	676.7	679	672	671

SAMPLE IMAGES	
---------------	--

Color

Bottom









Certificate L2367

Laboratory Sample No. Lab Number : 06124886 Unique Number: 10939037

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

: WC0894856

Received **Tested**

: 21 Mar 2024 Diagnosed

: 22 Mar 2024

: 22 Mar 2024 - Wes Davis

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

1101 NORTH MAIN ST AUSTIN, MN US 55912

Contact: RYAN LOWE rslowe@hormel.com T: (507)437-5674

Contact/Location: RYAN LOWE - HORAUS

F: (507)437-9805