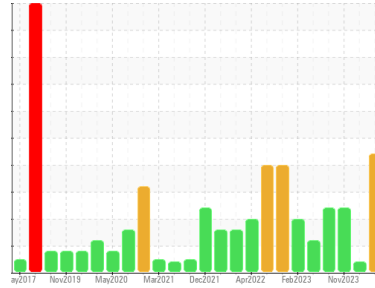




PROBLEM SUMMARY

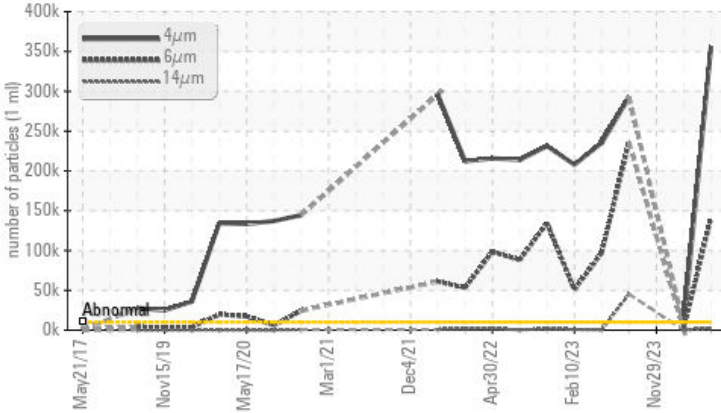
Area
WH-100
 Machine Id
B25970 - STORK COOKER GEARBOX #3 (1ST ON STERILE SECTION)
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX WG 680 (40 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ATTENTION	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 356008	7520	---
Particles >6µm	ASTM D7647	>2500	▲ 141037	958	---
Particles >14µm	ASTM D7647	>320	▲ 2148	39	---
Particles >21µm	ASTM D7647	>80	▲ 378	7	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 26/24/18	20/17/12	---

Customer Id: HORAUS
 Sample No.: WC0894849
 Lab Number: 06124885
 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 advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
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 Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
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

10 Jan 2024 Diag: Doug Bogart

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

view report



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. 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. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



25 Jul 2023 Diag: Don Baldrige

VISCOSITY



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 particulates present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

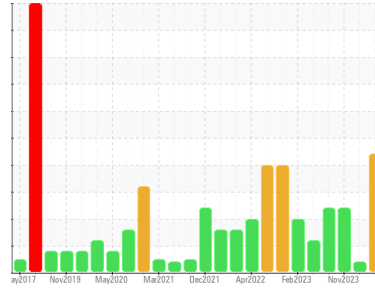
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
WH-100
 Machine Id
B25970 - STORK COOKER GEARBOX #3 (1ST ON STERILE SECTION)
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX WG 680 (40 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates (2 to 100 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0894849	WC0880587	WC0856024
Sample Date	Client Info		06 Mar 2024	10 Jan 2024	29 Nov 2023
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	ATTENTION	ABNORMAL

CONTAMINATION

	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	16	5
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	9	11	9
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	48	<1
Zinc	ppm	ASTM D5185m 1	0	0	12
Sulfur	ppm	ASTM D5185m 3114	3095	3054	2408

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	1	1	1
Sodium	ppm	ASTM D5185m	0	0	<1
Potassium	ppm	ASTM D5185m >20	0	<1	0

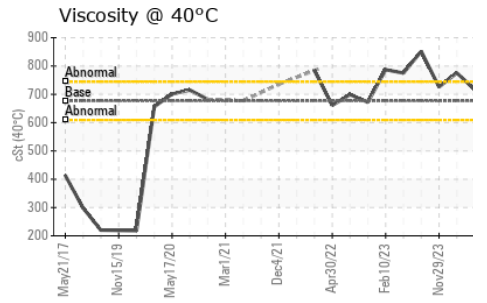
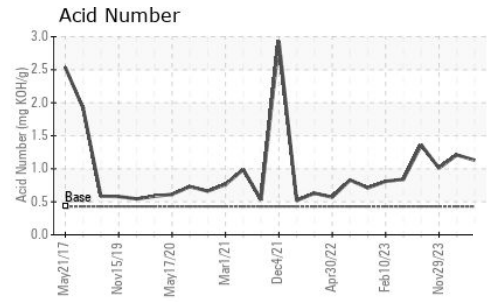
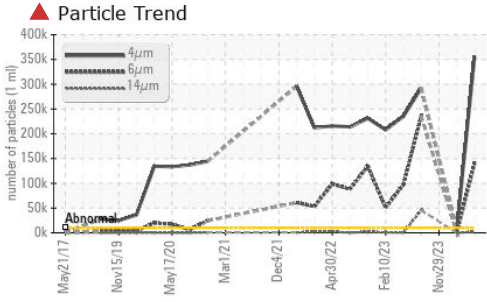
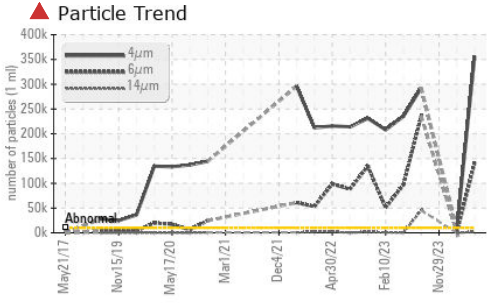
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 356008	7520	---
Particles >6µm	ASTM D7647	>2500	▲ 141037	958	---
Particles >14µm	ASTM D7647	>320	▲ 2148	39	---
Particles >21µm	ASTM D7647	>80	▲ 378	7	---
Particles >38µm	ASTM D7647	>20	11	1	---
Particles >71µm	ASTM D7647	>4	3	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 26/24/18	20/17/12	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.43	1.13	1.21	1.01

OIL ANALYSIS REPORT

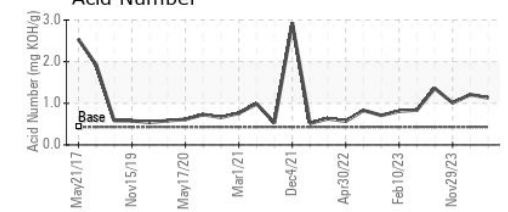
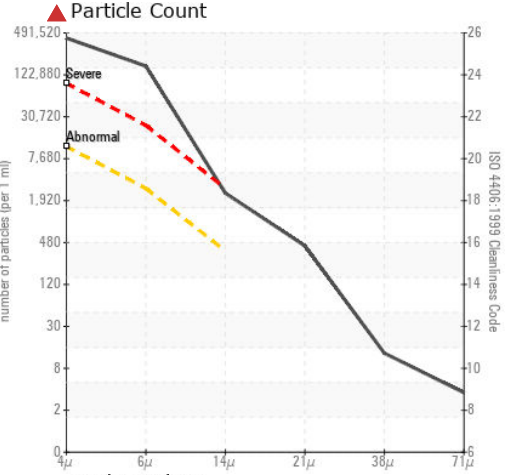
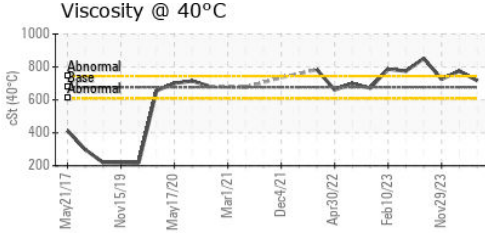
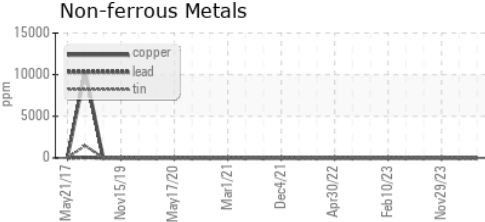
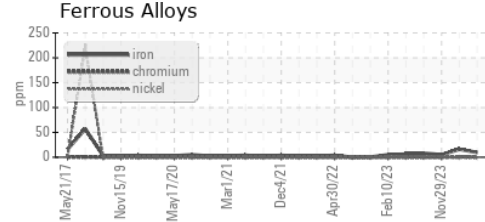


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	676.7	717	775.6	726

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0894849 **Received** : 21 Mar 2024
Lab Number : 06124885 **Tested** : 22 Mar 2024
Unique Number : 10939036 **Diagnosed** : 22 Mar 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: PrtCount)

HORMEL FOODS - AUSTIN
 1101 NORTH MAIN ST
 AUSTIN, MN
 US 55912
 Contact: RYAN LOWE
 rslowe@hormel.com
 T: (507)437-5674
 F: (507)437-9805

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)