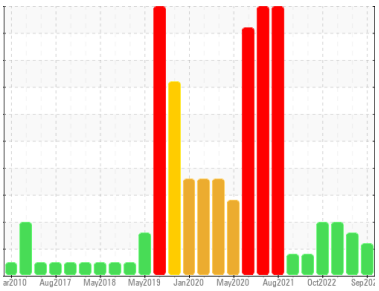
PROBLEM SUMMARY

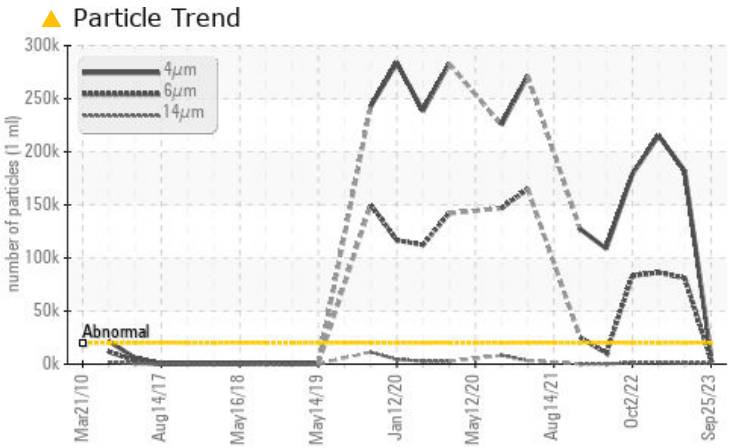
Sample Rating Trend



ISO

Machine Id
STORK TOPSIDE GEARBOX 4 (S/N 401 201 036-3-5)
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX EP 680 (15 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Particles >14µm		ASTM D7647	>640	▲ **749**	▲ 961	▲ 1764
Particles >21µm		ASTM D7647	>160	▲ **252**	209	▲ 279
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **20/19/17**	▲ 25/24/17	▲ 25/24/18

Customer Id: HORBEL
Sample No.: WC0826196
Lab Number: 05966259
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

25 Nov 2022 Diag: Angela Borella

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 particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

18 Oct 2022 Diag: Jonathan Hester

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 particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

02 Oct 2022 Diag: Don Baldridge

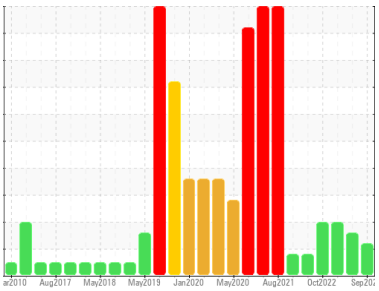
ISO

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 particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
STORK TOPSIDE GEARBOX 4 (S/N 401 201 036-3-5)
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX EP 680 (15 LTR)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0826196**	WC0734753	WC0735963
Sample Date		Client Info		**25 Sep 2023**	25 Nov 2022	18 Oct 2022
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				**ATTENTION**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**4**	<1	9
Chromium	ppm	ASTM D5185m	>15	**0**	0	0
Nickel	ppm	ASTM D5185m	>15	**<1**	2	<1
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>25	**0**	0	<1
Lead	ppm	ASTM D5185m	>100	**0**	1	0
Copper	ppm	ASTM D5185m	>200	**7**	156	9
Tin	ppm	ASTM D5185m	>25	**0**	12	0
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	**0**	0	0
Barium	ppm	ASTM D5185m	0	**0**	3	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	<1
Manganese	ppm	ASTM D5185m	0	**0**	0	1
Magnesium	ppm	ASTM D5185m	0	**0**	0	2
Calcium	ppm	ASTM D5185m	6	**0**	3	0
Phosphorus	ppm	ASTM D5185m	250	**2**	276	13
Zinc	ppm	ASTM D5185m	2	**15**	2	0
Sulfur	ppm	ASTM D5185m	9410	**2650**	4254	2316

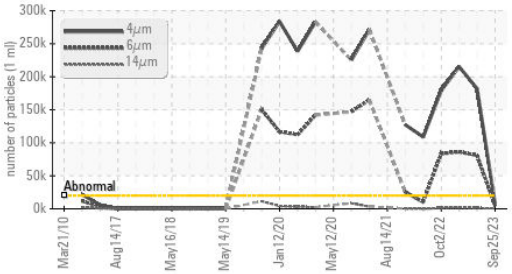
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**2**	<1	2
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**8075**	▲ 181814	▲ 215214
Particles >6µm		ASTM D7647	>5000	**4399**	▲ 80979	▲ 86312
Particles >14µm		ASTM D7647	>640	▲ **749**	▲ 961	▲ 1764
Particles >21µm		ASTM D7647	>160	▲ **252**	209	▲ 279
Particles >38µm		ASTM D7647	>40	**39**	32	18
Particles >71µm		ASTM D7647	>10	**4**	3	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **20/19/17**	▲ 25/24/17	▲ 25/24/18

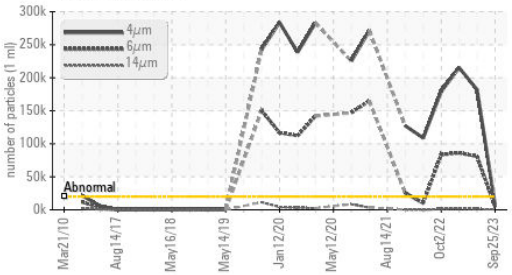
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.59	**1.69**	0.76	0.76

OIL ANALYSIS REPORT

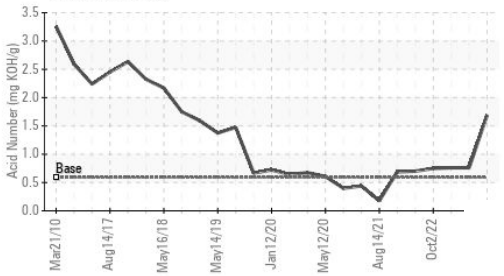
Particle Trend



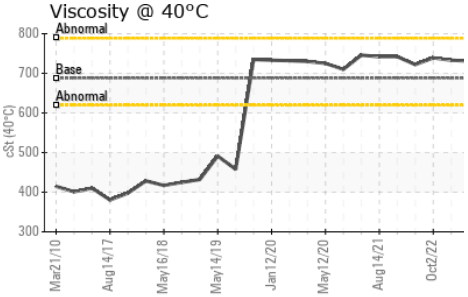
Particle Trend



Acid Number

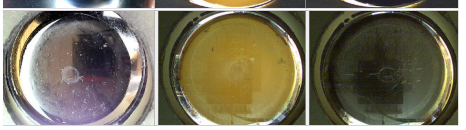


Viscosity @ 40°C



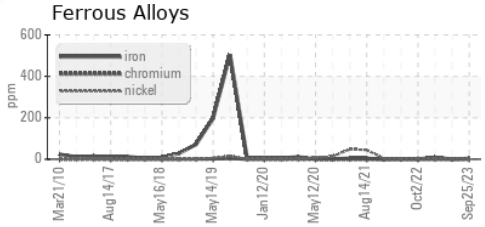
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	LIGHT
Sand/Dirt	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**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	688	**772**	731	733

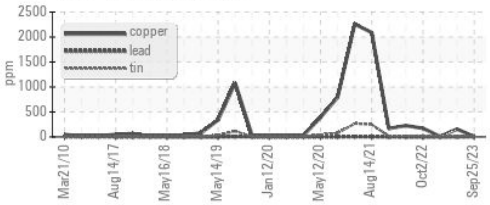
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

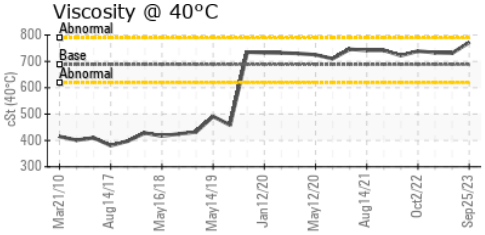
Ferrous Alloys



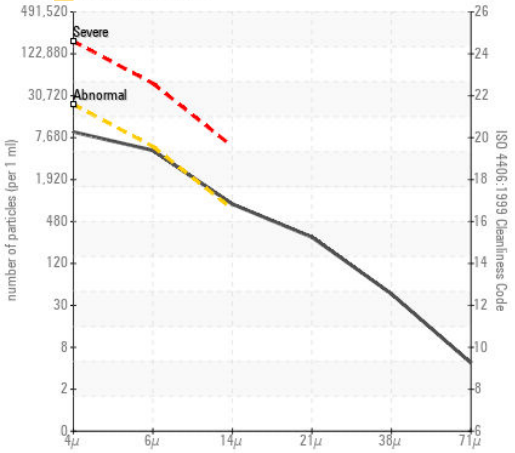
Non-ferrous Metals



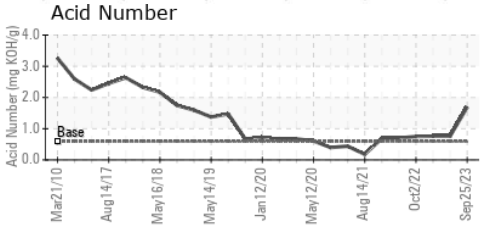
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0826196 **Received** : 02 Oct 2023
Lab Number : 05966259 **Diagnosed** : 08 Oct 2023
Unique Number : 10672810 **Diagnostician** : Doug Bogart
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-BELOIT
3000 KENNEDY DRIVE
BELOIT, WI
US 53511
Contact: Craig Bennett
cabennett@hormel.com
T:
F: (608)365-8322