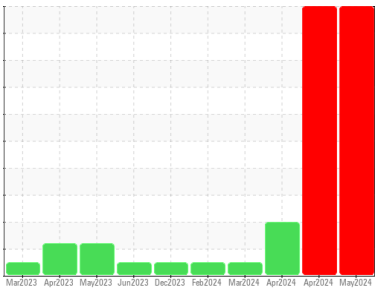
PROBLEM SUMMARY

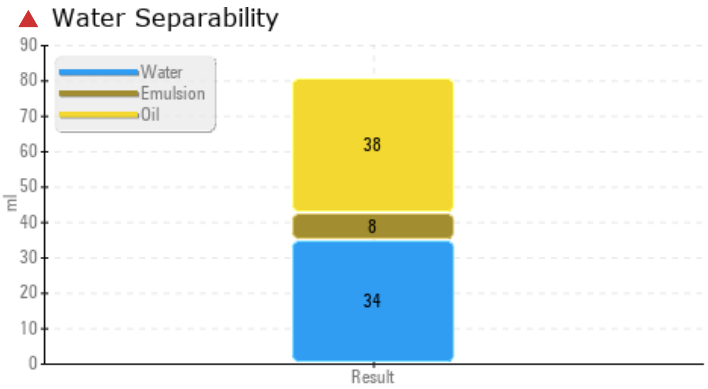
Sample Rating Trend



CONTAMINANT

Machine Id
GE Unit # 4 Governor Sump
Component
Governor System
Fluid
PETRO CANADA TURBOFLO R&O 68 (1000 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Recommend Varnish Potential testing (MPC). Air Release, Foam Tendency, and Water Separability tests and evaluation performed at WearCheck Canada.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	ATTENTION
Separability	oil/h2o/em	*ASTM D1401	41/39/0	▲ **38/34/8 (30)**	▲ 25/19/36 (30)	36/32/12 (30)

Customer Id: USAHEN
Sample No.: KFS0005997
Lab Number: 06207764
Test Package: PLANT

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

CONTAMINANT

30 Apr 2024 Diag: Doug Bogart
This is a baseline read-out on the submitted sample. All tests and evaluation performed at WearCheck Canada.{not applicable} Separability (Emulsion) % is severely high. Separability (Oil) % is severely low. Separability (Water) % is severely low. Separability % is severely low. Air Release Time % is abnormal.

view report

ISO

04 Apr 2024 Diag: Doug Bogart
Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates.All component wear rates are normal. There is a moderate 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

NORMAL

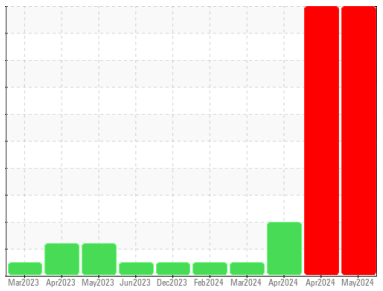
12 Mar 2024 Diag: Doug Bogart
Resample at the next service interval to monitor.All tests and evaluation performed at performed at WearCheck Canada. Please note that this is a corrected copy.All component wear rates are normal. Insufficient sample was received to conduct all the routine laboratory tests. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

KIMBRO FLUID SOLUTIONS

OIL ANALYSIS REPORT

Sample Rating Trend



CONTAMINANT

Machine Id
GE Unit # 4 Governor Sump
Component
Governor System
Fluid
PETRO CANADA TURBOFLO R&O 68 (1000 GAL)

DIAGNOSIS

Recommendation
Recommend Varnish Potential testing (MPC). Air Release, Foam Tendency, and Water Separability tests and evaluation performed at WearCheck Canada.

Contamination
Separability (Emulsion) % is severely high. Separability (Water) % is severely low. Separability (Oil) % is marginally low.

Fluid Condition
Separability % is severely low.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0005997**	KFS0005998	KFS0005996
Sample Date		Client Info		**31 May 2024**	30 Apr 2024	04 Apr 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	N/A	Filtered
Sample Status				**SEVERE**	SEVERE	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**<1**	0	0
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>3	**0**	0	0
Lead	ppm	ASTM D5185m	>75	**2**	0	0
Copper	ppm	ASTM D5185m	>15	**<1**	<1	0
Tin	ppm	ASTM D5185m	>55	**<1**	0	0
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Beryllium	ppm	ASTM D5185m		**---**	---	---
Cadmium	ppm	ASTM D5185m		**0**	0	0

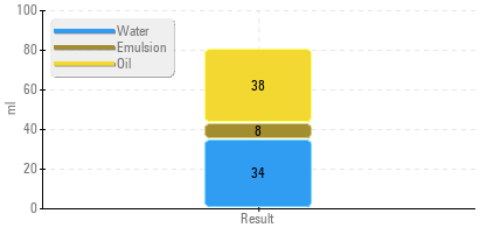
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m		**<1**	1	<1
Calcium	ppm	ASTM D5185m	0	**0**	5	40
Phosphorus	ppm	ASTM D5185m	4	**5**	15	17
Zinc	ppm	ASTM D5185m	0	**0**	5	5
Sulfur	ppm	ASTM D5185m		**137**	229	232
Lithium	ppm	ASTM D5185m		**---**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>8	**4**	3	5
Sodium	ppm	ASTM D5185m		**0**	<1	0
Potassium	ppm	ASTM D5185m	>20	**<1**	0	0

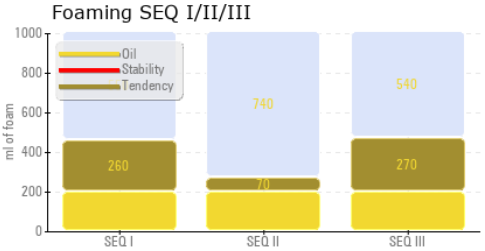
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	**361**	156	1420
Particles >6µm		ASTM D7647	>320	**84**	54	438
Particles >14µm		ASTM D7647	>40	**4**	9	48
Particles >21µm		ASTM D7647	>10	**1**	3	18
Particles >38µm		ASTM D7647	>3	**0**	0	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>17/15/12	**16/14/9**	14/13/10	18/16/13

OIL ANALYSIS REPORT

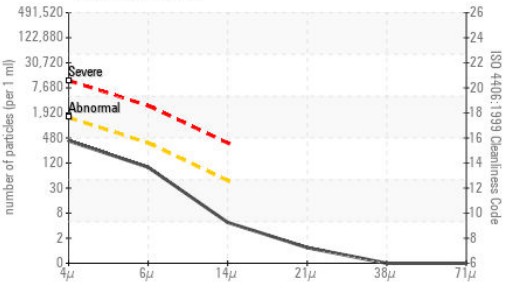
Water Separability



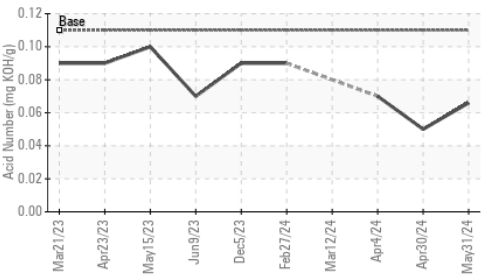
Foaming SEQ I/II/III



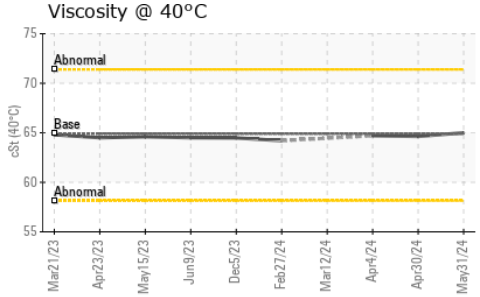
Particle Count



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.11	**0.066**	0.05	0.07

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	NONE
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	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.9	**65.0**	64.63	64.7
Separability	oil/h2o/em	*ASTM D1401	41/39/0	▲ **38/34/8 (30)**	▲ 25/19/36 (30)	36/32/12 (30)
Air Release Time	min	*ASTM D3427	8	**9.90**	▲ 11.2	10.8
Foam Tendency	I/II/III	*ASTM D892	10	**260/70/270**	10/70/10	5/30/5
Foam Stability	I/II/III	*ASTM D892	0	**0/0/0**	0/0/0	0/0/0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0005997
Lab Number : 06207764
Unique Number : 11075225
Test Package : PLANT (Additional Tests: AirRelease, Foaming, H2OSeparability, PrtCount)

Received : 12 Jun 2024
Tested : 13 Jun 2024
Diagnosed : 01 Jul 2024 - Doug Bogart

US ARMY CORPS OF ENGINEERS - OLD HICKORY
10 POWER PLANT RD
HENDERSONVILLE, TN
US 37075
Contact: Service Manager
T:
F:

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)

Report Id: USAHEN [WUSCAR] 06207764 (Generated: 07/01/2024 16:47:31) Rev: 1

Submitted By: JERRY BAILEY