

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

**NORMAL** 



# GE Unit # 4 Governor Sump

Component

**Governor System** 

PETRO CANADA TURBOFLO 68 (1000 GAL)

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#### Recommendation

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.

#### Wear

All component wear rates are normal.

#### Contamination

Insufficient sample was received to conduct all the routine laboratory tests. There is no indication of any contamination in the oil.

### **Fluid Condition**

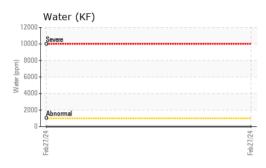
The condition of the oil is acceptable for the time in service.

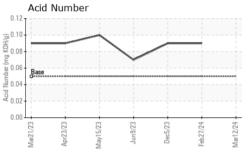
L)		Mar2023	Apr2023 May2023	Jun2023 Dec2023 Feb2024	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0005995	KFS0005994	KFS0004182
Sample Date		Client Info		12 Mar 2024	27 Feb 2024	05 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Filtered	Filtered	Filtered
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	<1	0
Lead	ppm	ASTM D5185m	>75	0	<1	0
Copper	ppm	ASTM D5185m	>15	<1	<1	<1
Tin	ppm	ASTM D5185m	>55	0	<1	0
Antimony	ppm	ASTM D5185m	>5	0	0	
Vanadium	ppm	ASTM D5185m		0	0	<1
Beryllium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0	0
Magnesium	ppm	ASTM D5185m	0	<1	<1	<1
Calcium	ppm	ASTM D5185m	0	1	<1	<1
Phosphorus	ppm	ASTM D5185m	120	11	9	9
Zinc	ppm	ASTM D5185m	0.0	5	4	4
Sulfur	ppm	ASTM D5185m	50	168	173	166
Lithium	ppm	ASTM D5185m		<1	<1	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>8	4	5	<1
Sodium	ppm	ASTM D5185m		1	0	<1
Potassium	ppm	ASTM D5185m	>20	9	<1	0
Water	%	ASTM D6304	>0.1	NEG	NEG	NEG
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300		2847	141
Particles >6µm		ASTM D7647			1104	74
Particles >14µm		ASTM D7647	>40		116	14
Particles >21µm		ASTM D7647			30	4
Particles >38µm		ASTM D7647	>3		3	1
Particles >71µm		ASTM D7647			1	0
Oil Cleanliness		ISO 4406 (c)	>17/15/12		19/17/14	14/13/11
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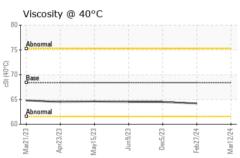


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FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05		0.09	0.09
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	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
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FILLID DDODEDI			12 24 //			
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 40°C	rIES cSt	method ASTM D445	68.4	current 	history1 64.2	history2 64.48
			68.4	 41/39/0 (30)		
Visc @ 40°C	cSt	ASTM D445	68.4		64.2	64.48
Visc @ 40°C Separability	cSt oil/h2o/em	ASTM D445 *ASTM D1401	68.4	 41/39/0 (30)	64.2 41/39/0 (25)	64.48
Visc @ 40°C Separability Air Release Time	cSt oil/h2o/em min	ASTM D445 *ASTM D1401 *ASTM D3427	68.4	 41/39/0 (30) 10.4	64.2 41/39/0 (25) 11.3	64.48
Visc @ 40°C Separability Air Release Time Foam Tendency	cSt oil/h2o/em min I/II/III I/II/III	ASTM D445 *ASTM D1401 *ASTM D3427 *ASTM D892	68.4	 41/39/0 (30) 10.4 5/0/5	64.2 41/39/0 (25) 11.3 10/50/10	64.48  
Visc @ 40°C Separability Air Release Time Foam Tendency Foam Stability	cSt oil/h2o/em min I/II/III I/II/III	ASTM D445 *ASTM D1401 *ASTM D3427 *ASTM D892 *ASTM D892	68.4 // 0 0	41/39/0 (30) 10.4 5/0/5 0/0/0	64.2 41/39/0 (25) 11.3 10/50/10 0/0/0	64.48   





Laboratory Sample No.

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

Lab Number : 06124492 Unique Number : 10938643

: KFS0005995

Received **Tested** Diagnosed

: 21 Mar 2024 : 29 Mar 2024

: 29 Mar 2024 - Doug Bogart

US ARMY CORPS OF ENGINEERS - OLD HICKORY 10 POWER PLANT RD HENDERSONVILLE, TN

US 37075 Test Package : PLANT ( Additional Tests: AirRelease, Foaming, H2OSeparability, KF, PrtCoQontact: Service Manager

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)

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