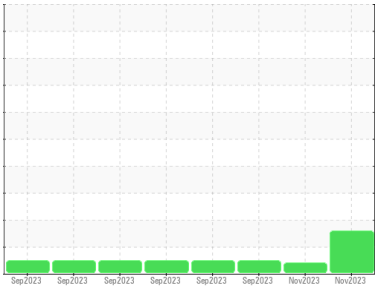
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Sample Rating Trend



ISO

Machine Id
GE HSK 4
Component
Gas Turbine
Fluid
AMSOIL SYN TURB ISO VG 32 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil. The water content is negligible.

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		**PCA0099974**	PCA0108266	PCA0099970
Sample Date		Client Info		**28 Nov 2023**	10 Nov 2023	17 Sep 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				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	**0**	0	<1
Chromium	ppm	ASTM D5185m	>4	**0**	0	<1
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**0**	1	0
Lead	ppm	ASTM D5185m		**0**	0	<1
Copper	ppm	ASTM D5185m	>5	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>5	**0**	0	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	6	0
Molybdenum	ppm	ASTM D5185m		**0**	0	<1
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	0	0
Calcium	ppm	ASTM D5185m		**3**	3	<1
Phosphorus	ppm	ASTM D5185m		**17**	42	23
Zinc	ppm	ASTM D5185m		**0**	0	0
Sulfur	ppm	ASTM D5185m		**651**	750	669

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**0**	0	<1
Sodium	ppm	ASTM D5185m		**<1**	0	<1
Potassium	ppm	ASTM D5185m	>20	**0**	<1	2
Water	%	ASTM D6304	>0.03	**0.009**	0.001	0.001
ppm Water	ppm	ASTM D6304	>300	**95**	12.6	3.3

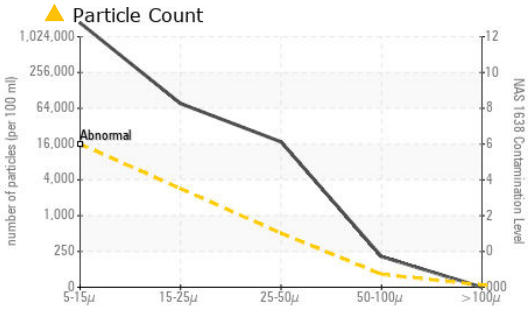
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles 5-15µm	count	*NAS 1638	>16000	▲ **1746398**	▲ 42115	11307
Particles 15-25µm	count	*NAS 1638	>2850	▲ **76840**	1220	693
Particles 25-50µm	count	*NAS 1638	>506	▲ **17422**	286	433
Particles 50-100µm	count	*NAS 1638	>90	▲ **205**	0	42
Particles >100µm	count	*NAS 1638	>16	**0**	0	10
NAS 1638	Class	*NAS 1638	>6	**>12**	8	6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.111**	0.055	0.09

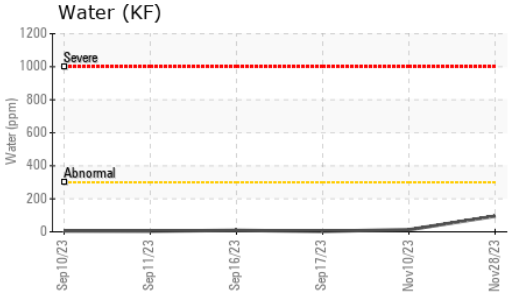
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

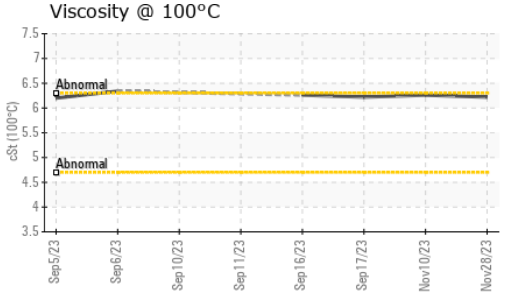
Particle Count



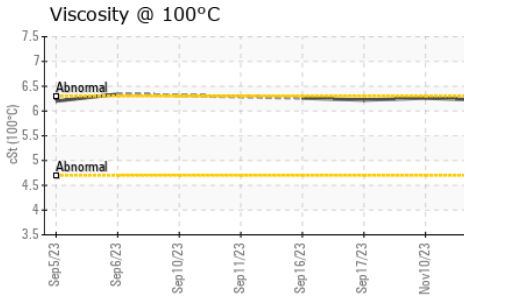
Water (KF)



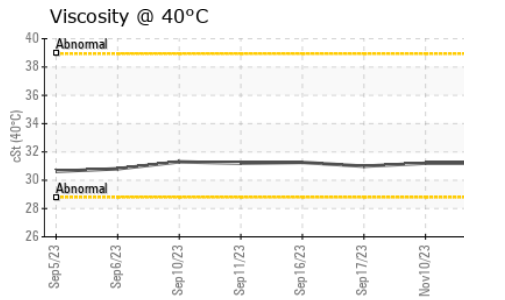
Viscosity @ 100°C



Viscosity @ 100°C



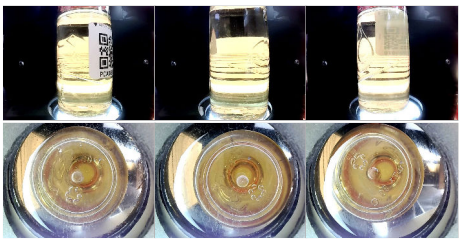
Viscosity @ 40°C



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	>0.03	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

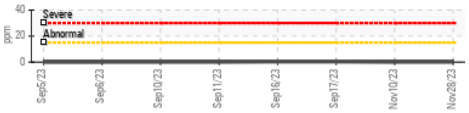
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**31.2**	31.2	30.99
Visc @ 100°C	cSt	ASTM D445		**6.22**	6.26	6.22
Viscosity Index (VI)	Scale	ASTM D2270		**153**	155	155

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

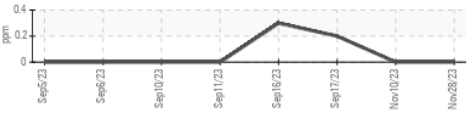


GRAPHS

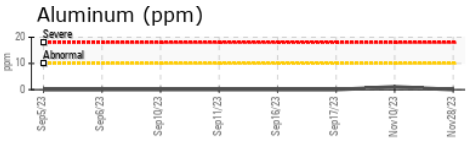
Iron (ppm)



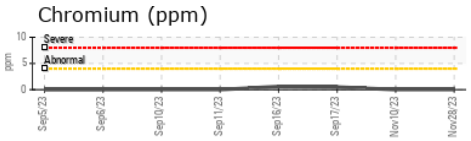
Lead (ppm)



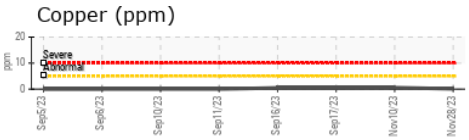
Aluminum (ppm)



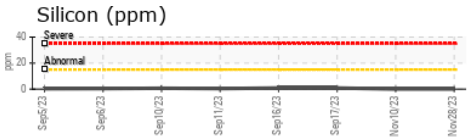
Chromium (ppm)



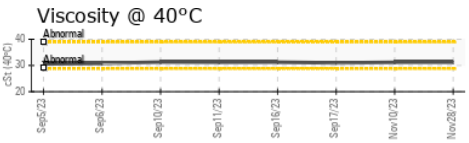
Copper (ppm)



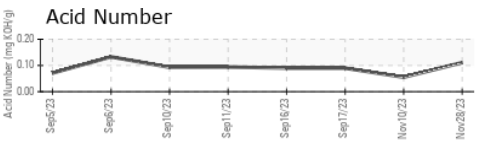
Silicon (ppm)



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0099974 **Received** : 06 Dec 2023
Lab Number : 06026368 **Diagnosed** : 07 Dec 2023
Unique Number : 10776159 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCountNAS, VI)

Certificate L2367

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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