OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Machine Id
BELL B30E B93A631EC03010095
Component
Transmission
Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
Gear wear is indicated.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the fluid.

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**BE0009666**	---	---
Sample Date		Client Info		**23 May 2024**	---	---
Machine Age	hrs	Client Info		**2025**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**ABNORMAL**	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**29**	---	---
Iron	ppm	ASTM D5185m	>200	▲ **202**	---	---
Chromium	ppm	ASTM D5185m	>10	**2**	---	---
Nickel	ppm	ASTM D5185m		**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>50	**13**	---	---
Lead	ppm	ASTM D5185m	>50	**6**	---	---
Copper	ppm	ASTM D5185m	>200	**7**	---	---
Tin	ppm	ASTM D5185m	>10	**1**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

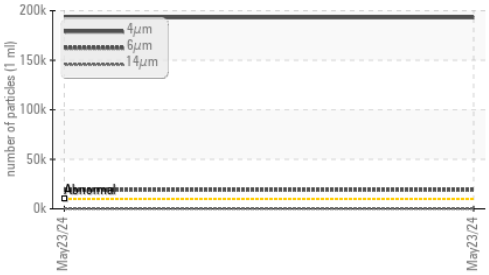
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**157**	---	---
Barium	ppm	ASTM D5185m		**<1**	---	---
Molybdenum	ppm	ASTM D5185m		**<1**	---	---
Manganese	ppm	ASTM D5185m		**3**	---	---
Magnesium	ppm	ASTM D5185m		**3**	---	---
Calcium	ppm	ASTM D5185m		**163**	---	---
Phosphorus	ppm	ASTM D5185m		**408**	---	---
Zinc	ppm	ASTM D5185m		**11**	---	---
Sulfur	ppm	ASTM D5185m		**2896**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**15**	---	---
Sodium	ppm	ASTM D5185m		**11**	---	---
Potassium	ppm	ASTM D5185m	>20	**9**	---	---

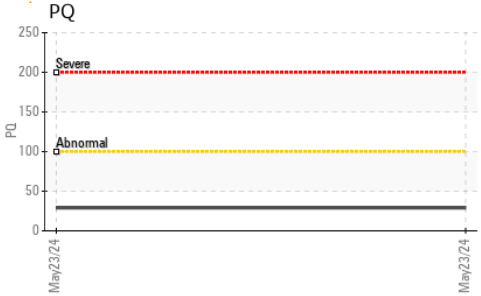
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ **193105**	---	---
Particles >6µm	ASTM D7647	>2500	▲ **19194**	---	---
Particles >14µm	ASTM D7647	>320	**257**	---	---
Particles >21µm	ASTM D7647	>80	**66**	---	---
Particles >38µm	ASTM D7647	>20	**4**	---	---
Particles >71µm	ASTM D7647	>4	**0**	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ **25/21/15**	---	---

OIL ANALYSIS REPORT

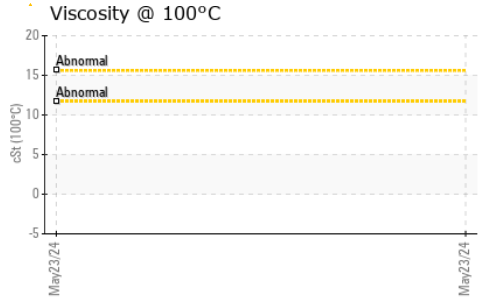
Particle Trend



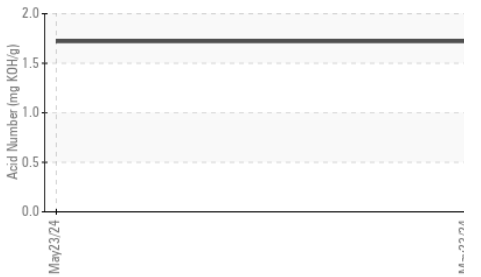
PQ



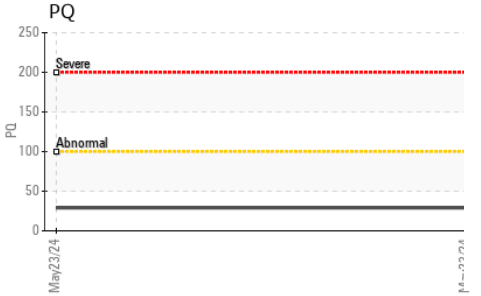
Viscosity @ 100°C



Acid Number



PQ



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.72**	---	---

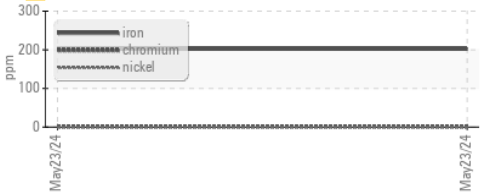
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**31.7**	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

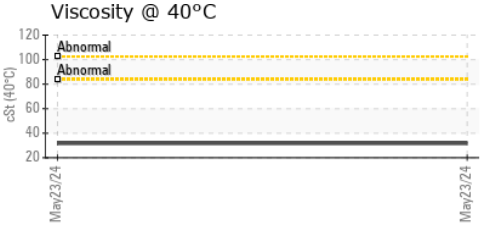
GRAPHS

Ferrous Alloys

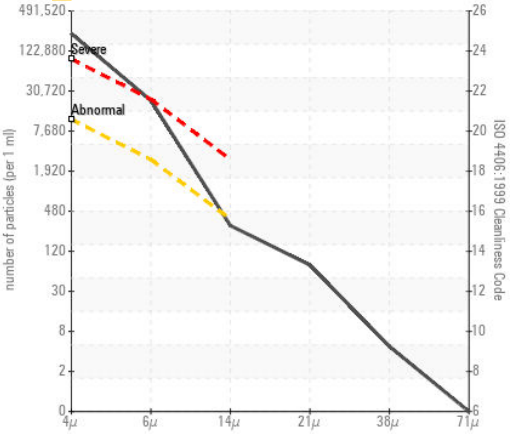


Non-ferrous Metals

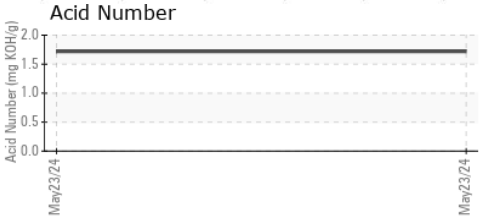
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : BE0009666
Lab Number : 06196550
Unique Number : 11058673
Test Package : MOBCE

Received : 31 May 2024
Tested : 04 Jun 2024
Diagnosed : 04 Jun 2024 - Jonathan Hester

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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