



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
NORMAL
ATTENTION



Area
[276792]
Machine Id
BELL B50E B93A650EH03007613
Component
Rear Differential
Fluid
GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		BE0003142	---	---
Sample Date		Client Info		09 Jul 2024	---	---
Machine Age	hrs	Client Info		4196	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				SEVERE	---	---

WEAR

The lead level is severe. All other component wear rates are normal.

PQ		ASTM D8184	>3000	40	---	---
Iron	ppm	ASTM D5185m	>HR:1=	82	---	---
Chromium	ppm	ASTM D5185m	>10	1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>25	▲ 211	---	---
Copper	ppm	ASTM D5185m	>100	28	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

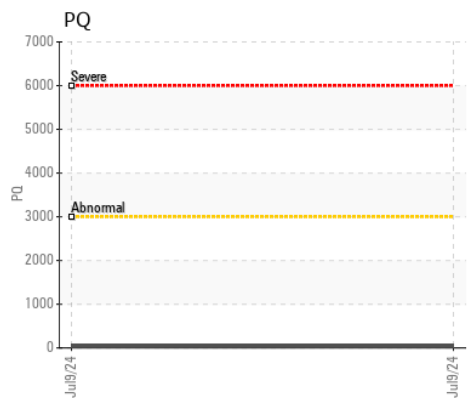
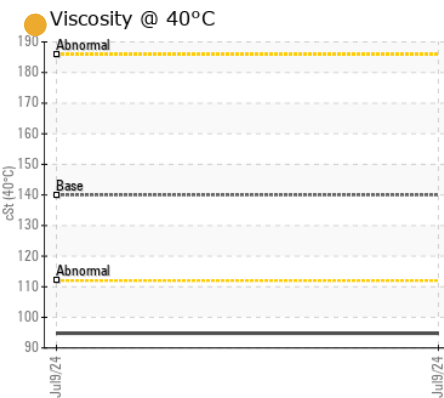
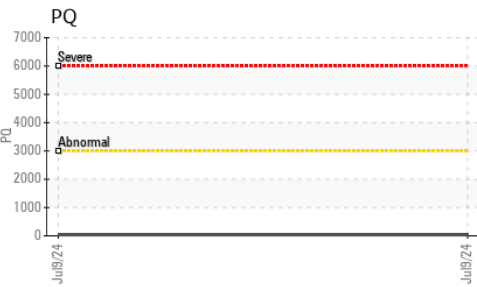
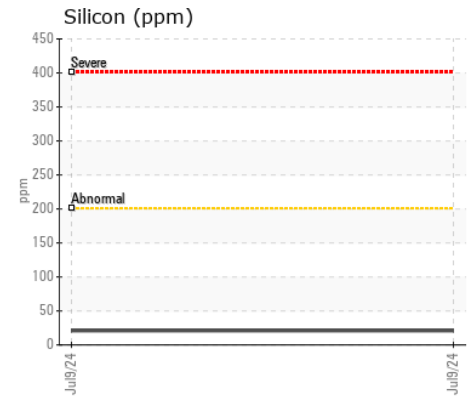
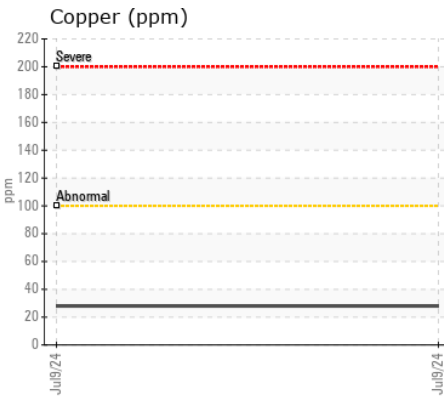
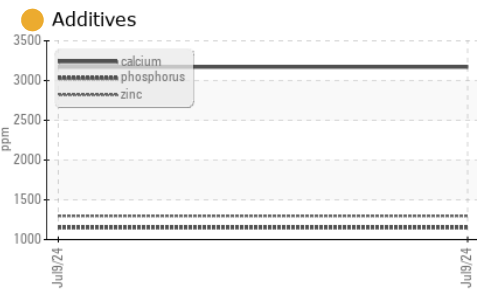
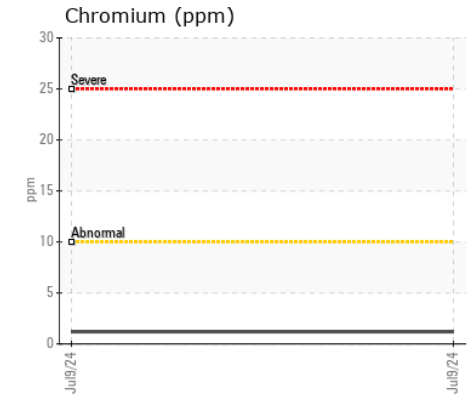
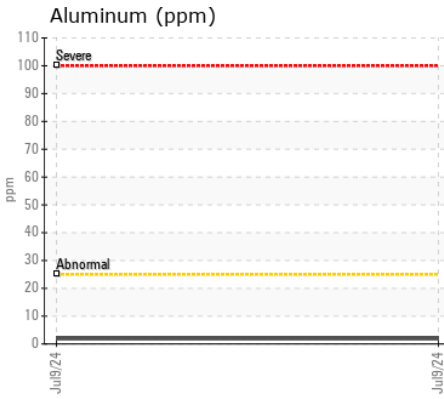
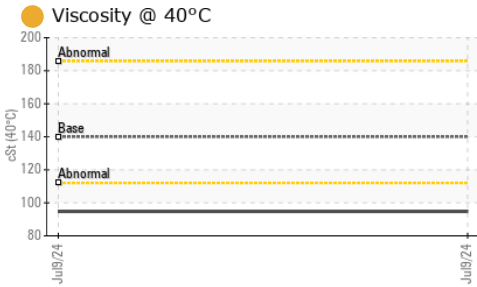
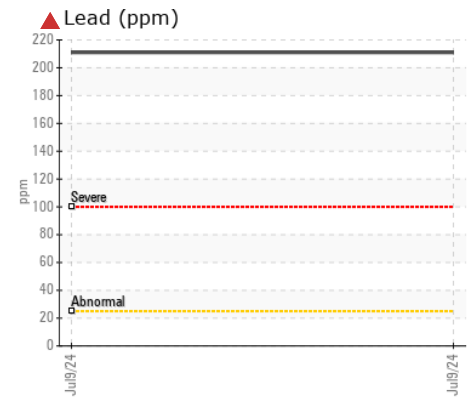
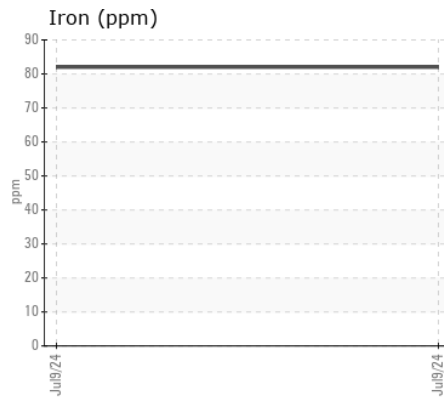
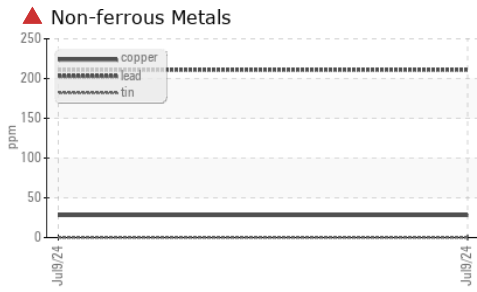
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>201	21	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>1.01	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>1.01	NEG	---	---

FLUID CONDITION

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		12	---	---
Boron	ppm	ASTM D5185m	150	89	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		3	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m	10	10	---	---
Calcium	ppm	ASTM D5185m	70	● 3170	---	---
Phosphorus	ppm	ASTM D5185m	2000	1151	---	---
Zinc	ppm	ASTM D5185m	50	● 1297	---	---
Sulfur	ppm	ASTM D5185m	20000	● 7391	---	---
Visc @ 40°C	cSt	ASTM D445	140	● 94.8	---	---



Certificate L2367

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

Sample No. : BE0003142

Lab Number : 06236462

Unique Number : 11125296

Test Package : MOBCE

Received : 15 Jul 2024

Tested : 16 Jul 2024

Diagnosed : 17 Jul 2024 - Sean Felton

Four Seasons Equipment Inc.

8111 Mills Road

Houston, TX

US 77064

Contact: Vaughan Phillips
vphillips@fourseasons-equip.com

T: (800)234-5007

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)