



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
BELL B40E B93A640EA03007599
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		BE0001010	BE0000999	BE0000995
Sample Date		Client Info		08 Feb 2024	25 Sep 2023	10 Jul 2023
Machine Age	hrs	Client Info		4505	4001	3503
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>79	19	12	12
Iron	ppm	ASTM D5185m	>100	20	10	20
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	3	4
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	9	8	9
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

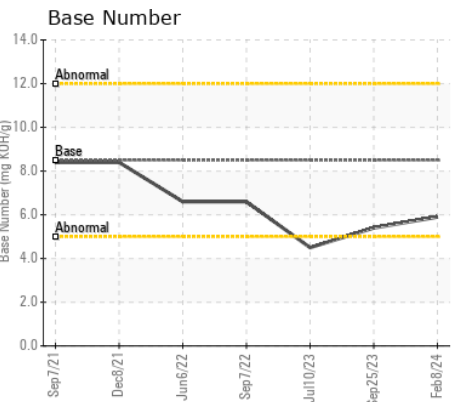
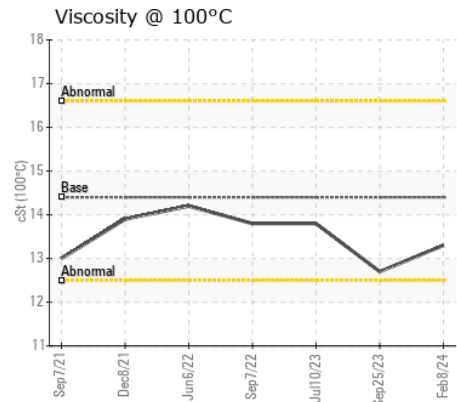
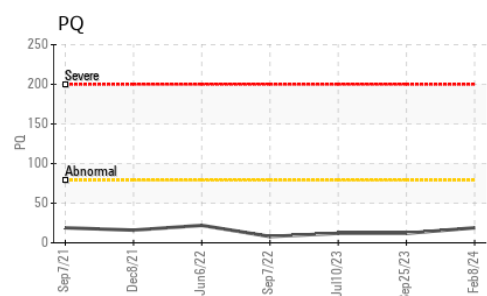
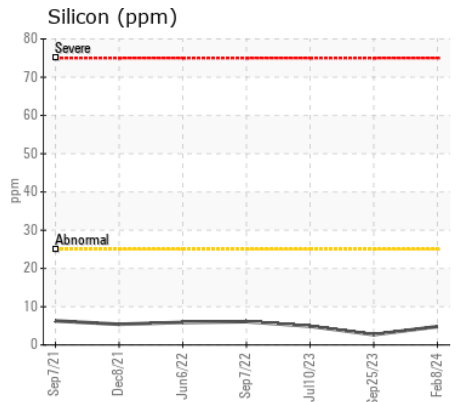
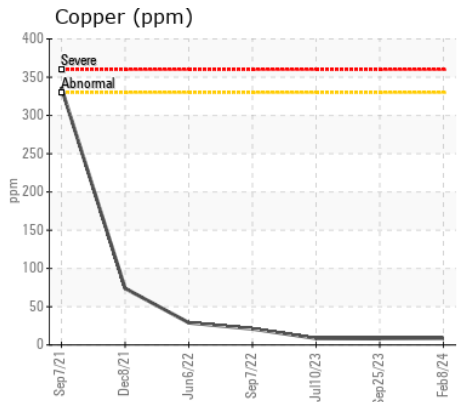
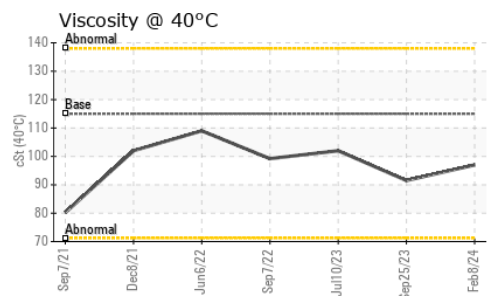
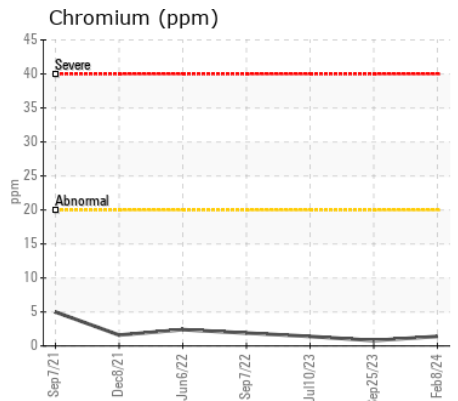
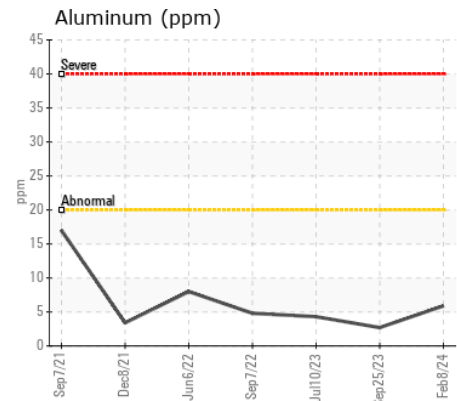
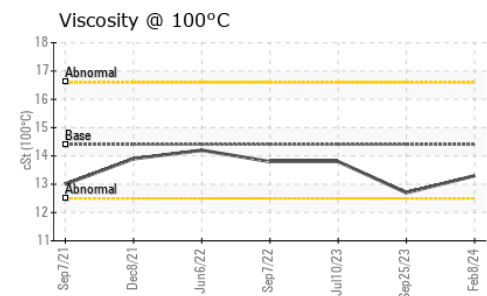
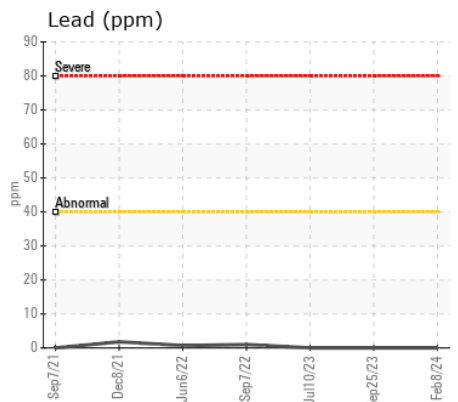
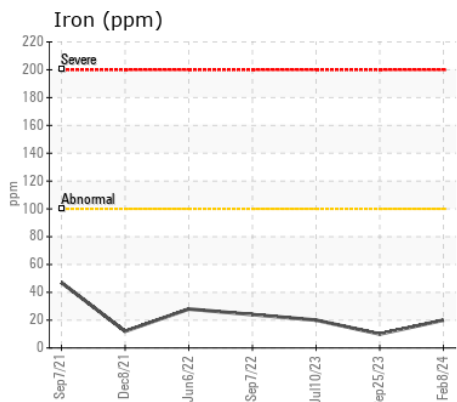
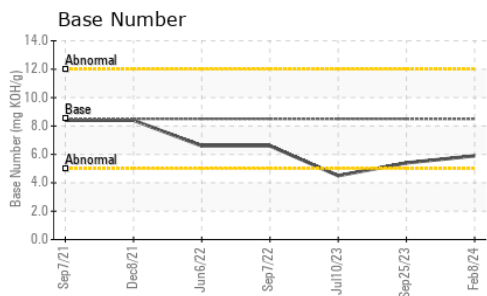
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	3	5
Potassium	ppm	ASTM D5185m	>20	14	2	6
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.3	1.1	1
Nitration	Abs/cm	*ASTM D7624	>20	9.3	7.6	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.8	19.5	24.4
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	0	<1	0
Boron	ppm	ASTM D5185m	250	<1	<1	1
Barium	ppm	ASTM D5185m	10	0	<1	0
Molybdenum	ppm	ASTM D5185m	100	63	49	61
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	380	342	371
Calcium	ppm	ASTM D5185m	3000	1608	1461	1741
Phosphorus	ppm	ASTM D5185m	1150	885	923	975
Zinc	ppm	ASTM D5185m	1350	1214	1133	1204
Sulfur	ppm	ASTM D5185m	4250	2728	2672	2616
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	13.4	20.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.9	5.4	4.5
Visc @ 40°C	cSt	ASTM D445	115	97.0	91.5	102
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	12.7	13.8
Viscosity Index (VI)	Scale	ASTM D2270	126	136	135	136



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : BE0001010 **Received** : 13 Feb 2024
Lab Number : 06087131 **Tested** : 14 Feb 2024
Unique Number : 10874576 **Diagnosed** : 14 Feb 2024 - Don Baldrige
Test Package : MOBCE

Four Seasons Equipment Inc.
 8111 Mills Road
 Houston, TX
 US 77064
 Contact: Vaughan Phillips
 vphillips@fourseasons-equip.com
 T: (800)234-5007
 F:

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)