



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
BELL B50E B93A650EK03408215
Component
Diesel Engine
Fluid
SHELL ROTELLA T3 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		BE0020394	BE0020392	---
Sample Date		Client Info		16 Feb 2024	18 Jul 2023	---
Machine Age	hrs	Client Info		1486	438	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>79	15	---	---
Iron	ppm	ASTM D5185m	>100	27	21	---
Chromium	ppm	ASTM D5185m	>20	4	1	---
Nickel	ppm	ASTM D5185m	>4	1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	10	6	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	31	▲ 401	---
Tin	ppm	ASTM D5185m	>15	2	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

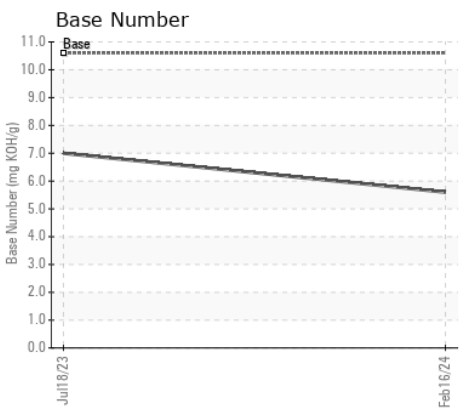
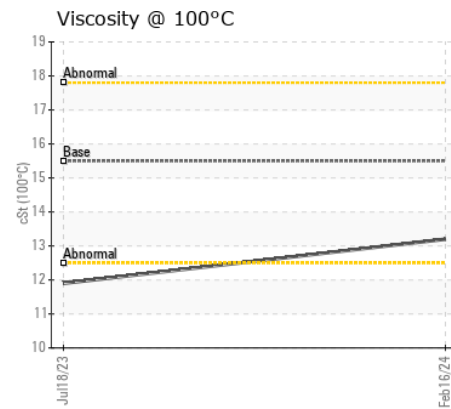
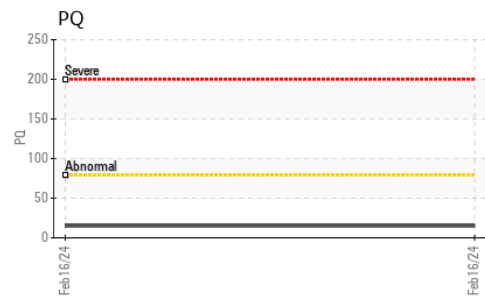
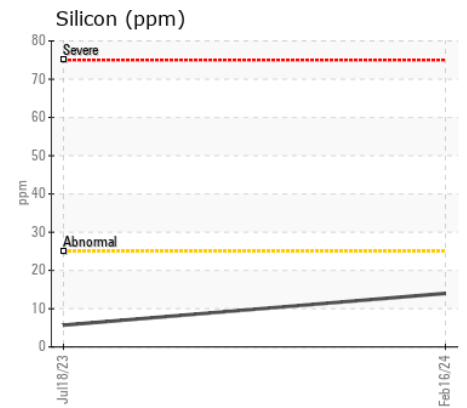
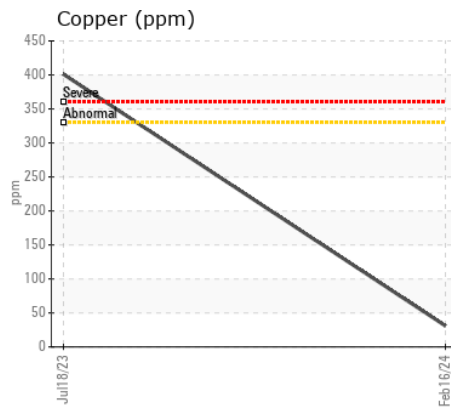
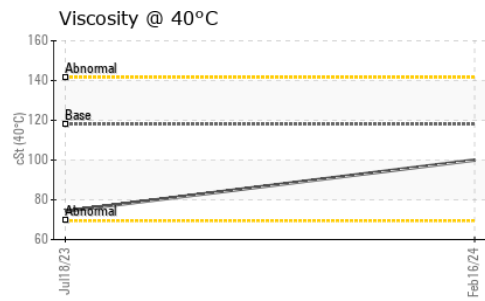
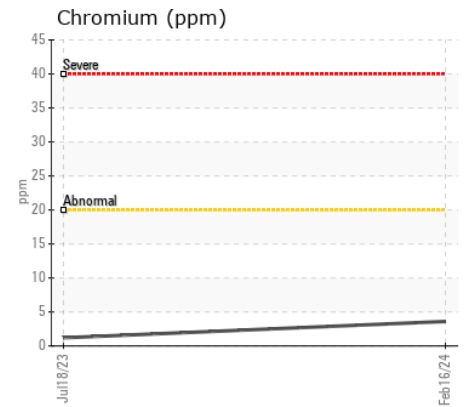
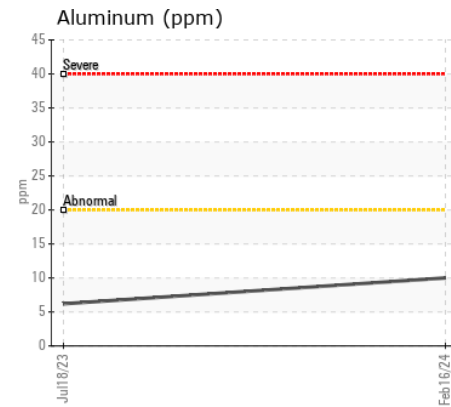
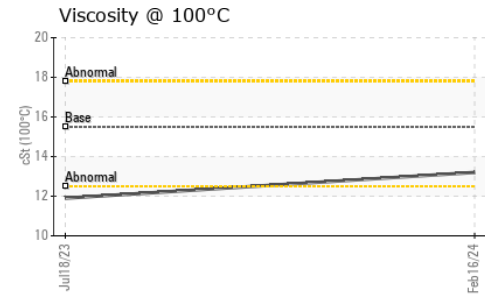
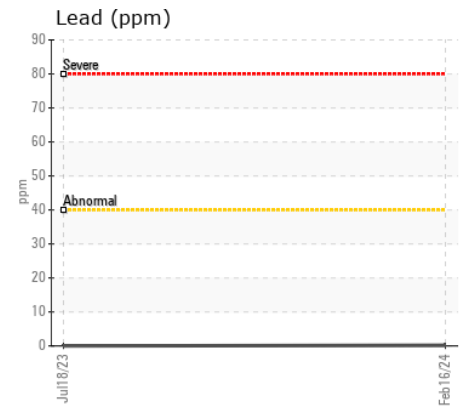
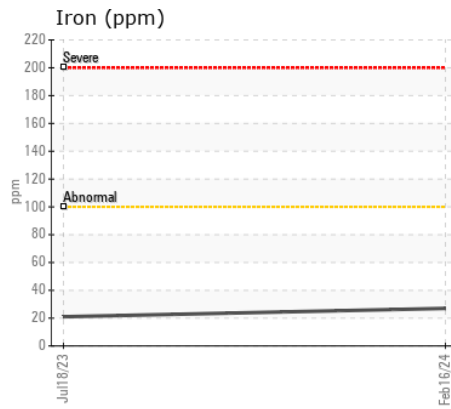
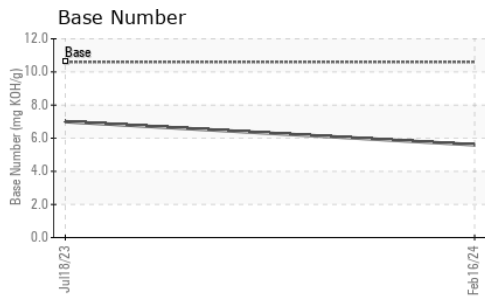
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	14	6	---
Potassium	ppm	ASTM D5185m	>20	29	12	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.5	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	20.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		3	<1	---
Boron	ppm	ASTM D5185m	10	42	70	---
Barium	ppm	ASTM D5185m	0	1	0	---
Molybdenum	ppm	ASTM D5185m	10	33	12	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m	10	332	665	---
Calcium	ppm	ASTM D5185m	2600	3088	1566	---
Phosphorus	ppm	ASTM D5185m	1050	1371	740	---
Zinc	ppm	ASTM D5185m	1250	1797	869	---
Sulfur	ppm	ASTM D5185m	3900	5953	2948	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	17.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	5.6	7.0	---
Visc @ 40°C	cSt	ASTM D445	118	100	● 74.3	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.2	● 11.9	---
Viscosity Index (VI)	Scale	ASTM D2270	139	129	155	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : BE0020394
Lab Number : 06101494
Unique Number : 10899724
Test Package : MOBCE

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Jonathan Hester

National Equipment Dealers LLC NE
 215 Woodside Drive
 Lexington, NC
 US 27292
 Contact: Steven Gawthrop
 sgawthrop@nedealers.com

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)

T:
F: