



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
BELL B50E B93A650EK03408277
 Component
Diesel Engine
 Fluid
SYNERGY 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		BE0020884	BE0020883	BE0020882
Sample Date		Client Info		20 May 2024	05 Feb 2024	20 Sep 2023
Machine Age	hrs	Client Info		1321	939	422
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	16	15	16
Iron	ppm	ASTM D5185m	>100	11	20	54
Chromium	ppm	ASTM D5185m	>20	0	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	6	5	0
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	100	380	260
Tin	ppm	ASTM D5185m	>15	2	4	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

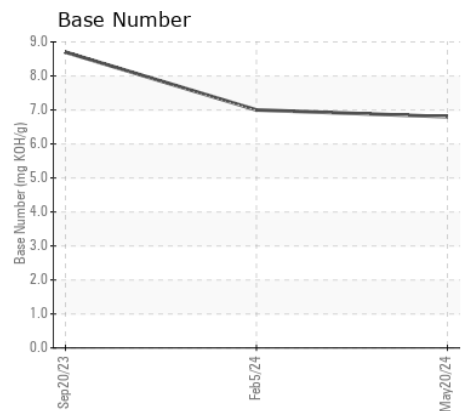
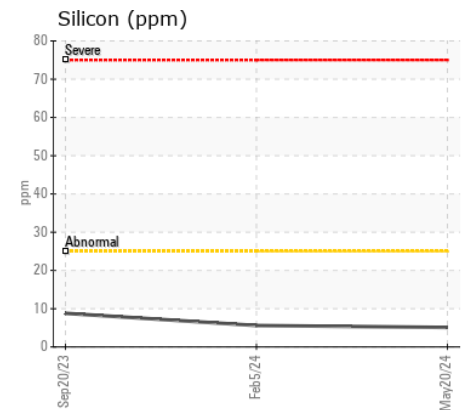
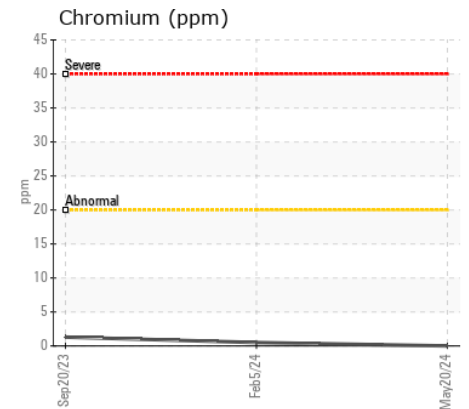
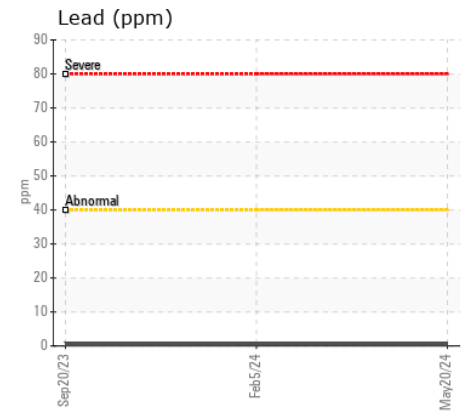
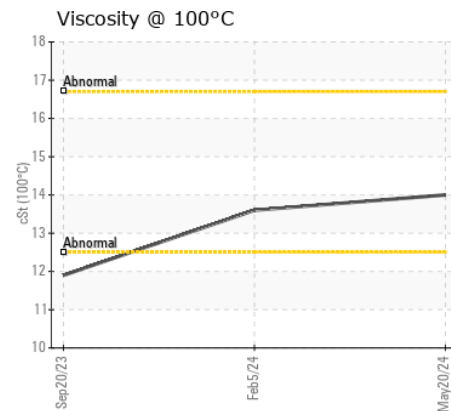
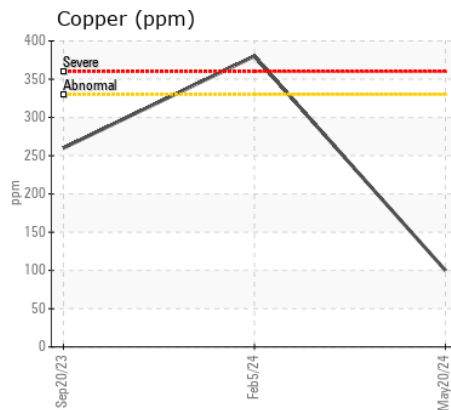
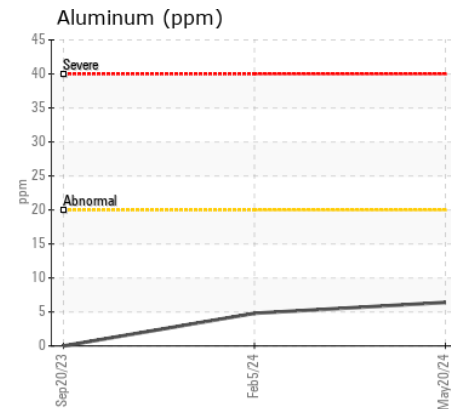
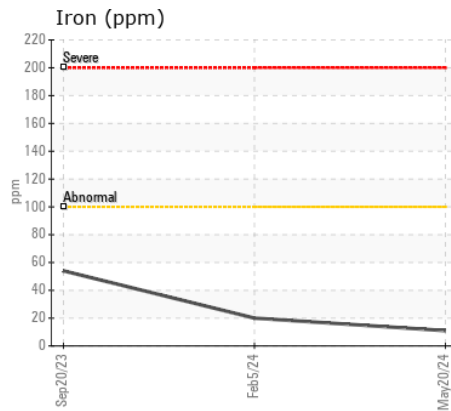
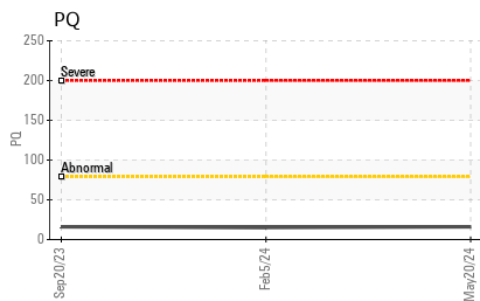
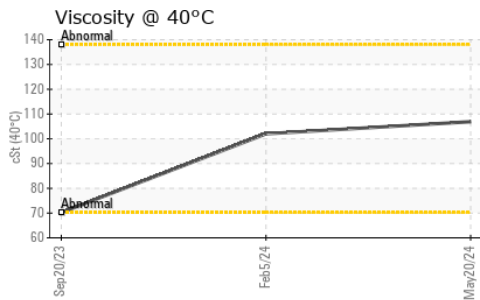
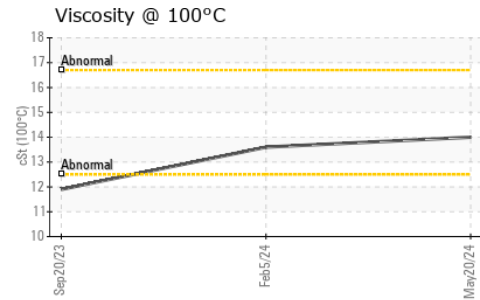
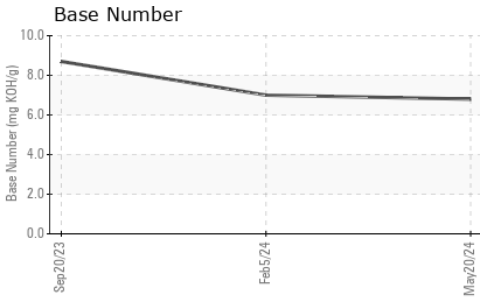
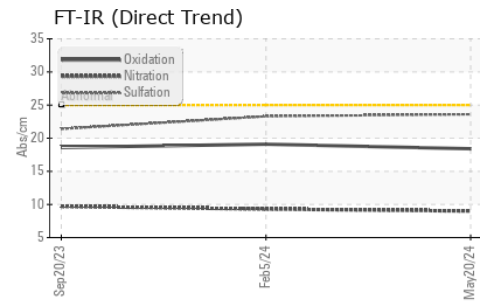
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	9
Potassium	ppm	ASTM D5185m	>20	9	5	8
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	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.0	9.3	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	23.3	21.4
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		3	0	0
Boron	ppm	ASTM D5185m		356	321	16
Barium	ppm	ASTM D5185m		0	14	3
Molybdenum	ppm	ASTM D5185m		94	118	1
Manganese	ppm	ASTM D5185m		<1	1	4
Magnesium	ppm	ASTM D5185m		475	466	62
Calcium	ppm	ASTM D5185m		1513	1601	2120
Phosphorus	ppm	ASTM D5185m		1063	965	688
Zinc	ppm	ASTM D5185m		1288	1150	776
Sulfur	ppm	ASTM D5185m		3200	2974	2211
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	19.1	18.6
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	7.0	8.7
Visc @ 40°C	cSt	ASTM D445		106.9	102	70.2
Visc @ 100°C	cSt	ASTM D445		14.0	13.6	11.9
Viscosity Index (VI)	Scale	ASTM D2270		132	133	166



Certificate L2367

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

Sample No. : BE0020884

Lab Number : 06193452

Unique Number : 11050204

Test Package : MOBCE

Received : 28 May 2024

Tested : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Don Baldrige

Oak Hills

20245 Ewing Road

Ewing, IL

US 62836

Contact: JOSH

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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)