



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
BELL B45E AEBA645EH03408645
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 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		BE0025286	BE0025270	BE0025269
Sample Date		Client Info		28 May 2024	02 Oct 2023	24 Aug 2023
Machine Age	hrs	Client Info		3384	1520	1012
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				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>79	15	12	16
Iron	ppm	ASTM D5185m	>100	9	15	32
Chromium	ppm	ASTM D5185m	>20	<1	1	3
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	9
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	3	98	172
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

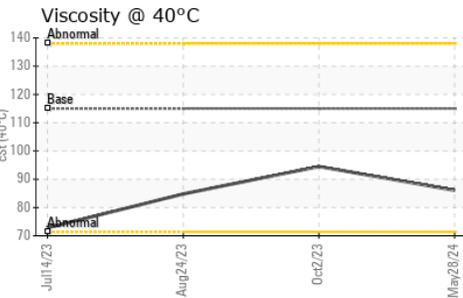
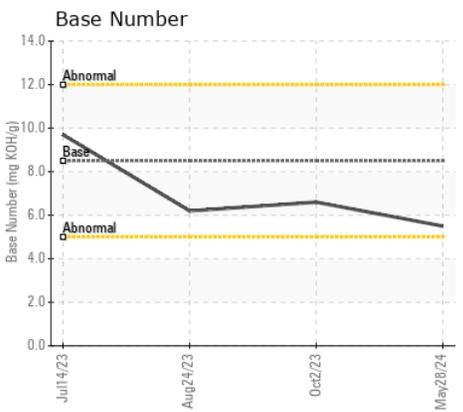
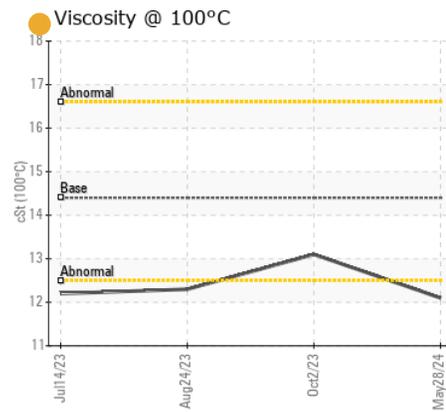
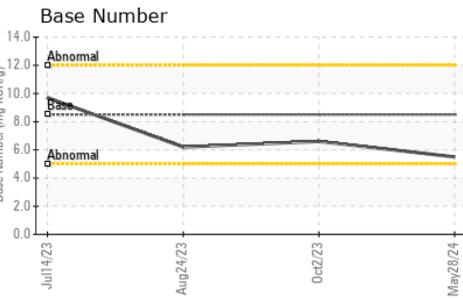
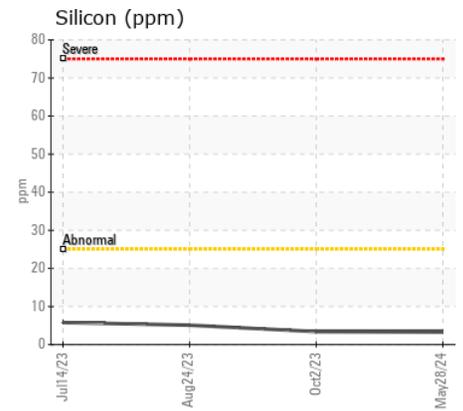
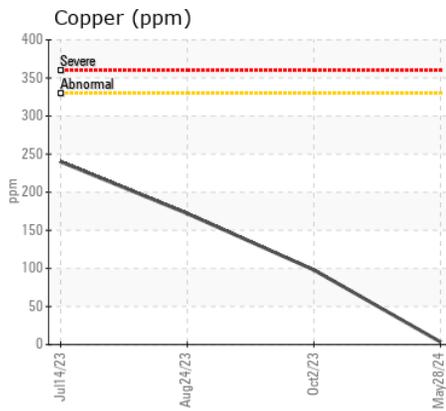
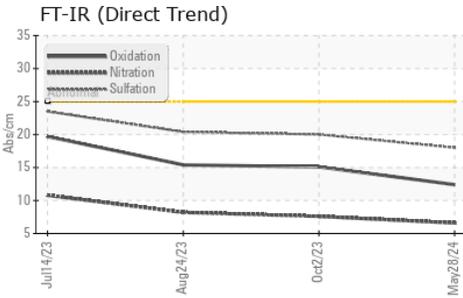
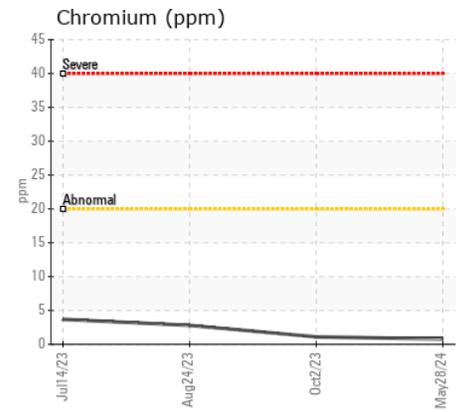
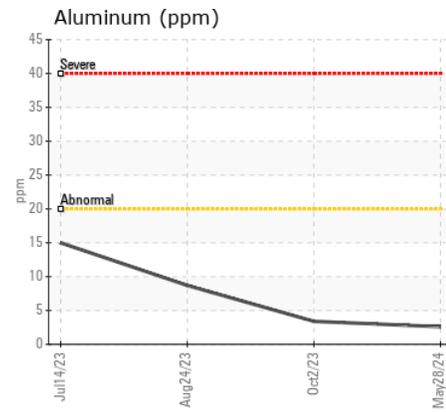
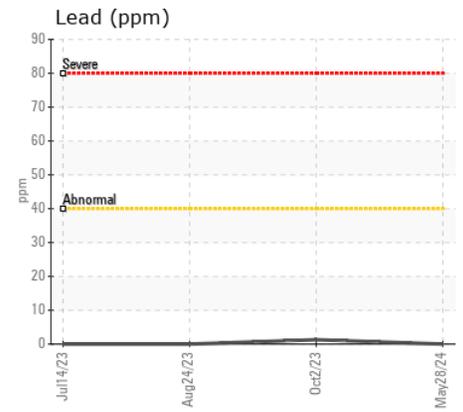
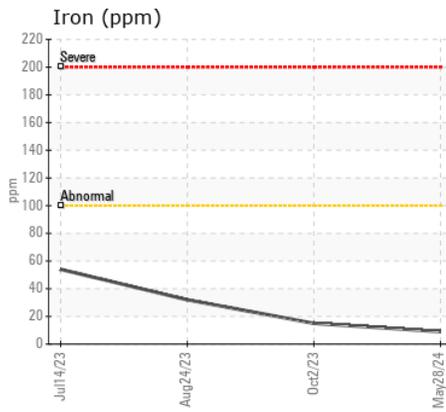
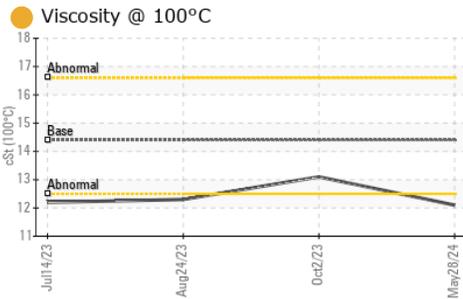
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	3	5
Potassium	ppm	ASTM D5185m	>20	2	6	11
Fuel	%	ASTM D3524	>5	0.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	6.6	7.6	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	20.0	20.4
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	<1	2	2
Boron	ppm	ASTM D5185m	250	6	12	<1
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	43	56	48
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m	450	310	384	321
Calcium	ppm	ASTM D5185m	3000	1335	1737	1927
Phosphorus	ppm	ASTM D5185m	1150	882	960	930
Zinc	ppm	ASTM D5185m	1350	1053	1247	1159
Sulfur	ppm	ASTM D5185m	4250	2886	2606	2660
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.4	15.1	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.5	6.6	6.2
Visc @ 40°C	cSt	ASTM D445	115	86.1	94.5	84.8
Visc @ 100°C	cSt	ASTM D445	14.4	12.1	13.1	12.3
Viscosity Index (VI)	Scale	ASTM D2270	126	134	137	140



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : BE0025286
Lab Number : 06196531
Unique Number : 11058654
Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel)

National Equipment Dealers LLC NE
 215 Woodside Drive
 Lexington, NC
 US 27292

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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