



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
BELL B30E B93A631EC03010095
 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		BE0009659	BE0009655	BE0009654
Sample Date		Client Info		23 May 2024	07 Dec 2023	18 Apr 2023
Machine Age	hrs	Client Info		2025	1506	1014
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	20	16	14
Iron	ppm	ASTM D5185m	>100	15	18	23
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	8	5
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	5	12	30
Tin	ppm	ASTM D5185m	>15	<1	1	3
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

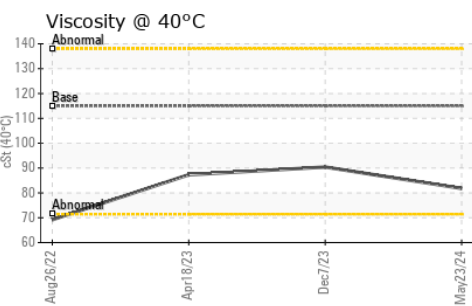
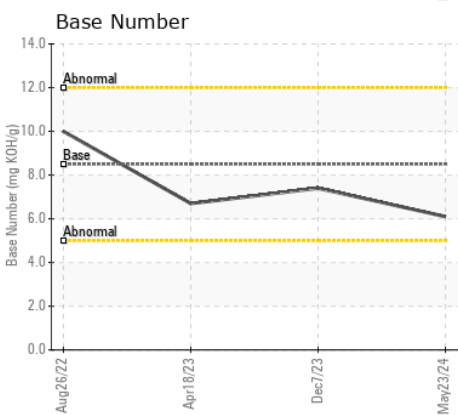
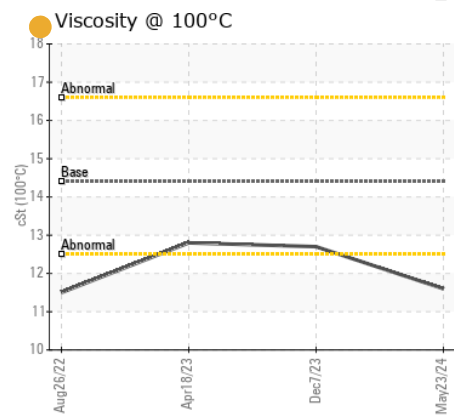
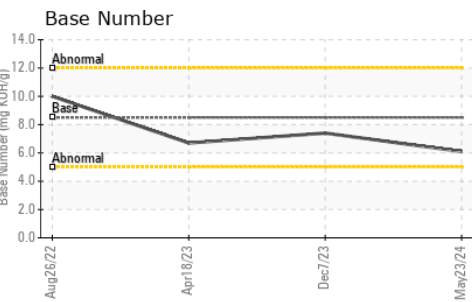
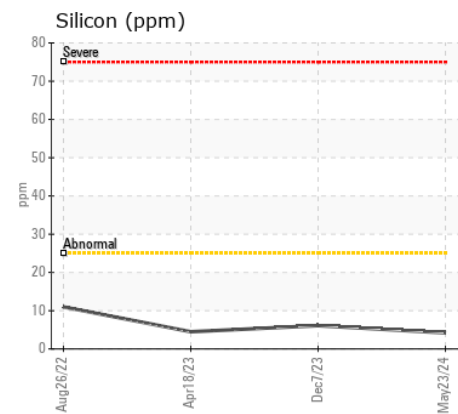
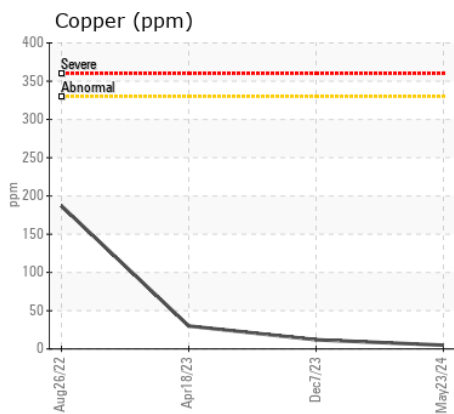
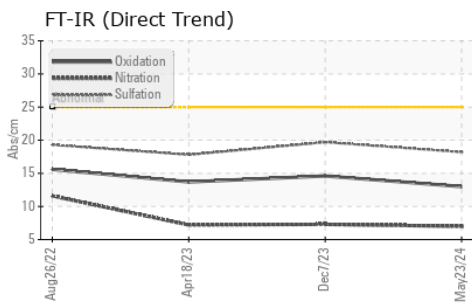
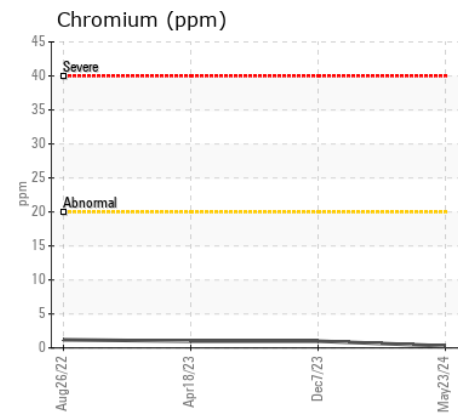
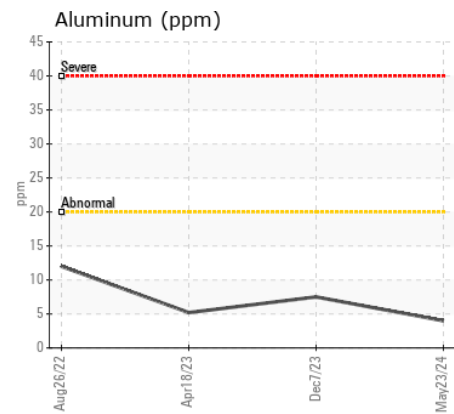
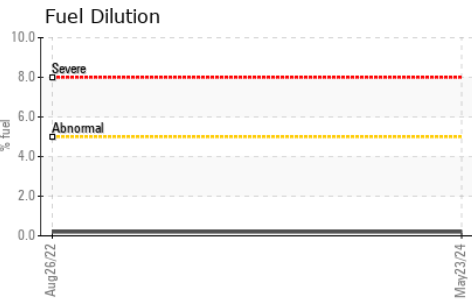
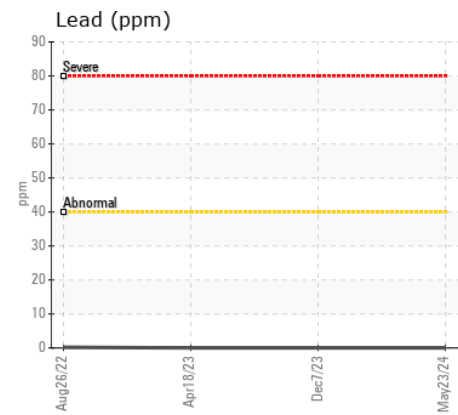
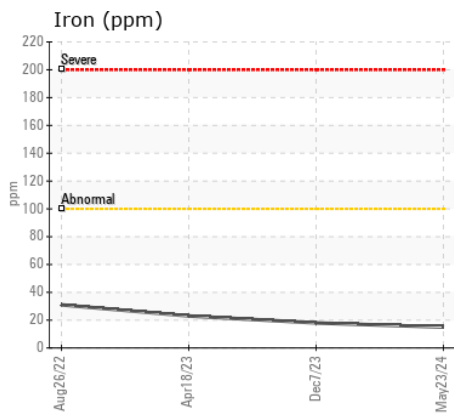
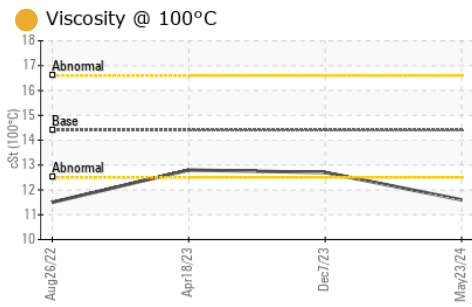
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	6	4
Potassium	ppm	ASTM D5185m	>20	2	9	2
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	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.0	7.3	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	19.7	17.8
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	4	6	12
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	45	59	55
Manganese	ppm	ASTM D5185m		<1	1	3
Magnesium	ppm	ASTM D5185m	450	312	402	457
Calcium	ppm	ASTM D5185m	3000	1476	1659	1627
Phosphorus	ppm	ASTM D5185m	1150	882	920	917
Zinc	ppm	ASTM D5185m	1350	1078	1174	1135
Sulfur	ppm	ASTM D5185m	4250	2958	3334	3378
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	14.6	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.1	7.4	6.7
Visc @ 40°C	cSt	ASTM D445	115	81.8	90.4	87.3
Visc @ 100°C	cSt	ASTM D445	14.4	11.6	12.7	12.8
Viscosity Index (VI)	Scale	ASTM D2270	126	133	137	144



Certificate L2367

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

Sample No. : BE0009659

Lab Number : 06196532

Unique Number : 11058655

Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel)

Received : 31 May 2024

Tested : 05 Jun 2024

Diagnosed : 05 Jun 2024 - Jonathan Hester

National Equipment Dealers LLC NE

215 Woodside Drive

Lexington, NC

US 27292

Contact: Steven Gawthrop

sgawthrop@nedea.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)

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F: