MOB I

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
A-339
Component
Diesel Engine
Fluid
DURAMAX 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

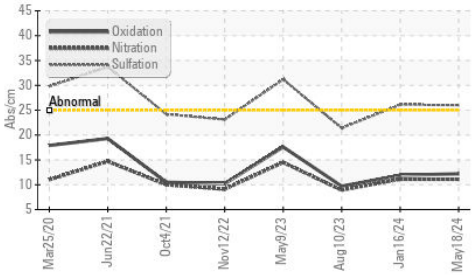
Light concentration of carbon/soot present in the oil.

FLUID CONDITION

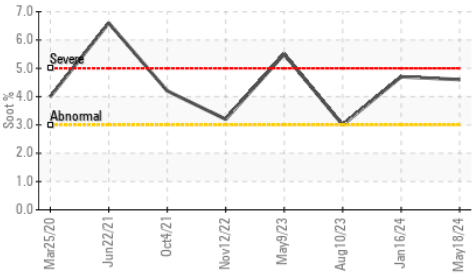
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0035304	DC0020731	DC0029744
Sample Date		Client Info		18 May 2024	16 Jan 2024	10 Aug 2023
Machine Age	hrs	Client Info		31544	30877	30042
Oil Age	hrs	Client Info		667	835	683
Filter Age	hrs	Client Info		667	835	683
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	44	▲ 161	42
Chromium	ppm	ASTM D5185m	>20	1	3	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	2
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	6	9	9
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	7	6
Potassium	ppm	ASTM D5185m	>20	3	<1	4
Fuel	%	ASTM D3524	>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	▲ 4.6	▲ 4.7	▲ 3
Nitration	Abs/cm	*ASTM D7624	>20	11.1	11.1	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.0	26.1	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
Sodium	ppm	ASTM D5185m		2	1	1
Boron	ppm	ASTM D5185m		3	4	2
Barium	ppm	ASTM D5185m		0	0	11
Molybdenum	ppm	ASTM D5185m		4	5	5
Manganese	ppm	ASTM D5185m		0	2	<1
Magnesium	ppm	ASTM D5185m		57	60	76
Calcium	ppm	ASTM D5185m		2187	2337	2137
Phosphorus	ppm	ASTM D5185m		777	891	836
Zinc	ppm	ASTM D5185m		1087	1066	1033
Sulfur	ppm	ASTM D5185m		3401	4085	3453
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2	11.9	9.7
Base Number (BN)	mg KOH/g	ASTM D2896		2.7	▲ 0.0	6.3
Visc @ 100°C	cSt	ASTM D445		14.8	14.7	14.3

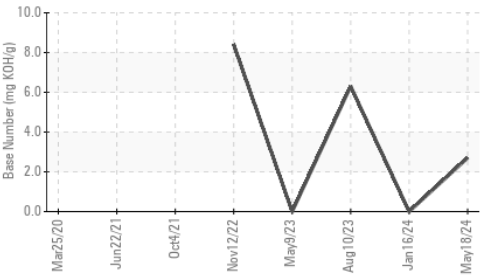
FT-IR (Direct Trend)



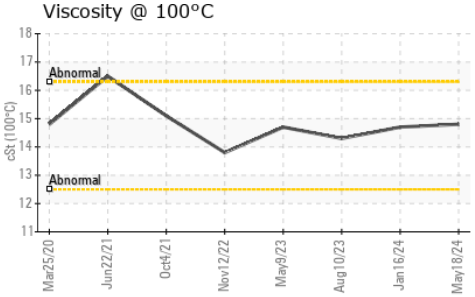
Soot %



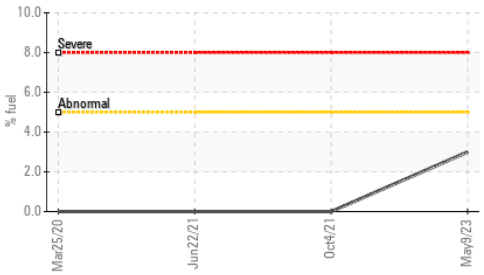
Base Number



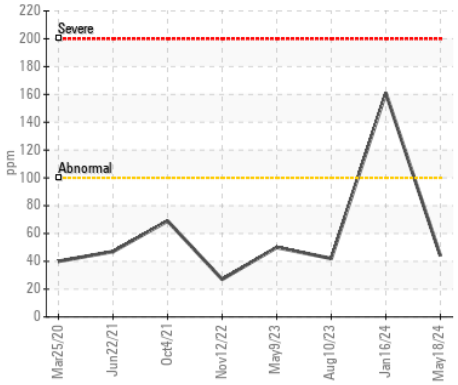
Viscosity @ 100°C



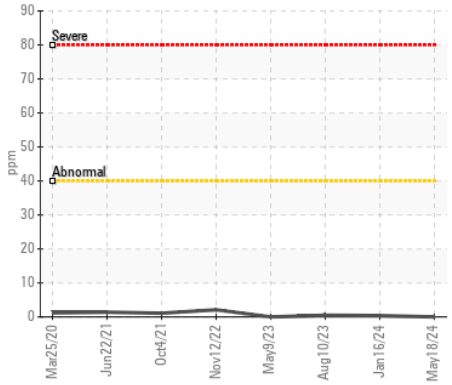
Fuel Dilution



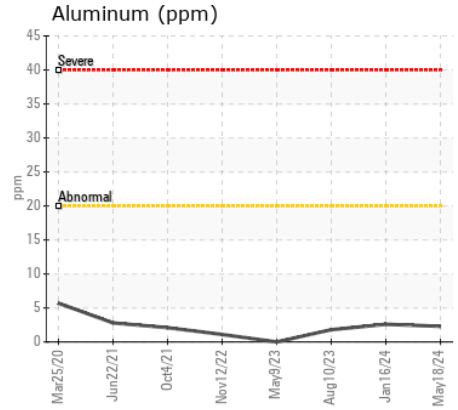
Iron (ppm)



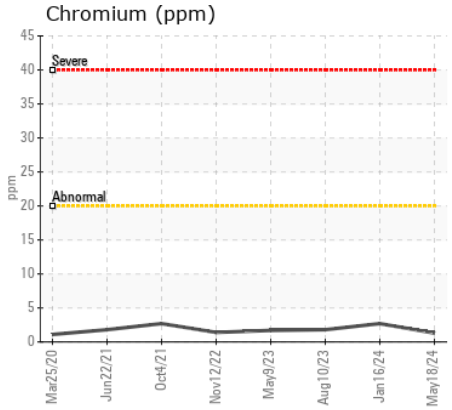
Lead (ppm)



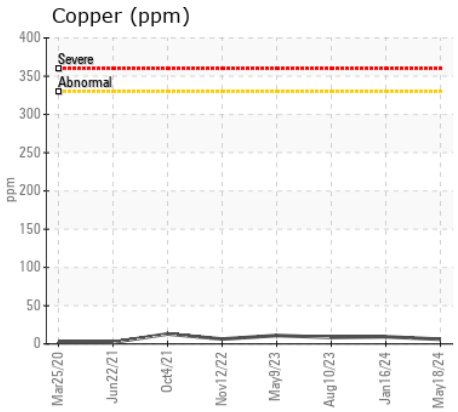
Aluminum (ppm)



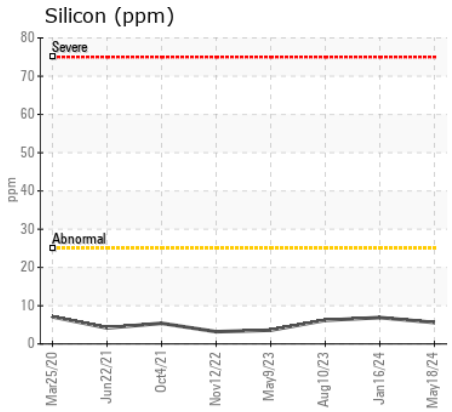
Chromium (ppm)



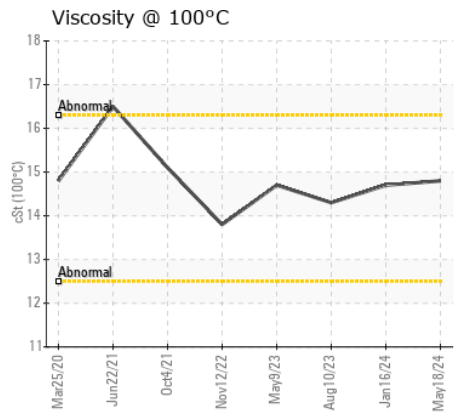
Copper (ppm)



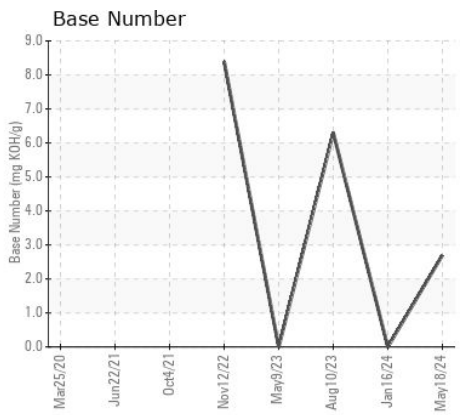
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0035304
Lab Number : 06221039
Unique Number : 11099236
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Wes Davis

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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