MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Current
Machine Id
IC 12-13
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (30 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Piston and cylinder wear is indicated.

CONTAMINATION

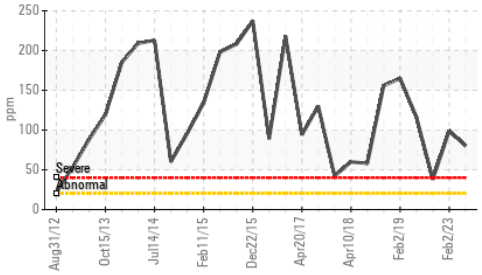
There is no indication of any contamination in the oil.

FLUID CONDITION

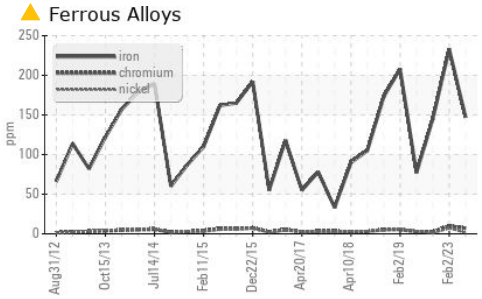
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0849402**	WC0693087	WC0602588
Sample Date		Client Info		**01 Mar 2024**	02 Feb 2023	20 Jan 2022
Machine Age	mls	Client Info		**128188**	124982	116720
Oil Age	mls	Client Info		**3206**	8262	8509
Filter Age	mls	Client Info		**3206**	8262	8509
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185m	>100	▲ **147**	▲ 233	▲ 145
Chromium	ppm	ASTM D5185m	>20	**7**	10	2
Nickel	ppm	ASTM D5185m	>4	**2**	7	<1
Titanium	ppm	ASTM D5185m		**0**	<1	<1
Silver	ppm	ASTM D5185m	>3	**0**	<1	1
Aluminum	ppm	ASTM D5185m	>20	▲ **80**	▲ 99	▲ 38
Lead	ppm	ASTM D5185m	>40	**2**	6	7
Copper	ppm	ASTM D5185m	>330	**7**	12	19
Tin	ppm	ASTM D5185m	>15	**<1**	2	3
Vanadium	ppm	ASTM D5185m		**0**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**7**	9	9
Potassium	ppm	ASTM D5185m	>20	**4**	<1	5
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	**0.9**	1.8	1.6
Nitration	Abs/cm	*ASTM D7624	>20	**9.1**	11.4	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.7**	22.9	24.1
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		**3**	7	6
Boron	ppm	ASTM D5185m	250	**5**	14	14
Barium	ppm	ASTM D5185m	10	**0**	0	<1
Molybdenum	ppm	ASTM D5185m	100	**7**	7	6
Manganese	ppm	ASTM D5185m		**<1**	2	2
Magnesium	ppm	ASTM D5185m	450	**41**	38	72
Calcium	ppm	ASTM D5185m	3000	**2376**	2036	2216
Phosphorus	ppm	ASTM D5185m	1150	**982**	786	946
Zinc	ppm	ASTM D5185m	1350	**1083**	952	1091
Sulfur	ppm	ASTM D5185m	4250	**3682**	3427	3153
Oxidation	Abs/.1mm	*ASTM D7414	>25	**10.9**	13.1	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	**8.16**	6.29	5.26
Visc @ 100°C	cSt	ASTM D445	10.9	**10.2**	10.6	10.4

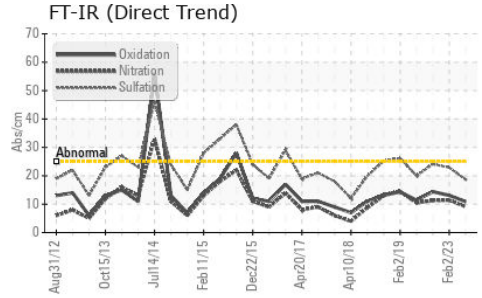
Aluminum (ppm)



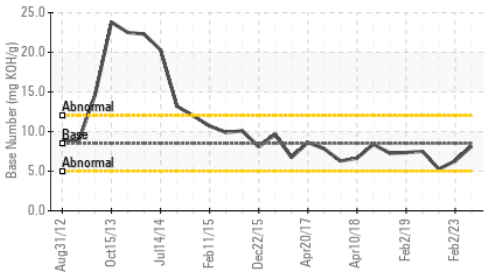
Ferrous Alloys



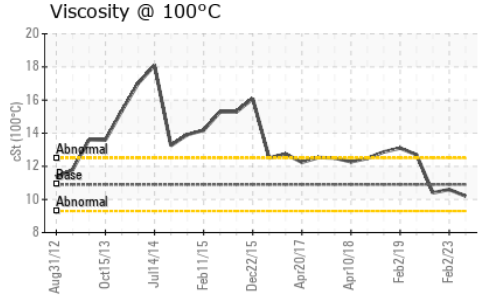
FT-IR (Direct Trend)



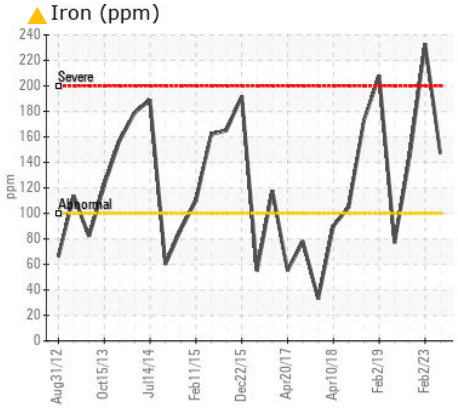
Base Number



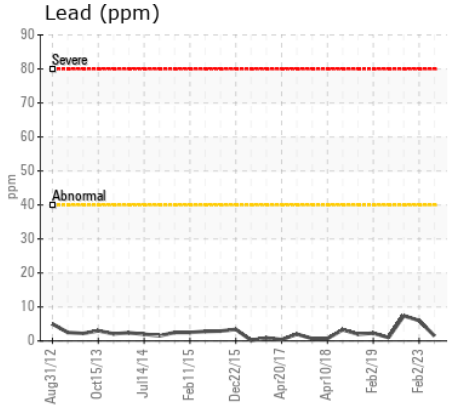
Viscosity @ 100°C



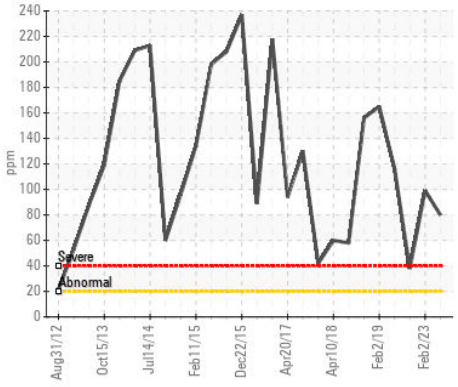
Iron (ppm)



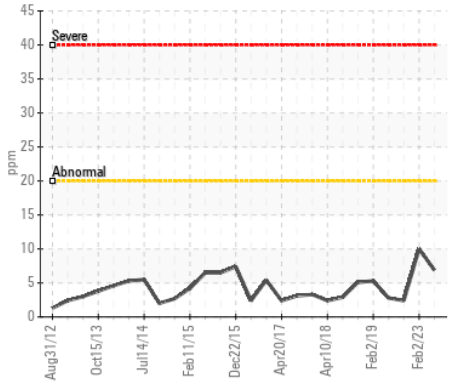
Lead (ppm)



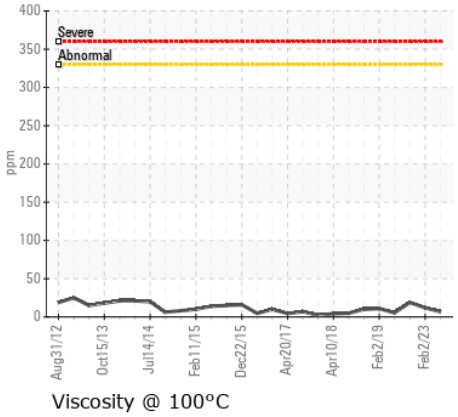
Aluminum (ppm)



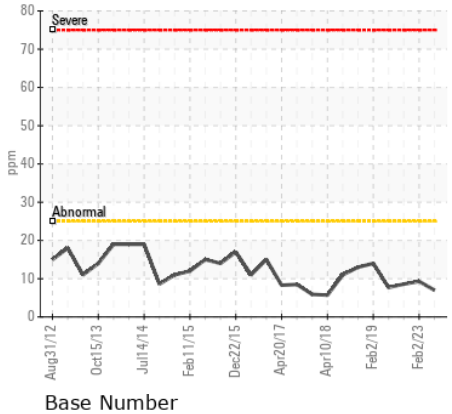
Chromium (ppm)



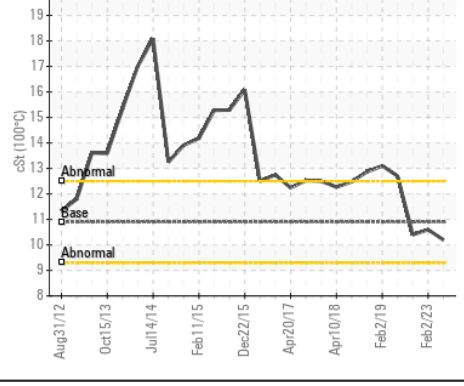
Copper (ppm)



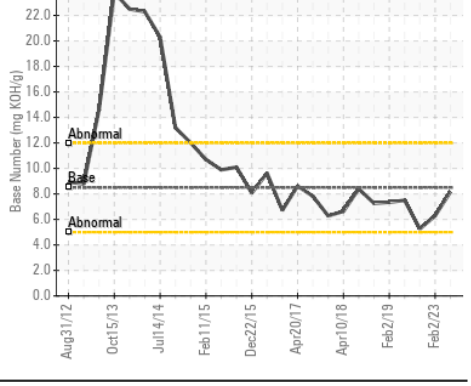
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0849402
Lab Number : 06151294
Unique Number : 10981372
Test Package : MOB 2

Received : 16 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 19 Apr 2024 - Don Baldridge

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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