MOB II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Current
Machine Id
IC 09-20
Component
Diesel Engine
Fluid
Northland superline exp 10w-30 (17 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

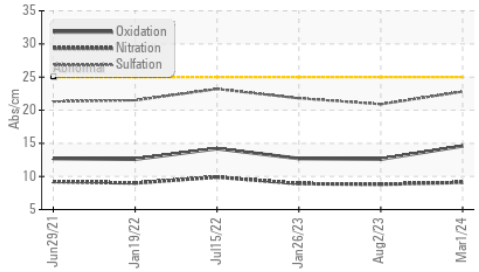
There is no indication of any contamination in the oil.

FLUID CONDITION

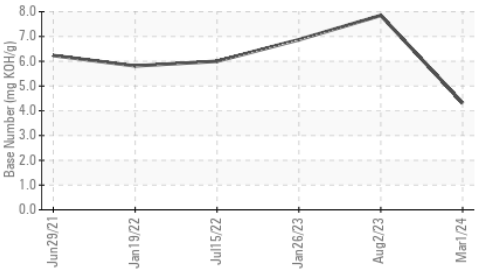
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0849404**	WC0693104	WC0693086
Sample Date		Client Info		**01 Mar 2024**	02 Aug 2023	26 Jan 2023
Machine Age	mls	Client Info		**48362**	42136	36447
Oil Age	mls	Client Info		**6226**	5689	6056
Filter Age	mls	Client Info		**6226**	5689	6056
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>130	**27**	17	26
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m	>2	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**12**	4	10
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>125	**1**	<1	1
Tin	ppm	ASTM D5185m	>4	**0**	<1	0
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	**6**	5	7
Potassium	ppm	ASTM D5185m	>20	**7**	8	17
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>6	**0.5**	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	**9.1**	8.8	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.8**	20.9	21.8
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
Sodium	ppm	ASTM D5185m		**3**	2	<1
Boron	ppm	ASTM D5185m		**3**	2	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**2**	6	1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**17**	34	14
Calcium	ppm	ASTM D5185m		**2467**	2397	2497
Phosphorus	ppm	ASTM D5185m		**1006**	904	934
Zinc	ppm	ASTM D5185m		**1121**	1092	1091
Sulfur	ppm	ASTM D5185m		**3644**	4237	3500
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.6**	12.6	12.7
Base Number (BN)	mg KOH/g	ASTM D2896		**4.31**	7.85	6.87
Visc @ 100°C	cSt	ASTM D445		**10.4**	10.7	10.9

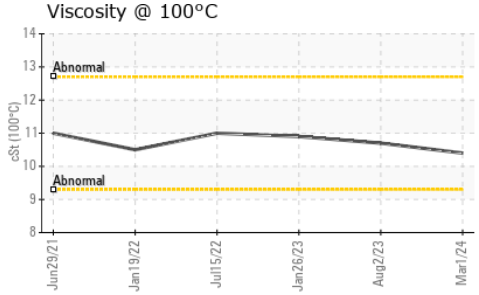
FT-IR (Direct Trend)



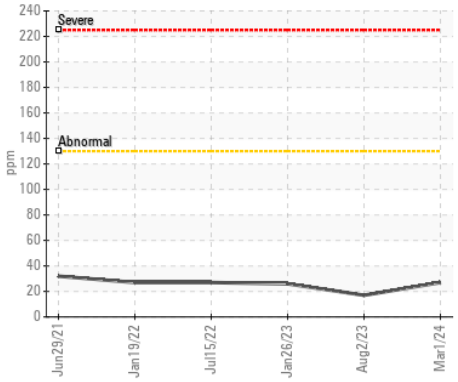
Base Number



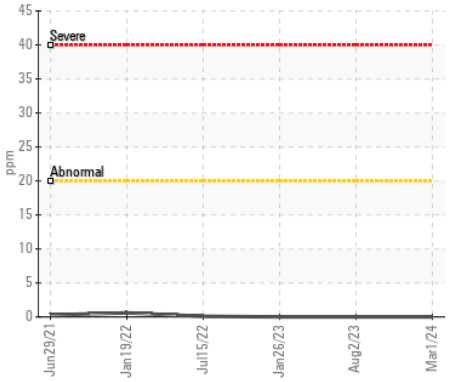
Viscosity @ 100°C



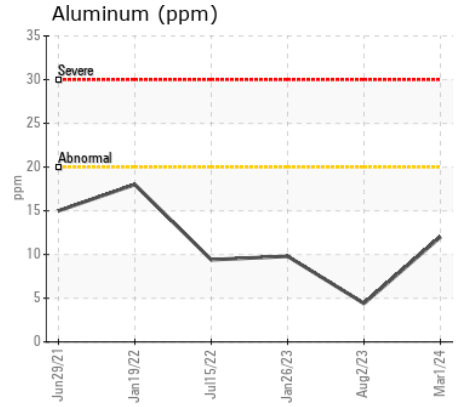
Iron (ppm)



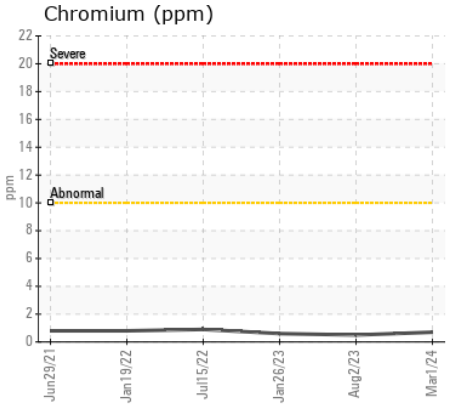
Lead (ppm)



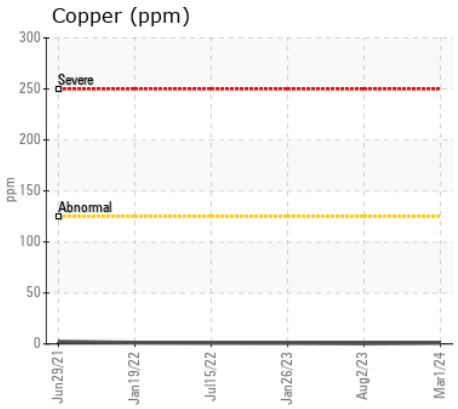
Aluminum (ppm)



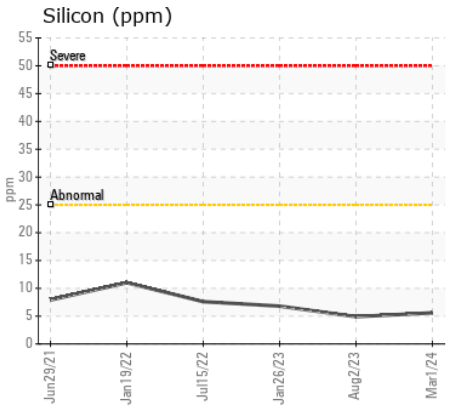
Chromium (ppm)



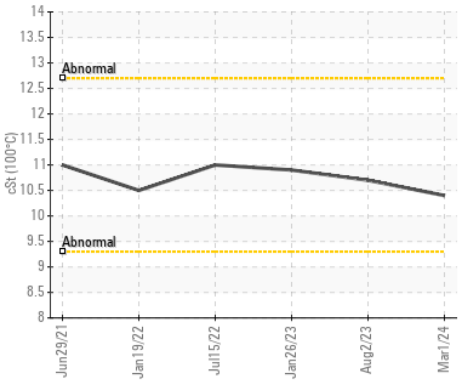
Copper (ppm)



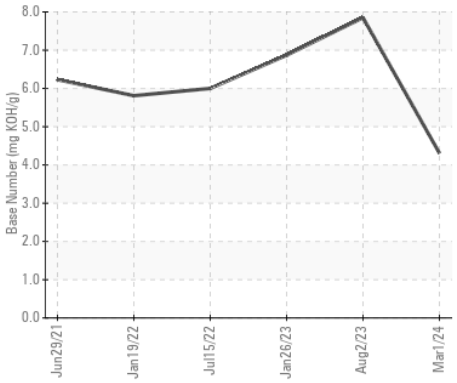
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0849404
Lab Number : 06151296
Unique Number : 10981374
Test Package : MOB 2

Received : 16 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 18 Apr 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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