MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO 2101
Component
Diesel Engine
Fluid
TOTAL RUBIA OPTIMA 1500 FE 5W30 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

CONTAMINATION

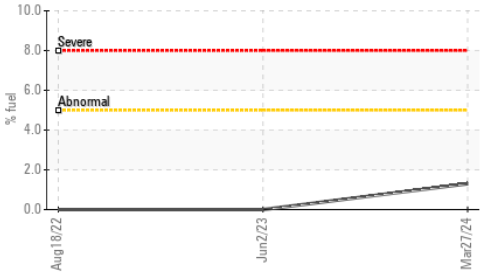
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

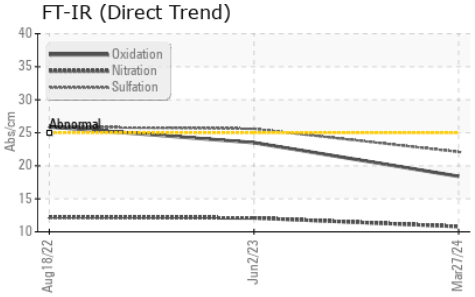
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0766414	WC0766403	WC0523989
Sample Date		Client Info		27 Mar 2024	02 Jun 2023	18 Aug 2022
Machine Age	hrs	Client Info		3632	0	1145
Oil Age	hrs	Client Info		1200	2411	1145
Filter Age	hrs	Client Info		0	2411	1145
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	24	39	56
Chromium	ppm	ASTM D5185(m)	>20	<1	2	1
Nickel	ppm	ASTM D5185(m)	>4	2	1	3
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<1	1	<1
Aluminum	ppm	ASTM D5185(m)	>20	11	8	8
Lead	ppm	ASTM D5185(m)	>40	<1	2	4
Copper	ppm	ASTM D5185(m)	>330	9	37	101
Tin	ppm	ASTM D5185(m)	>15	1	2	5
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	15	61
Potassium	ppm	ASTM D5185(m)	>20	23	14	19
Fuel	%	ASTM D7593*	>5	1.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.8	12.1	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.1	25.6	25.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		2	4	3
Boron	ppm	ASTM D5185(m)		3	14	133
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		64	67	101
Manganese	ppm	ASTM D5185(m)		<1	1	4
Magnesium	ppm	ASTM D5185(m)		956	1105	625
Calcium	ppm	ASTM D5185(m)		983	925	1485
Phosphorus	ppm	ASTM D5185(m)		893	1015	644
Zinc	ppm	ASTM D5185(m)		1130	1181	754
Sulfur	ppm	ASTM D5185(m)		2380	2733	2046
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	23.5	25.9
Base Number (BN)	mg KOH/g	ASTM D2896*		6.55	5.63	6.17
Visc @ 100°C	cSt	ASTM D7279(m)		10.4	10.8	9.3

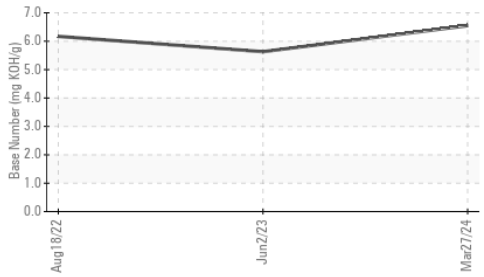
Fuel Dilution



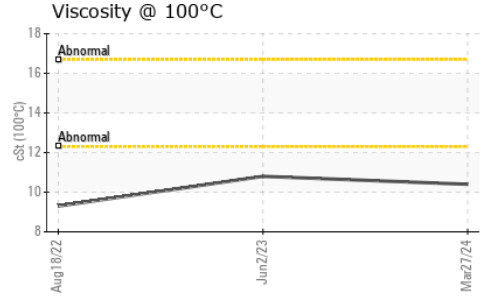
FT-IR (Direct Trend)



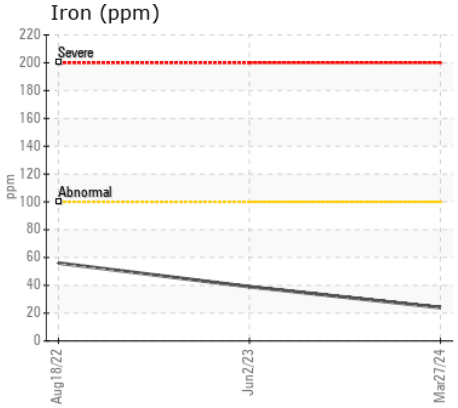
Base Number



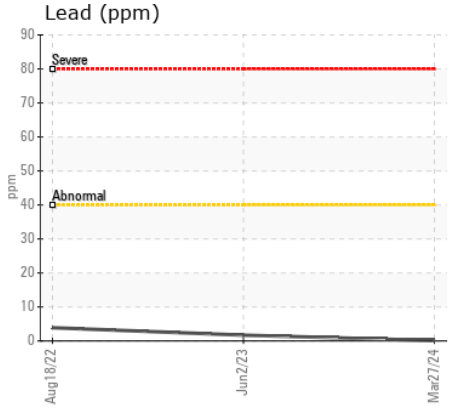
Viscosity @ 100°C



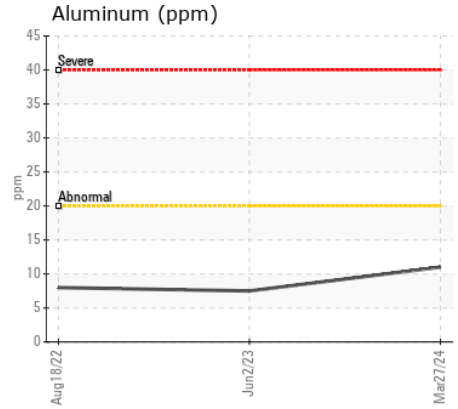
Iron (ppm)



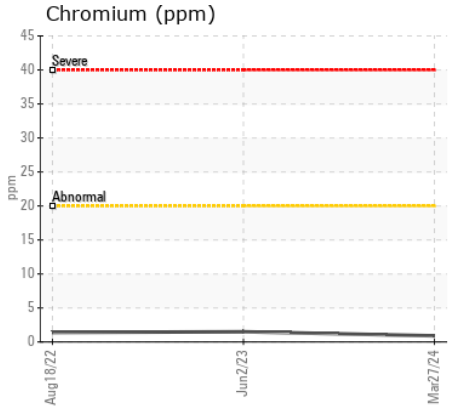
Lead (ppm)



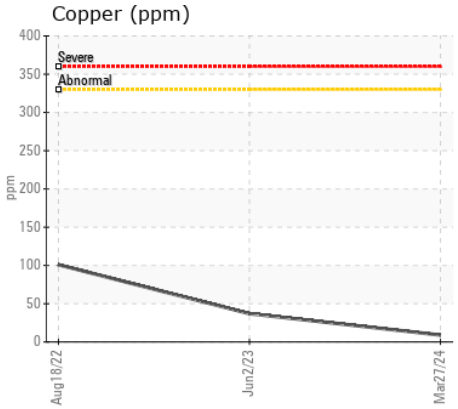
Aluminum (ppm)



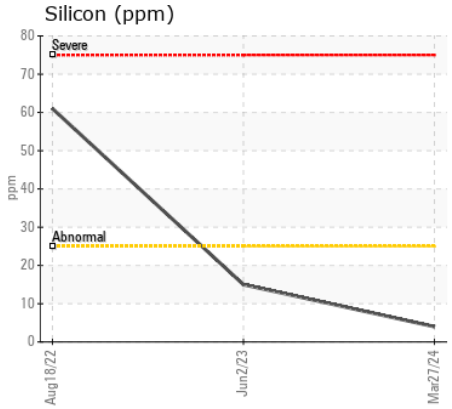
Chromium (ppm)



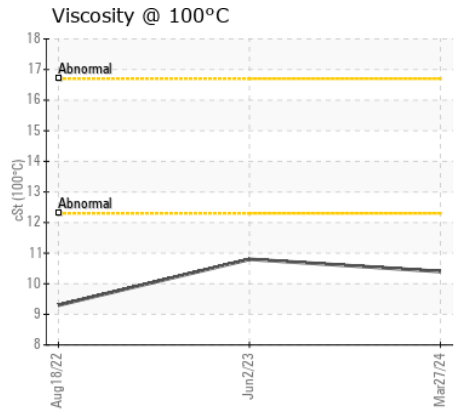
Copper (ppm)



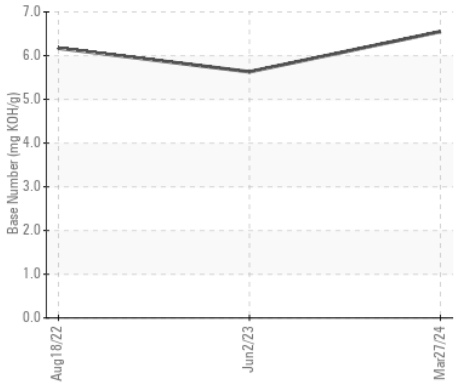
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0766414 **Received** : 22 Apr 2024
Lab Number : 02630539 **Tested** : 24 Apr 2024
Unique Number : 5763671 **Diagnosed** : 24 Apr 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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