MOBIL

VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[74]
Machine Id
VOLVO ECR235DL 210480
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

WEAR

An increase in the iron level is noted. Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

CONTAMINATION

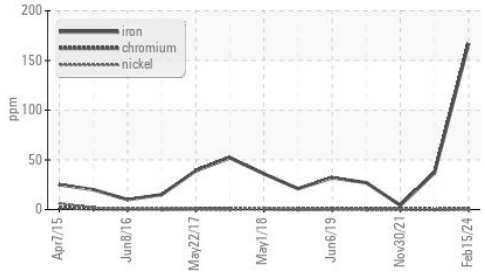
There is no indication of any contamination in the oil.

FLUID CONDITION

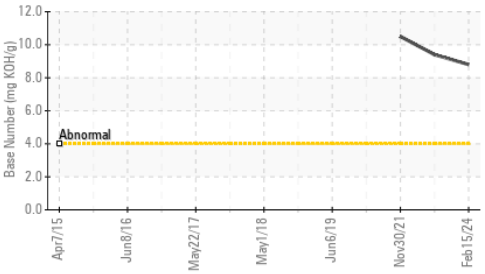
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**VC527564**	VC527533	VC527553
Sample Date		Client Info		**15 Feb 2024**	30 Mar 2023	30 Nov 2021
Machine Age	hrs	Client Info		**3838**	3643	700
Oil Age	hrs	Client Info		**195**	118	205
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Changed	Changed
Filter Changed		Client Info		**Changed**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	▲ **167**	37	4
Chromium	ppm	ASTM D5185m	>10	**<1**	0	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**6**	2	2
Lead	ppm	ASTM D5185m	>20	**0**	0	<1
Copper	ppm	ASTM D5185m	>15	**2**	0	2
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
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	>20	**13**	9	10
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	3
Fuel		WC Method	>6.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.1	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**6.3**	6.1	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**17.9**	19.1	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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m	>118	**3**	1	2
Boron	ppm	ASTM D5185m		**29**	43	69
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**30**	34	37
Manganese	ppm	ASTM D5185m		**1**	<1	<1
Magnesium	ppm	ASTM D5185m		**359**	356	542
Calcium	ppm	ASTM D5185m		**1904**	1807	1741
Phosphorus	ppm	ASTM D5185m		**909**	802	812
Zinc	ppm	ASTM D5185m		**1039**	1009	916
Sulfur	ppm	ASTM D5185m		**3122**	3203	2382
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.1**	15.2	19
Base Number (BN)	mg KOH/g	ASTM D2896		**8.8**	9.4	10.5
Visc @ 100°C	cSt	ASTM D445		**12.9**	12.6	13.3

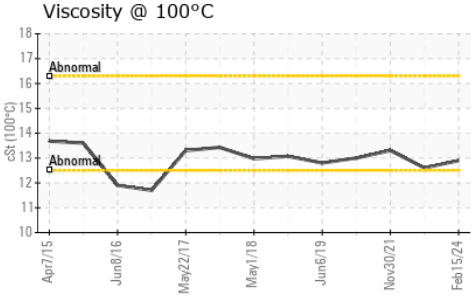
Ferrous Alloys



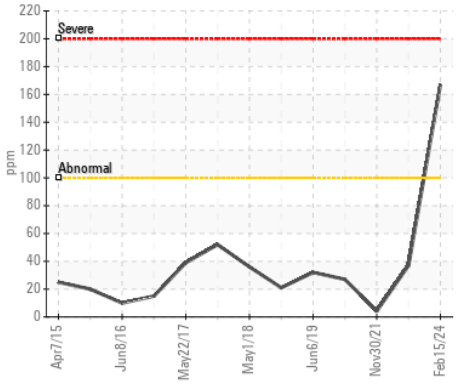
Base Number



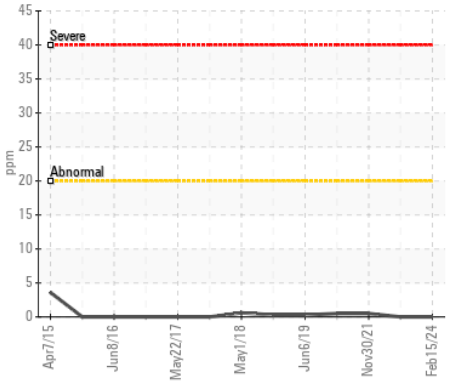
Viscosity @ 100°C



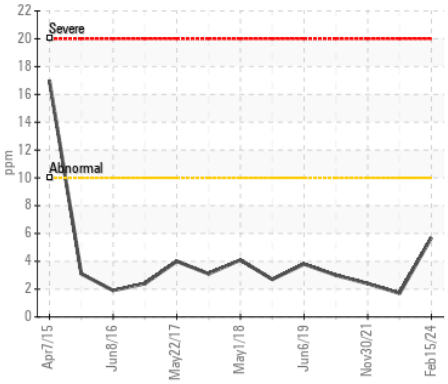
Iron (ppm)



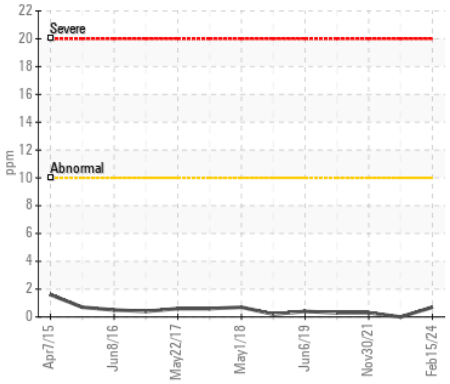
Lead (ppm)



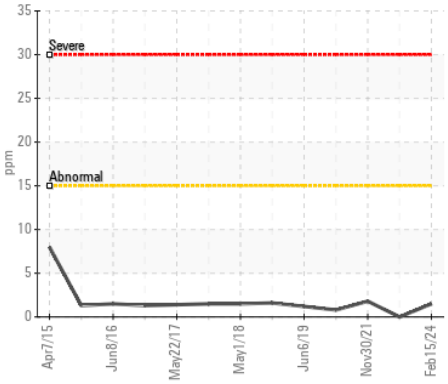
Aluminum (ppm)



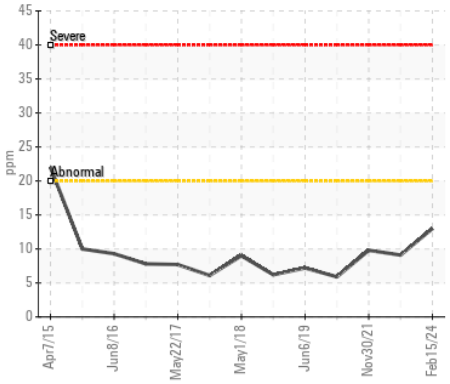
Chromium (ppm)



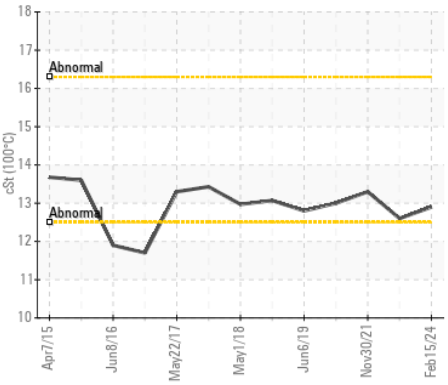
Copper (ppm)



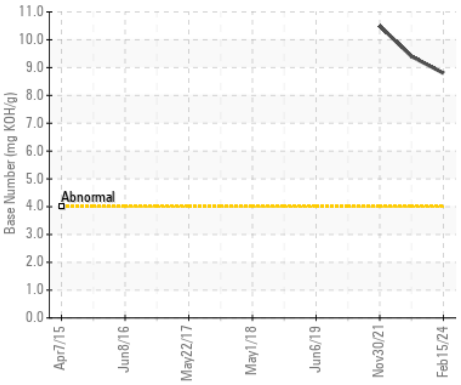
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VC527564
Lab Number : 06103462
Unique Number : 10901692
Test Package : MOB 1 (Additional Tests: TBN)

Received : 28 Feb 2024
Tested : 02 Mar 2024
Diagnosed : 02 Mar 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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