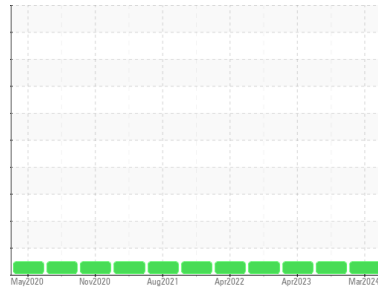


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
VOLVO L 90H-2 (S/N 623778)
 Component
Rear Diesel Engine
 Fluid
DISEL ENGINE OIL SAE 40 (7 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0104394	PCA0098371	PCA0090599
Sample Date	Client Info		18 Mar 2024	25 Oct 2023	07 Apr 2023
Machine Age	hrs	Client Info	3656	3408	3183
Oil Age	hrs	Client Info	248	225	283
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	6	6	10
Chromium	ppm	ASTM D5185m >20	0	<1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	5	4	6
Lead	ppm	ASTM D5185m >40	0	0	0
Copper	ppm	ASTM D5185m >330	0	<1	<1
Tin	ppm	ASTM D5185m >15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	17	3	5
Barium	ppm	ASTM D5185m 10	0	0	0
Molybdenum	ppm	ASTM D5185m 100	27	57	59
Manganese	ppm	ASTM D5185m	<1	0	1
Magnesium	ppm	ASTM D5185m 450	384	932	941
Calcium	ppm	ASTM D5185m 3000	1744	1044	1067
Phosphorus	ppm	ASTM D5185m 1150	945	1036	1006
Zinc	ppm	ASTM D5185m 1350	1100	1233	1244
Sulfur	ppm	ASTM D5185m 4250	3957	3114	3324

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	3	4
Sodium	ppm	ASTM D5185m >216	1	<1	<1
Potassium	ppm	ASTM D5185m >20	<1	<1	<1

INFRA-RED

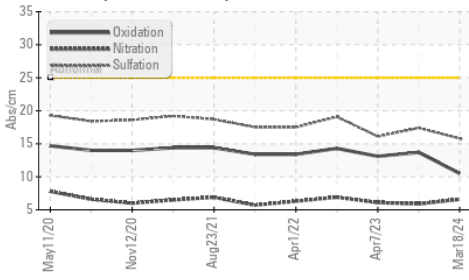
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	6.6	5.9	6.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	15.8	17.4	16.1

FLUID DEGRADATION

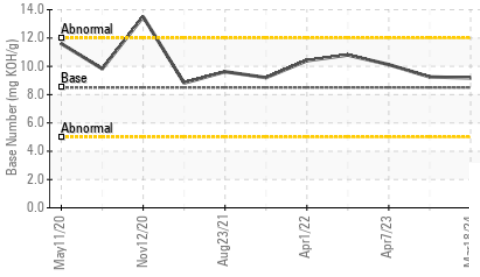
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	10.5	13.7	13.1
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	9.18	9.25	10.12

OIL ANALYSIS REPORT

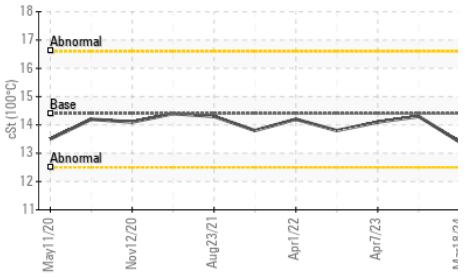
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

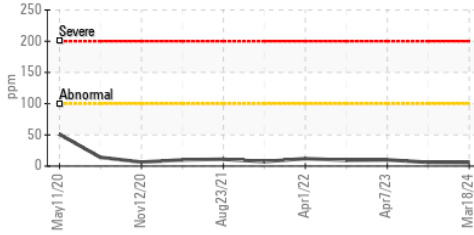


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

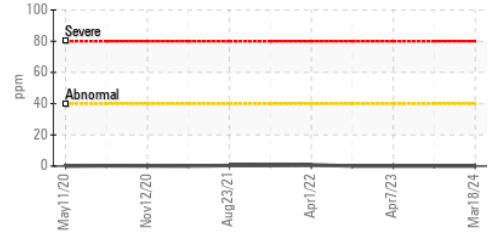
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	14.3	14.1

GRAPHS

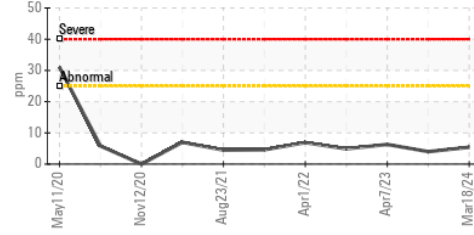
Iron (ppm)



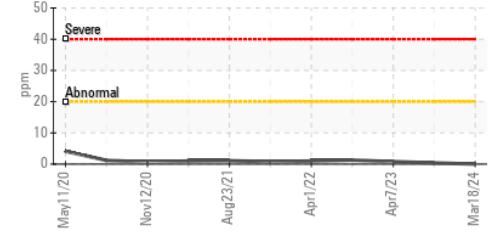
Lead (ppm)



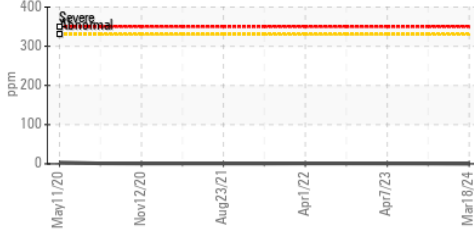
Aluminum (ppm)



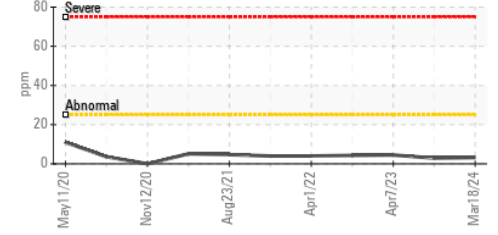
Chromium (ppm)



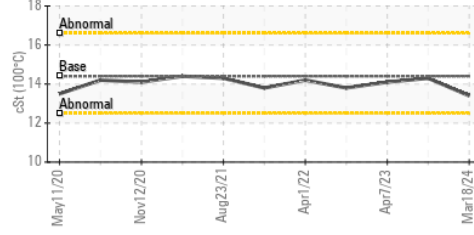
Copper (ppm)



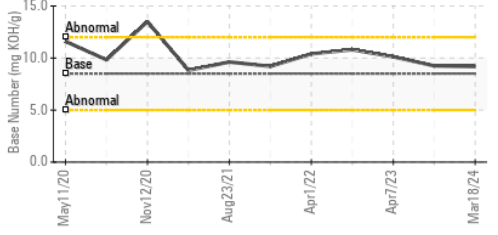
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104394 **Received** : 05 Apr 2024
Lab Number : **06140690** **Tested** : 08 Apr 2024
Unique Number : 10965498 **Diagnosed** : 08 Apr 2024 - Wes Davis
Test Package : MOB 2

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)

J F PRICE
 611 PLEASANT ST
 E WEYMOUTH, MA
 US 02189
 Contact: JOHN LANG
 gnalj1970@comcast.net
 T: (617)435-7199
 F: (781)337-4150