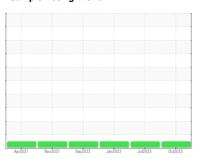


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



VOLVO 480445

Component

Front Diesel Engine

AMSOIL (ATM) SYN MOTOR OIL10W30 (34 LTR)

DIAGNOSIS

RecommendationConfirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to

monitor. 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. There is no indication of any contamination in the oil.

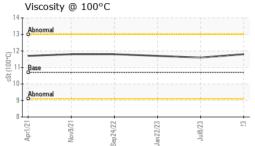
Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

LTR)		Apr2021	Nov2021 Sep2022	Jan 2023 Jul 2023	0ct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0874492	WC0836891	WC0575249
Sample Date		Client Info		29 Oct 2023	08 Jul 2023	22 Jan 2023
Machine Age	kms	Client Info		1905976	1858528	1806394
Oil Age	kms	Client Info		47447	52134	55345
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	26	24	20
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>25	9	17	16
Lead	ppm	ASTM D5185(m)	>40	1	1	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		1	1	<1
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		<1	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		12	13	12
Calcium	ppm	ASTM D5185(m)		2266	2265	2296
Phosphorus	ppm	ASTM D5185(m)		819	884	868
Zinc	ppm	ASTM D5185(m)		990	1008	981
Sulfur	ppm	ASTM D5185(m)		2648	2763	2755
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	12	5	4
Sodium	ppm	ASTM D5185(m)		8	8	6
Potassium	ppm	ASTM D5185(m)	>20	17	39	31
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.3	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.3	8.6	8.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.5	25.2	25.6
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9	16.5	16.3



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPER	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	10.7	11.8	11.6	11.7
GRAPHS						
Iron (ppm)				Lead (nnm)		

	V130 @ 100	0	COL	AOTIVI DI LI J(III)	10.7	11.0	11.0		11.7	
- 1	GRAPHS									
250	Iron (ppm	1)				Lead (ppm)				
200 150 Ed. 100	Severe Abnormal					80 - Severe 80 - Severe 60 - Severe 50 - Severe 40 - Abnormal				
0	Apr1/21	03	Jan22/23	-1118/23	0ct29/23	Chromium (bbw)	Jan22/23	Jul8/23	0ct29/23
45 40 35 30 25 20 15	Abnormal	/				45 Severe 35 - 30 - 20 Abnormal				
5 0 400 350	Copper (p	03	Jan 22 23	SJ/8/DS	0ct29/23	Silicon (ppm	Sep24/22	Jan22/23	Jul8/23	0ct29/23
300 250 <u>E</u> 200 150 100 50		7	C	m m	3	50 - 50 - 50 - 50 - 50 - 50 - 50 - 50 -	2	33	3	3
	Apr1/21	00	Jan 22/23	Jul8/23 -	Oct29/23	Apr1/21	Sep24/22	Jan22/23	Jul8/23 -	Oct29/23
14		@ 100°C				Soot %				
13 (100 ₀ 01) 11 10	Base					5.0 - Severe 4.0 - *** 53.0 - Abnormal 2.0 -				
8	Apr1/21	Sep24/22	Jan 22/23	Jul8/23	0ct29/23	Apr1/21	Sep24/22	Jan22/23	Jul8/23	Oct29/23



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5669665 Test Package : MOB 1

: WC0874492 : 02592586

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received

: 30 Oct 2023 Diagnosed : 30 Oct 2023 Diagnostician : Kevin Marson

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.

ARMONT CONTRACTING LTD

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