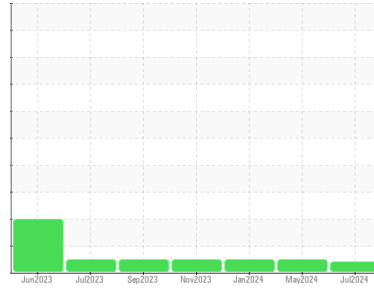


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area

[W/O 11076]

Machine Id

VOLVO A30G 753127

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (10 GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ML0002062	ML0001342	VCP447913
Sample Date	Client Info		08 Jul 2024	06 May 2024	18 Jan 2024
Machine Age	hrs	Client Info	1895	1636	1291
Oil Age	hrs	Client Info	259	1636	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	0.3
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 >200	4	5	6
Chromium	ppm	ASTM D5185m >20	0	<1	<1
Nickel	ppm	ASTM D5185m >10	0	<1	0
Titanium	ppm	ASTM D5185m	0	<1	2
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >30	1	3	2
Lead	ppm	ASTM D5185m >40	0	<1	0
Copper	ppm	ASTM D5185m >20	<1	2	2
Tin	ppm	ASTM D5185m >20	0	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2.5	93	407	412
Barium	ppm	ASTM D5185m 0.0	0	2	<1
Molybdenum	ppm	ASTM D5185m 0.7	81	115	87
Manganese	ppm	ASTM D5185m 0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 256	500	556	417
Calcium	ppm	ASTM D5185m 2057	1663	1489	1419
Phosphorus	ppm	ASTM D5185m 935	871	895	1087
Zinc	ppm	ASTM D5185m 1223	967	1005	1291
Sulfur	ppm	ASTM D5185m 4079	3029	3056	3458

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	4	6	4
Sodium	ppm	ASTM D5185m	3	0	1
Potassium	ppm	ASTM D5185m >20	0	2	0

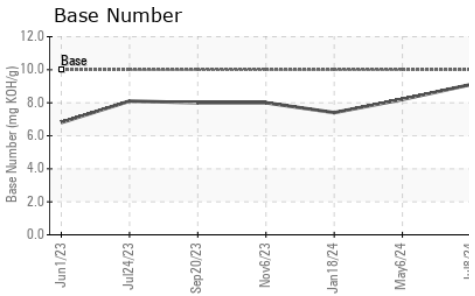
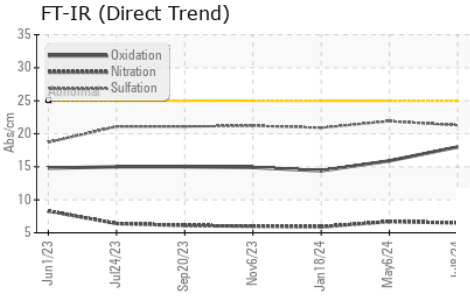
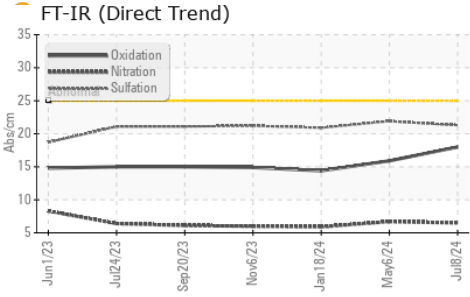
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	6.5	6.7	5.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.3	21.9	20.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	15.9	14.4
Base Number (BN)	mg KOH/g	ASTM D2896 10	9.1	8.2	7.4

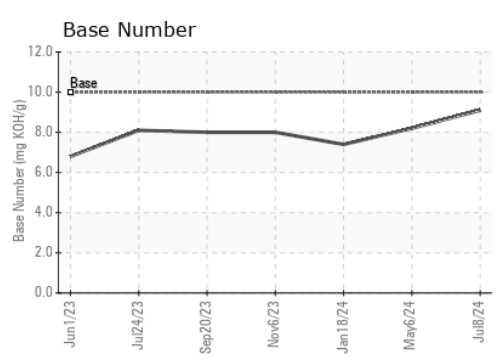
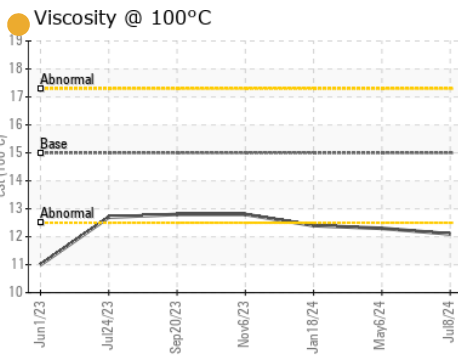
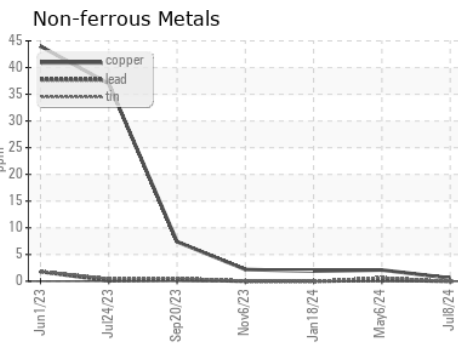
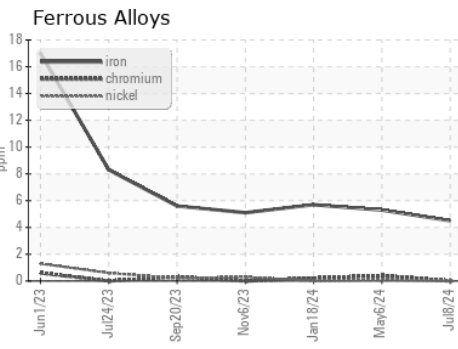
OIL ANALYSIS REPORT



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	15.0	● 12.1	12.3	12.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002062 **Received** : 11 Jul 2024
Lab Number : 06234273 **Tested** : 12 Jul 2024
Unique Number : 11123107 **Diagnosed** : 14 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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 Contact: H TRENT
 HTRENT@PLEASANTS.ORG
 T: (301)252-5635
 F:

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)