



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L60H 623461

Component
Diesel Engine

Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004474	ASC0004310	ASC0006087
Sample Date		Client Info		18 Jun 2024	17 Apr 2024	23 Feb 2024
Machine Age	hrs	Client Info		1941	1510	1026
Oil Age	hrs	Client Info		0	484	500
Filter Age	hrs	Client Info		0	484	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	13	11
Chromium	ppm	ASTM D5185m	>10	<1	1	2
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	3	5
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	0	1	2
Tin	ppm	ASTM D5185m	>10	1	1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

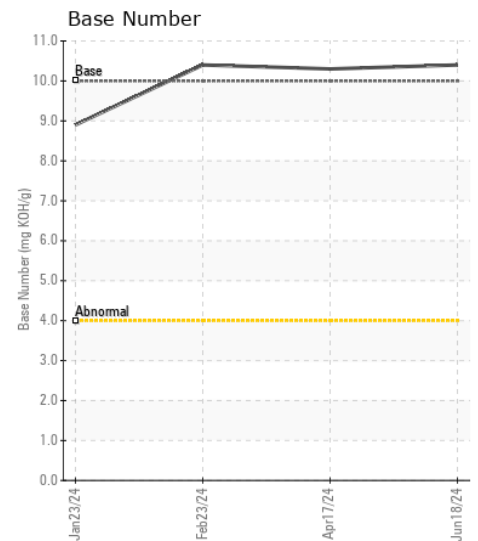
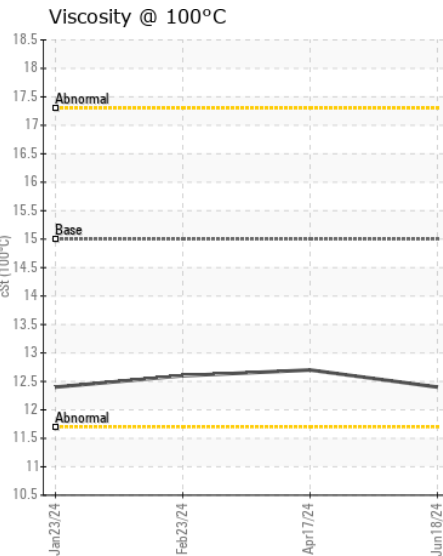
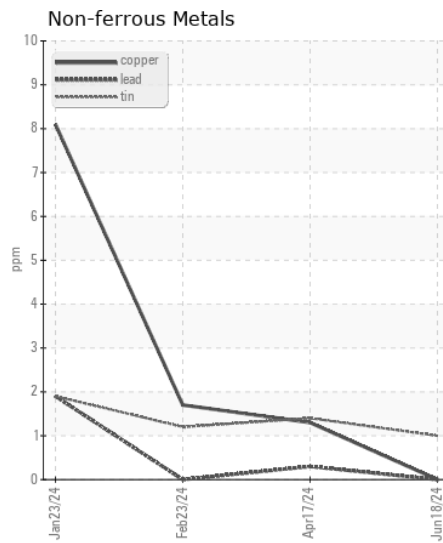
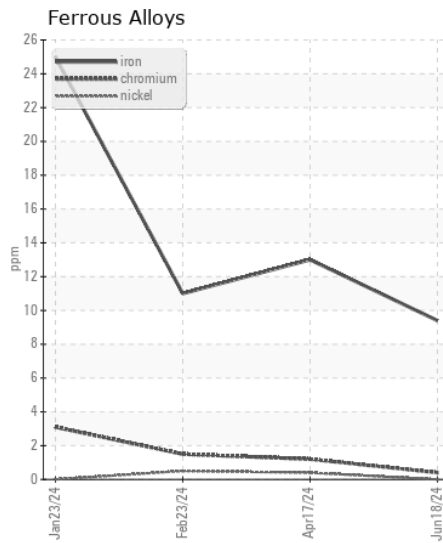
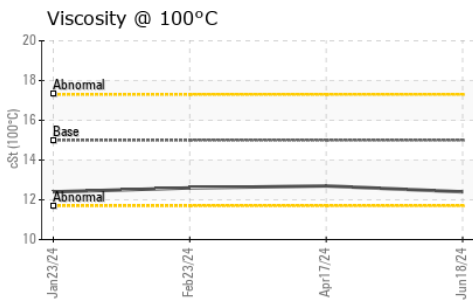
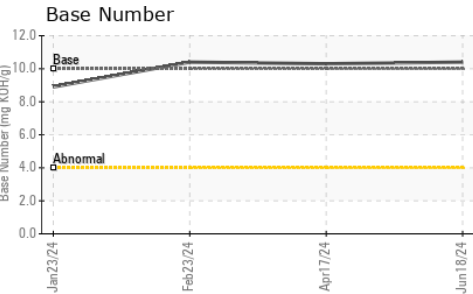
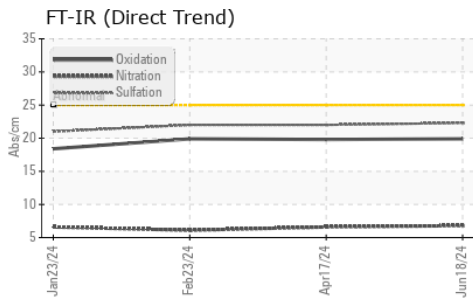
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	7	7
Potassium	ppm	ASTM D5185m	>20	3	2	<1
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	0.4	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.6	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.0	22.0
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

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.

Sodium	ppm	ASTM D5185m		3	2	3
Boron	ppm	ASTM D5185m	2.5	34	52	47
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	38	43	41
Manganese	ppm	ASTM D5185m	0.0	<1	<1	1
Magnesium	ppm	ASTM D5185m	256	526	506	521
Calcium	ppm	ASTM D5185m	2057	1686	1725	1639
Phosphorus	ppm	ASTM D5185m	935	971	1002	910
Zinc	ppm	ASTM D5185m	1223	1141	1120	1135
Sulfur	ppm	ASTM D5185m	4079	3359	3178	3092
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	19.8	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.4	10.3	10.4
Visc @ 100°C	cSt	ASTM D445	15.0	12.4	12.7	12.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0004474

Lab Number : 06214431

Unique Number : 11087295

Test Package : CONST (Additional Tests: TBN)

Received : 19 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 20 Jun 2024 - Wes Davis

520 - ASCENDUM MACHINERY INC - KNOXVILLE

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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)