



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO EC480EL 314086
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0004303	ASC0004273	---
Sample Date		Client Info		21 Jun 2024	03 Jun 2024	---
Machine Age	hrs	Client Info		5918	5918	---
Oil Age	hrs	Client Info		0	5918	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<1	13	---
Chromium	ppm	ASTM D5185m	>20	0	0	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		<1	40	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	1	3	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	<1	40	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

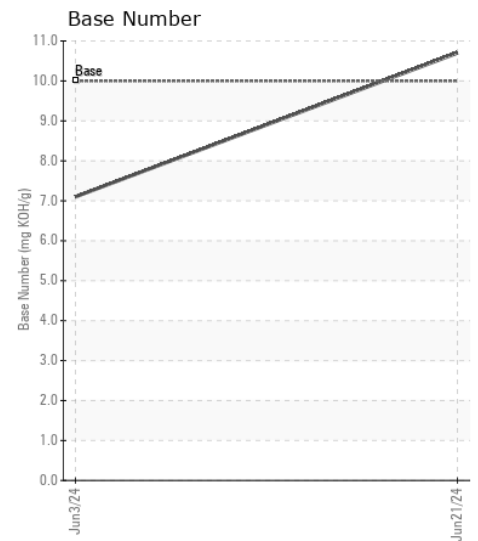
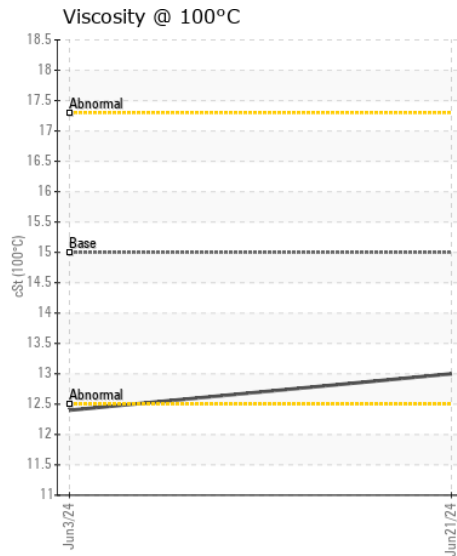
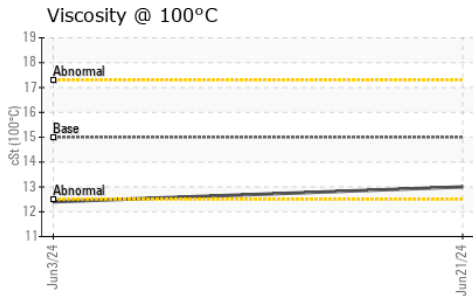
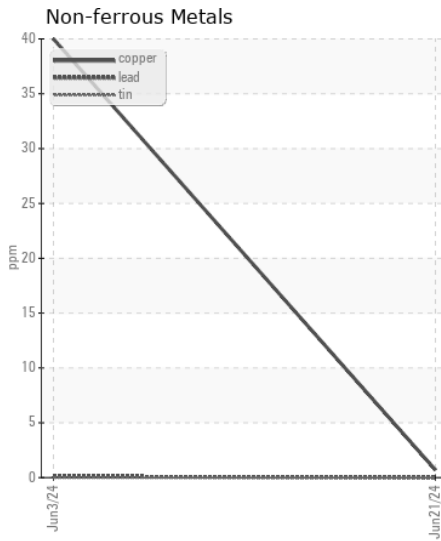
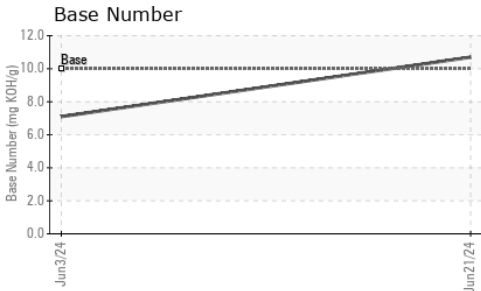
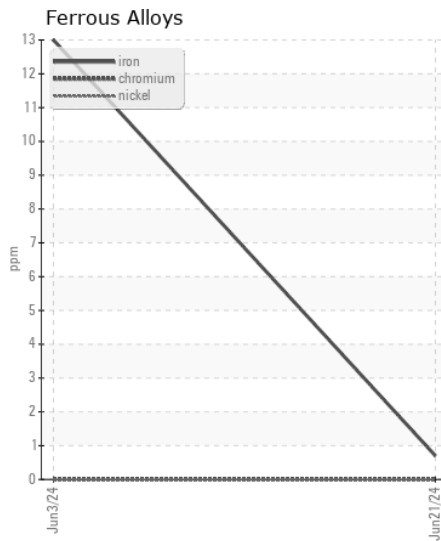
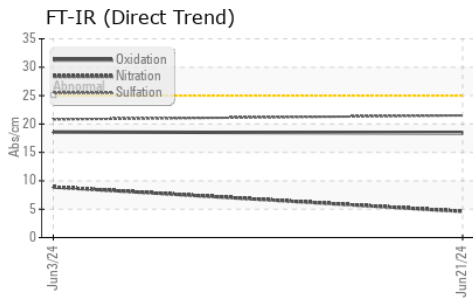
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	2	---
Potassium	ppm	ASTM D5185m	>20	4	2	---
Fuel		WC Method	>6.0	<1.0	1.3	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	4.6	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	20.8	---
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	---

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		2	31	---
Boron	ppm	ASTM D5185m	2.5	67	52	---
Barium	ppm	ASTM D5185m	0.0	0	<1	---
Molybdenum	ppm	ASTM D5185m	0.7	37	23	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	256	512	456	---
Calcium	ppm	ASTM D5185m	2057	1607	1780	---
Phosphorus	ppm	ASTM D5185m	935	898	976	---
Zinc	ppm	ASTM D5185m	1223	1107	1125	---
Sulfur	ppm	ASTM D5185m	4079	3290	3733	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	18.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.7	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.0	12.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0004303
Lab Number : 06220646
Unique Number : 11098843
Test Package : CONST (Additional Tests: TBN)

Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Wes Davis

520 - ASCENDUM MACHINERY INC - KNOXVILLE
 5730 RUTLEDGE PIKE
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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)