



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[7128 HR LANCASTER OI]

Machine Id
VOLVO ECR235EL 315392

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		VCP449169	---	---
Sample Date		Client Info		11 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	<1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

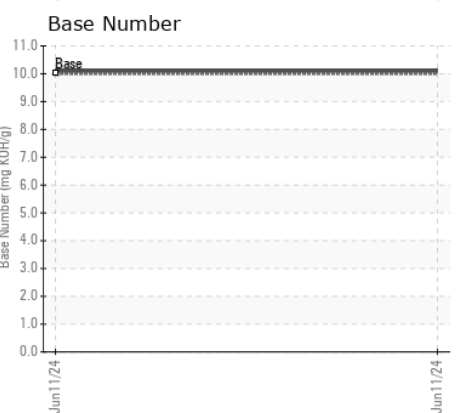
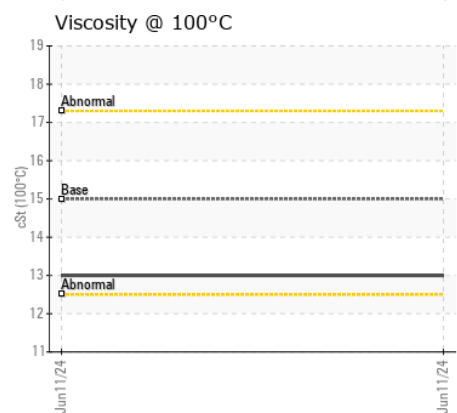
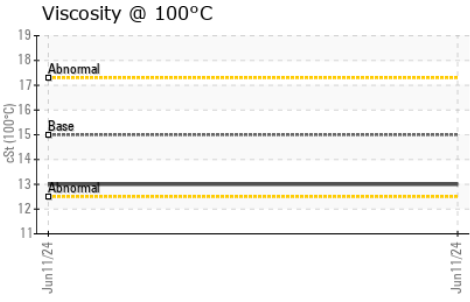
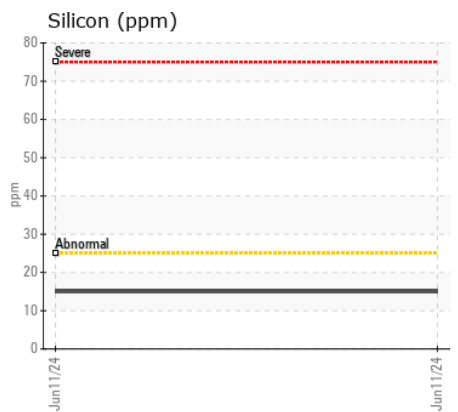
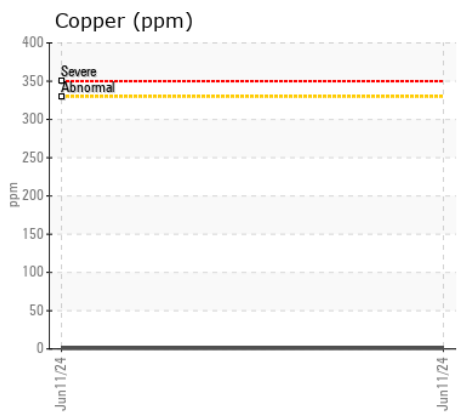
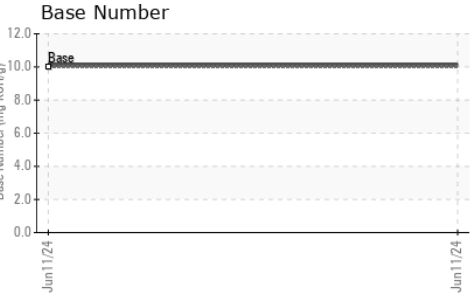
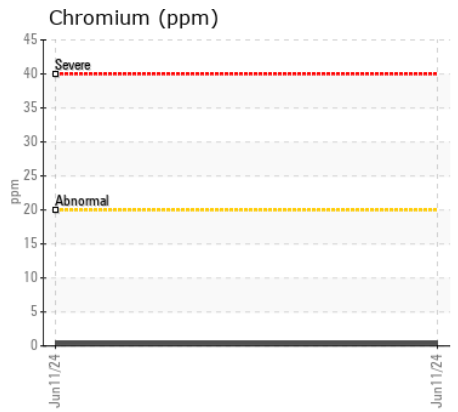
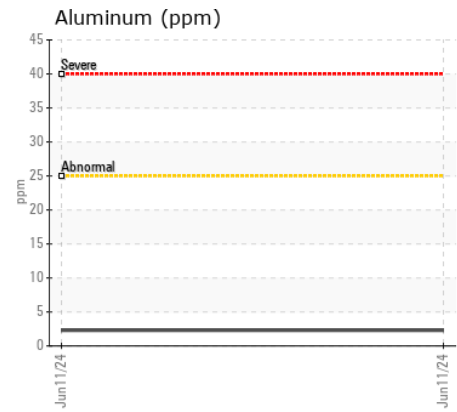
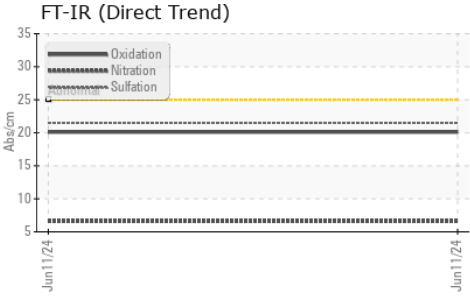
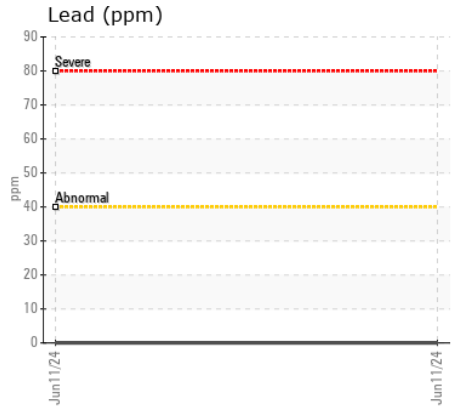
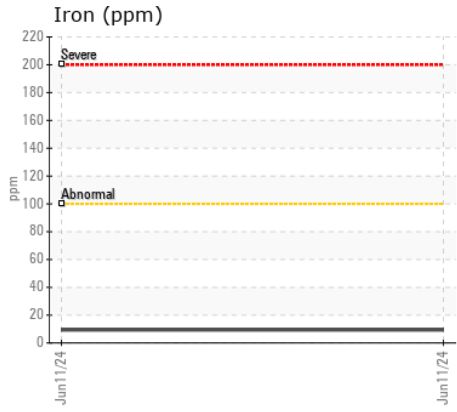
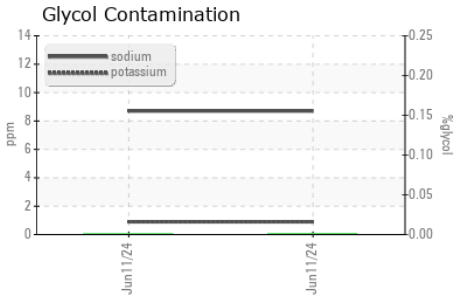
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	15	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		0.0	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	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		9	---	---
Boron	ppm	ASTM D5185m	2.5	43	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.7	43	---	---
Manganese	ppm	ASTM D5185m	0.0	<1	---	---
Magnesium	ppm	ASTM D5185m	256	478	---	---
Calcium	ppm	ASTM D5185m	2057	1600	---	---
Phosphorus	ppm	ASTM D5185m	935	887	---	---
Zinc	ppm	ASTM D5185m	1223	1133	---	---
Sulfur	ppm	ASTM D5185m	4079	3196	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.1	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.0	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP449169 **Received** : 14 Jun 2024
Lab Number : 06211012 **Tested** : 21 Jun 2024
Unique Number : 11083876 **Diagnosed** : 21 Jun 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: GLYCOL, TBN)

HIGHWAY EQUIPMENT & SUPPLY CO MAIN
 PO BOX 1957
 HARRISBURG, PA
 US 17105
 Contact: CHAD HERRON

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)

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