



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area

**BRETT AGGEN [502940]**

Machine Id

**VOLVO PENTA 4012149040**

Component

**Gasoline Engine**

Fluid

**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (4 QTS)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA053197	---	---
Sample Date		Client Info		21 May 2024	---	---
Machine Age	hrs	Client Info		324	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ATTENTION	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	42	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>40	2	---	---
Lead	ppm	ASTM D5185m	>50	4	---	---
Copper	ppm	ASTM D5185m	>155	6	---	---
Tin	ppm	ASTM D5185m	>10	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

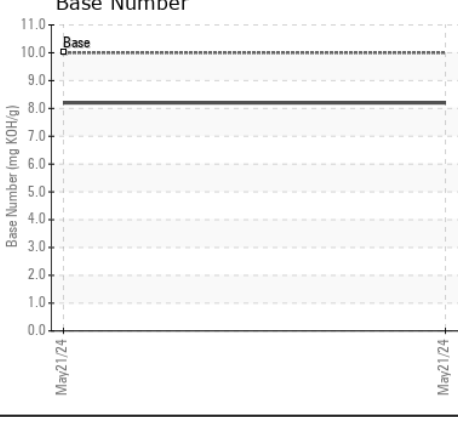
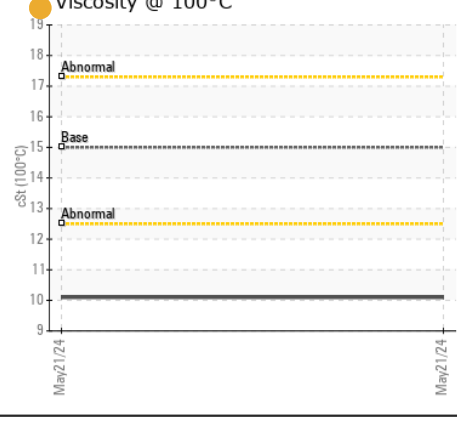
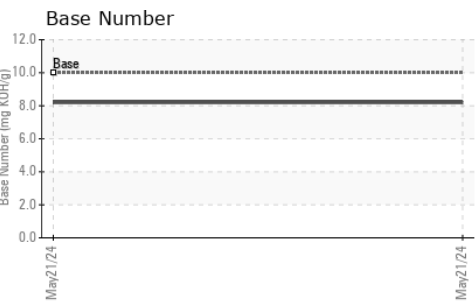
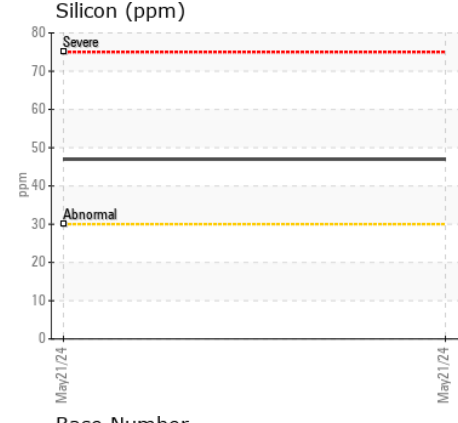
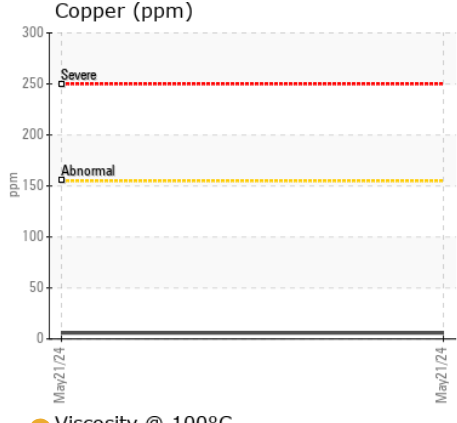
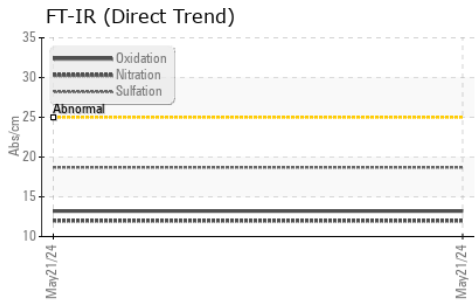
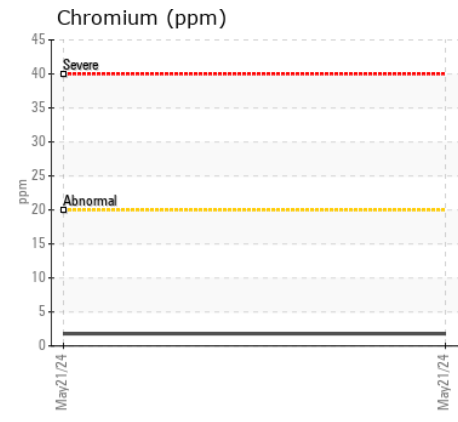
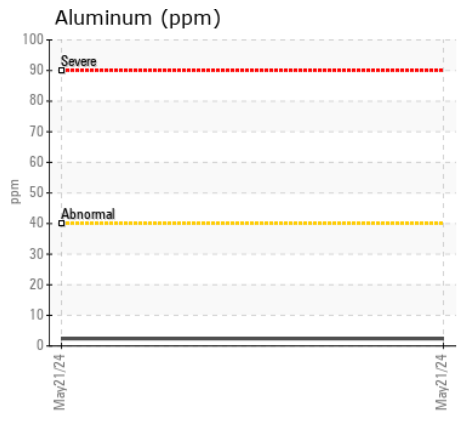
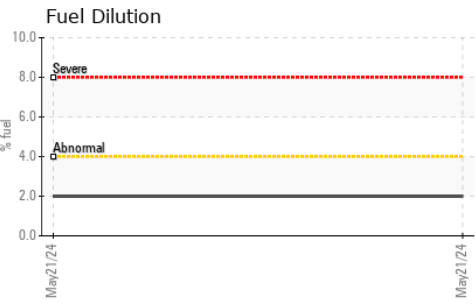
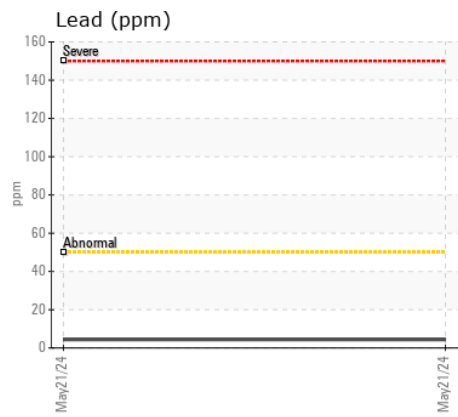
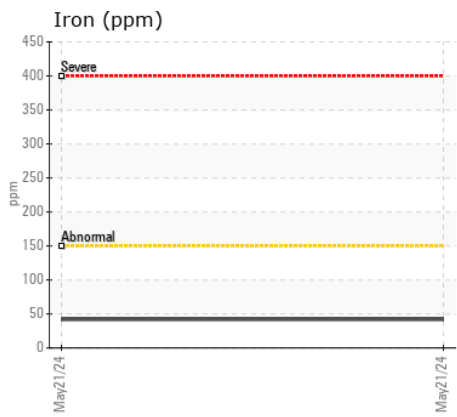
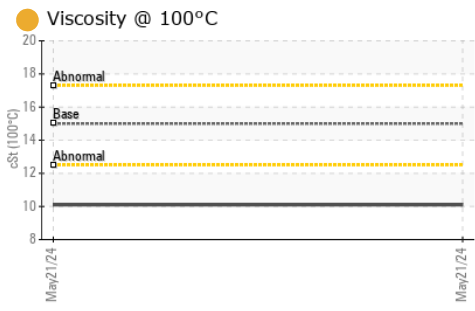
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	47	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel	%	ASTM D3524	>4.0	2.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	12.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	---	---
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	>0.1	NEG	---	---

**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.

Sodium	ppm	ASTM D5185m		6	---	---
Boron	ppm	ASTM D5185m	2.5	41	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.7	34	---	---
Manganese	ppm	ASTM D5185m	0.0	<1	---	---
Magnesium	ppm	ASTM D5185m	256	153	---	---
Calcium	ppm	ASTM D5185m	2057	1701	---	---
Phosphorus	ppm	ASTM D5185m	935	728	---	---
Zinc	ppm	ASTM D5185m	1223	851	---	---
Sulfur	ppm	ASTM D5185m	4079	2359	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.2	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	10.1	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA053197 **Received** : 30 May 2024  
**Lab Number** : 06195083 **Tested** : 04 Jun 2024  
**Unique Number** : 11057206 **Diagnosed** : 04 Jun 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

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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)