



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**NICK DENISSEN [501840]**  
 Machine Id  
**VOLVO PENTA 7008458822**  
 Component  
**Port Diesel Engine**  
 Fluid  
**VOLVO VDS-4.5 Premium Motor Oil 15W40 (8 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VPA055418</b>	VPA037083	VPA030593
Sample Date		Client Info		<b>06 Apr 2023</b>	07 Sep 2021	05 Aug 2020
Machine Age	hrs	Client Info		<b>0</b>	264	168
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>14</b>	13	12
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>2</b>	3	<1
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Lead	ppm	ASTM D5185m	>95	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>85	<b>49</b>	47	52
Tin	ppm	ASTM D5185m	>9	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

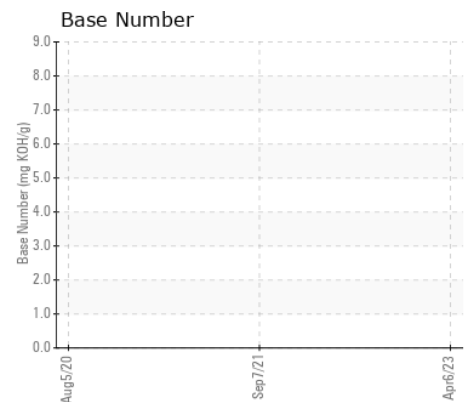
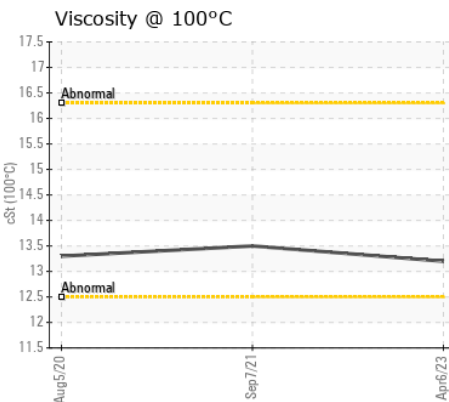
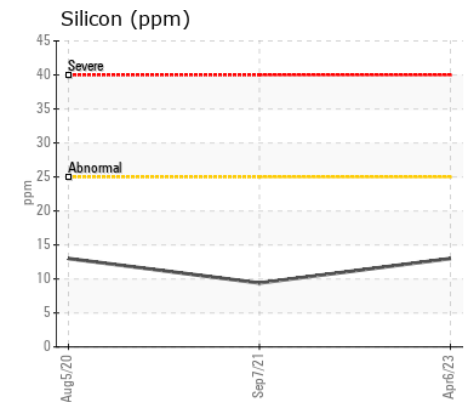
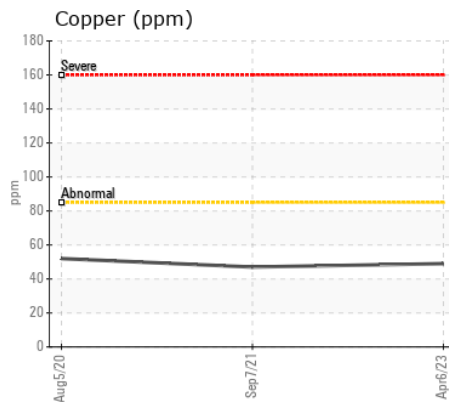
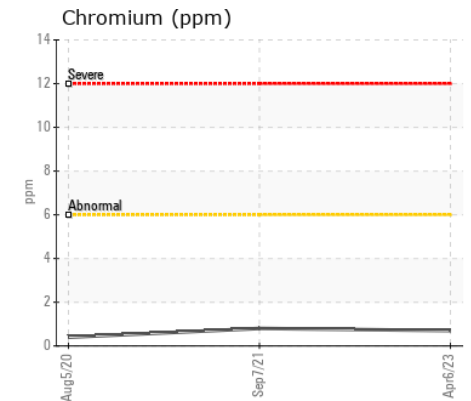
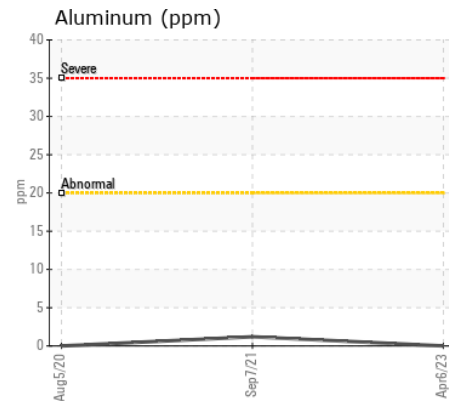
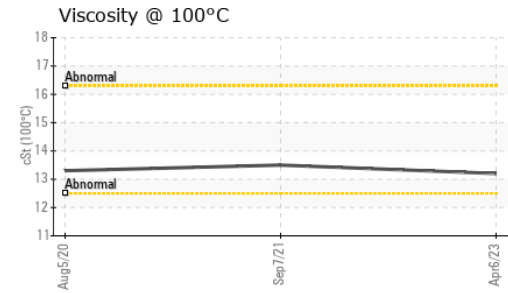
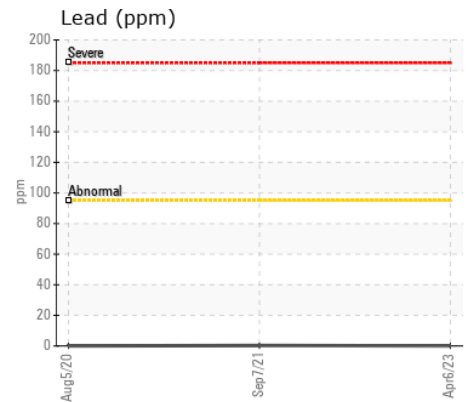
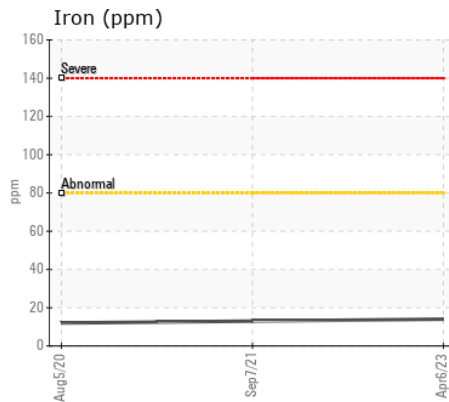
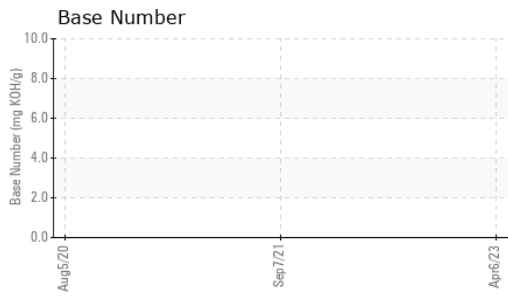
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	9	13
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	0
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.3</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	6.4	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	20.3	20.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	4	<1
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	6	9
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>56</b>	58	62
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>850</b>	988	906
Calcium	ppm	ASTM D5185m		<b>1022</b>	1133	1184
Phosphorus	ppm	ASTM D5185m		<b>965</b>	1073	1097
Zinc	ppm	ASTM D5185m		<b>1148</b>	1298	1358
Sulfur	ppm	ASTM D5185m		<b>2696</b>	2986	2922
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	15	15
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.8</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>13.2</b>	13.5	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA055418 **Received** : 12 Apr 2023  
**Lab Number** : 05818019 **Diagnosed** : 14 Apr 2023  
**Unique Number** : 10426102 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: 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)