MOB I

VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
HEALY
Machine Id
VOLVO PENTA 2006017481
Component
Port Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (4 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

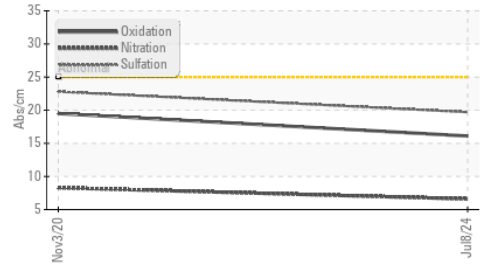
There is no indication of any contamination in the oil.

FLUID CONDITION

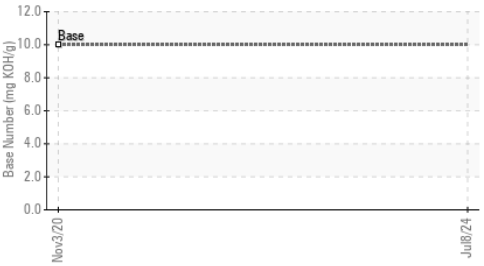
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA021409	VPA031687	---
Sample Date		Client Info		08 Jul 2024	03 Nov 2020	---
Machine Age	hrs	Client Info		0	1015	---
Oil Age	hrs	Client Info		0	60	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>80	5	9	---
Chromium	ppm	ASTM D5185m	>6	0	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	1	0	---
Lead	ppm	ASTM D5185m	>95	0	1	---
Copper	ppm	ASTM D5185m	>85	<1	3	---
Tin	ppm	ASTM D5185m	>9	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	3	2	---
Potassium	ppm	ASTM D5185m	>20	2	8	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	6.6	8.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	22.8	---
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	>0.1	NEG	NEG	---
Sodium	ppm	ASTM D5185m		3	4	---
Boron	ppm	ASTM D5185m	2.5	82	188	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.7	32	1	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	256	391	14	---
Calcium	ppm	ASTM D5185m	2057	1804	2038	---
Phosphorus	ppm	ASTM D5185m	935	1024	933	---
Zinc	ppm	ASTM D5185m	1223	1228	1106	---
Sulfur	ppm	ASTM D5185m	4079	3791	2777	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	19.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.4	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	14.1	14.8	---

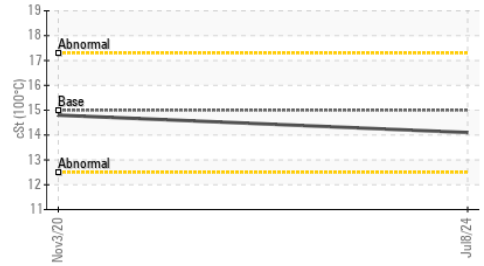
FT-IR (Direct Trend)



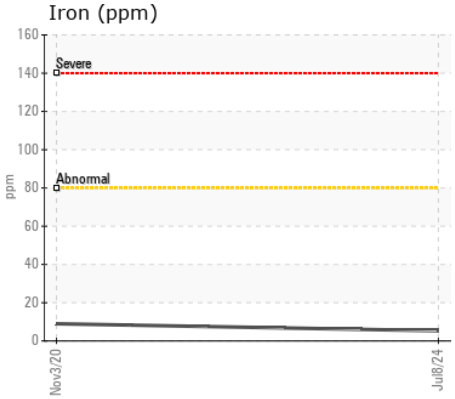
Base Number



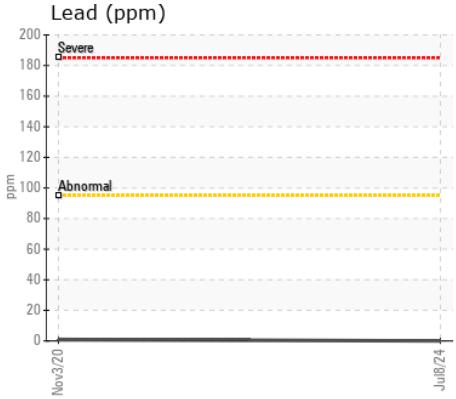
Viscosity @ 100°C



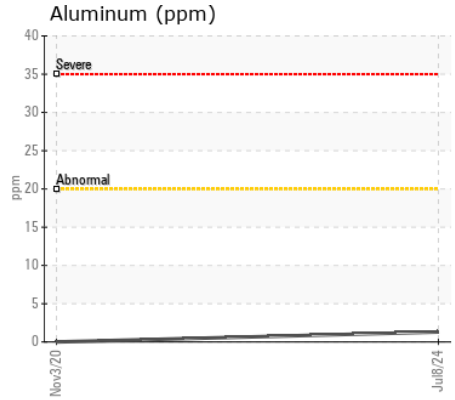
Iron (ppm)



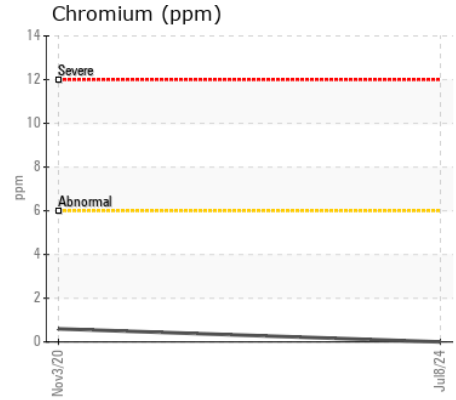
Lead (ppm)



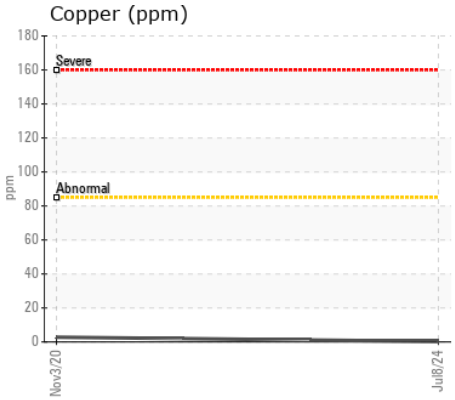
Aluminum (ppm)



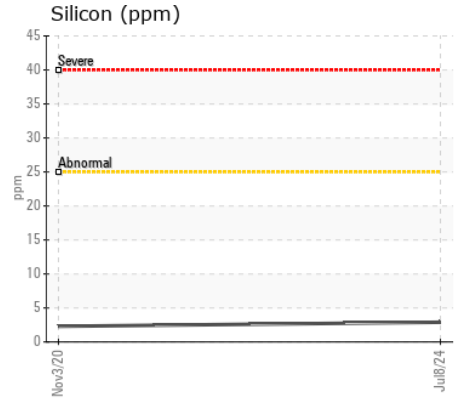
Chromium (ppm)



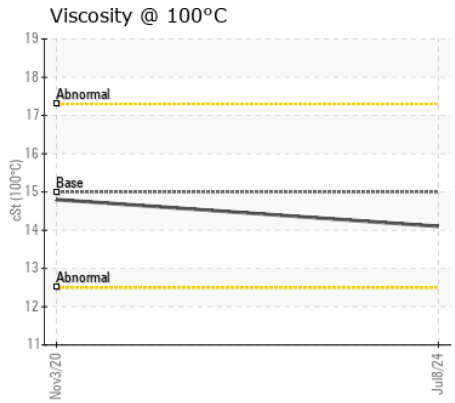
Copper (ppm)



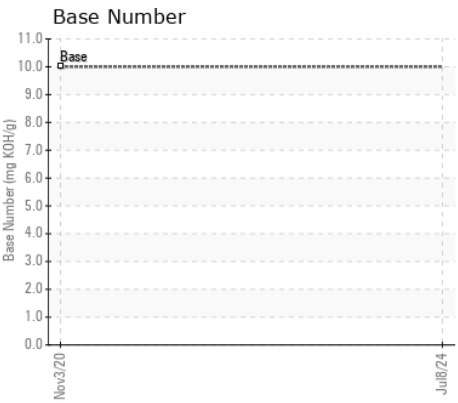
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA021409 **Received** : 16 Jul 2024
Lab Number : 06237482 **Tested** : 17 Jul 2024
Unique Number : 11126316 **Diagnosed** : 18 Jul 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

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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