MOB I

VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
PAUL PITTMAN
Machine Id
VOLVO MD2040-C PAUL PITTMAN
Component
Diesel Engine
Fluid
VOLVO PENTA SAE 15W40 (2 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

Light concentration of visible metal present. All component wear rates are normal.

CONTAMINATION

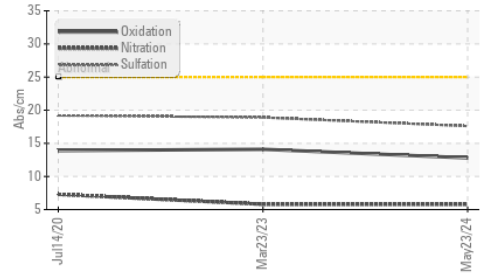
There is no indication of any contamination in the oil.

FLUID CONDITION

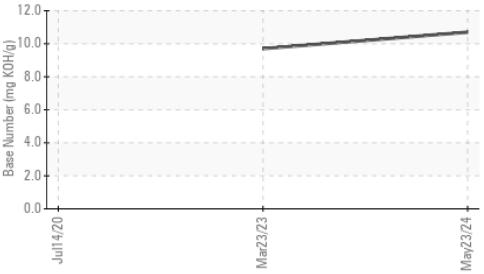
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA045809	VPA047767	VPA027611
Sample Date		Client Info		23 May 2024	23 Mar 2023	14 Jul 2020
Machine Age	hrs	Client Info		0	2500	1576
Oil Age	hrs	Client Info		50	120	150
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	4	0	11
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	2
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	1	2
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	3	4
Potassium	ppm	ASTM D5185m	>20	2	<1	4
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.8	5.8	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	18.9	19.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		3	0	2
Boron	ppm	ASTM D5185m		33	10	82
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	59	30
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		942	899	790
Calcium	ppm	ASTM D5185m		1234	1103	1230
Phosphorus	ppm	ASTM D5185m		1021	995	813
Zinc	ppm	ASTM D5185m		1181	1168	931
Sulfur	ppm	ASTM D5185m		3589	3044	2415
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	14.1	13.9
Base Number (BN)	mg KOH/g	ASTM D2896		10.7	9.7	---
Visc @ 100°C	cSt	ASTM D445		13.8	13.5	13.7

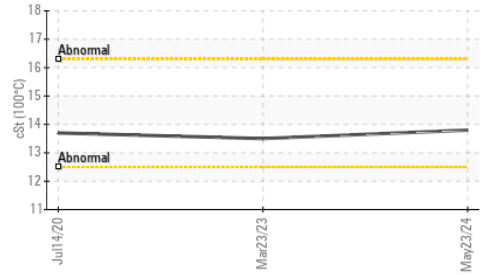
FT-IR (Direct Trend)



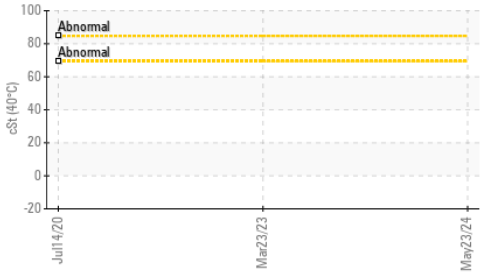
Base Number



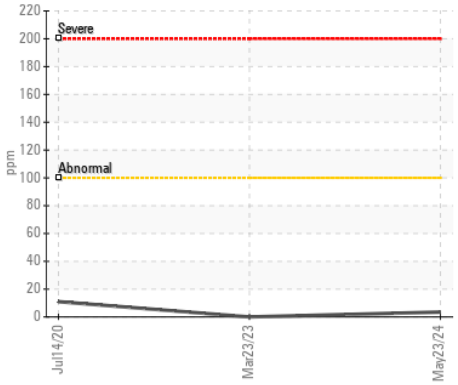
Viscosity @ 100°C



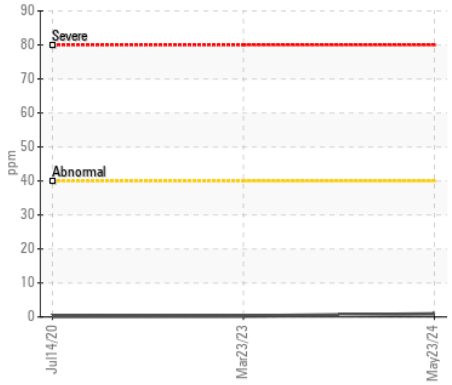
Viscosity @ 40°C



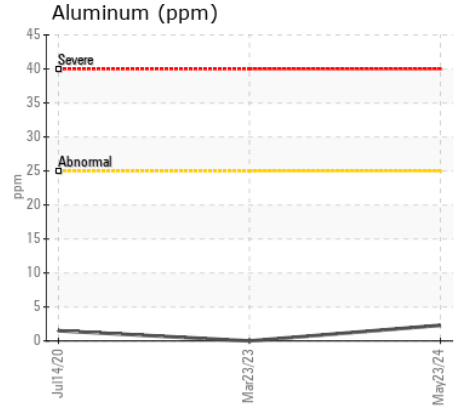
Iron (ppm)



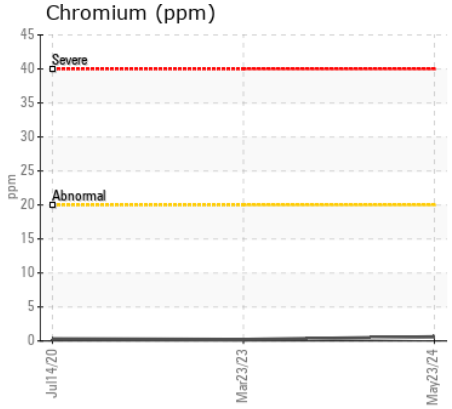
Lead (ppm)



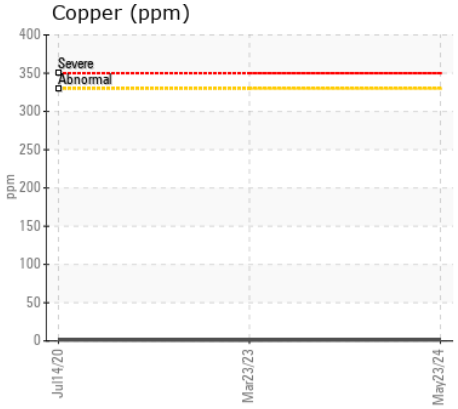
Aluminum (ppm)



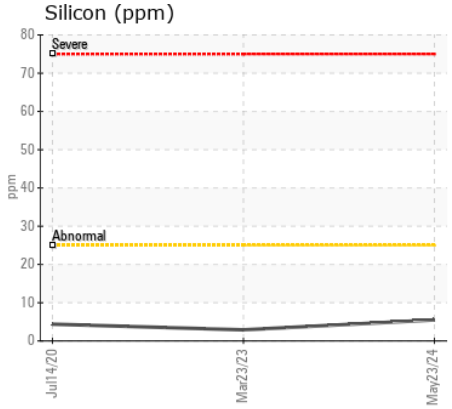
Chromium (ppm)



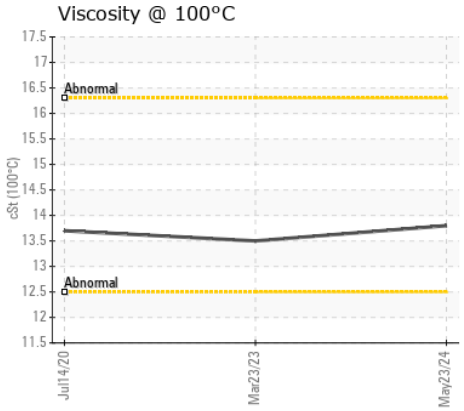
Copper (ppm)



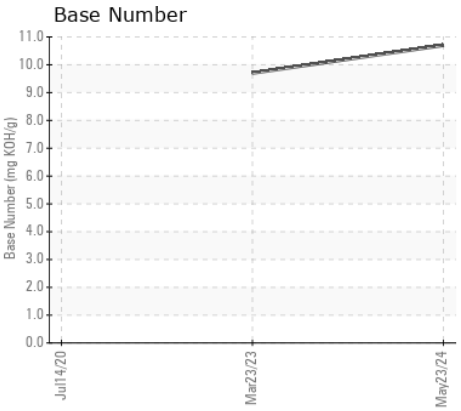
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA045809 **Received** : 23 May 2024
Lab Number : 06189879 **Tested** : 29 May 2024
Unique Number : 11046631 **Diagnosed** : 29 May 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: kv40, 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)

Northwest Diesel Power
1325 ROEDER AVE SUITE 103
BELLINGHAM, WA
US 98225
Contact: BRANDON ROBERTSON
parts@nwdieselpower.com
T:
F: