



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
PAUL JOHNSON [7710072]
 Machine Id
VOLVO PENTA A583186
 Component
Port Diesel Engine
 Fluid
VOLVO PENTA SAE 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA029135	---	---
Sample Date		Client Info		30 Jul 2020	---	---
Machine Age	hrs	Client Info		220	---	---
Oil Age	hrs	Client Info		40	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	9	---	---
Chromium	ppm	ASTM D5185m	>6	<1	---	---
Nickel	ppm	ASTM D5185m	>2	1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>95	1	---	---
Copper	ppm	ASTM D5185m	>85	4	---	---
Tin	ppm	ASTM D5185m	>9	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

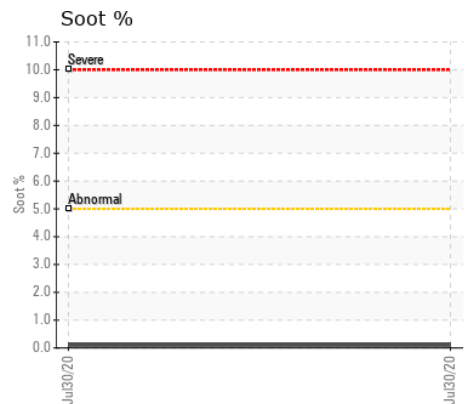
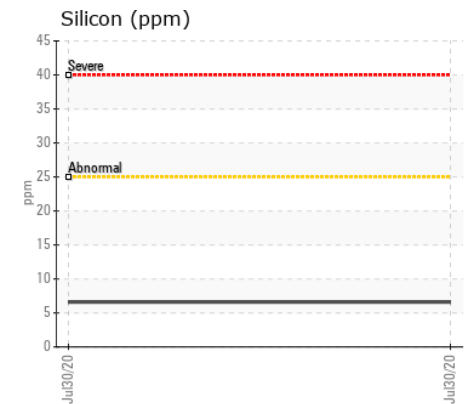
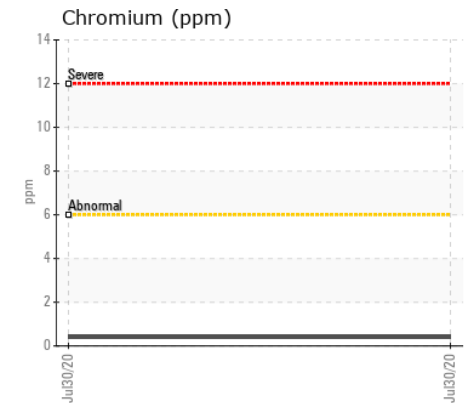
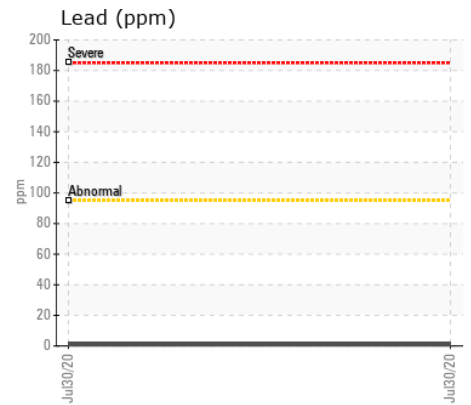
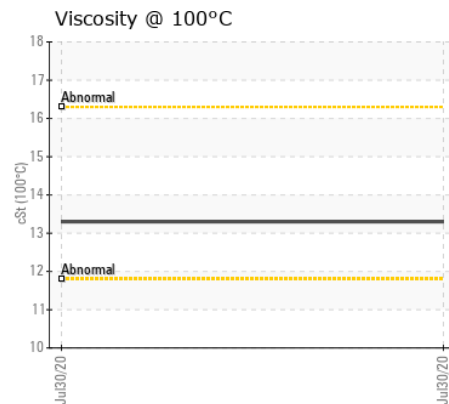
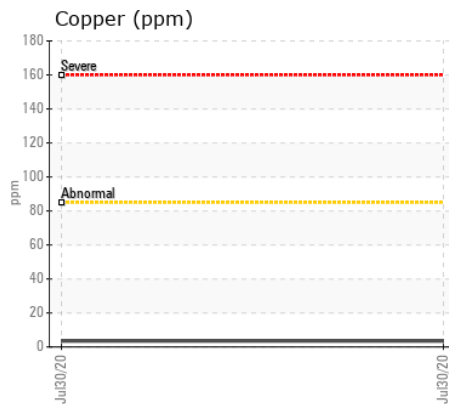
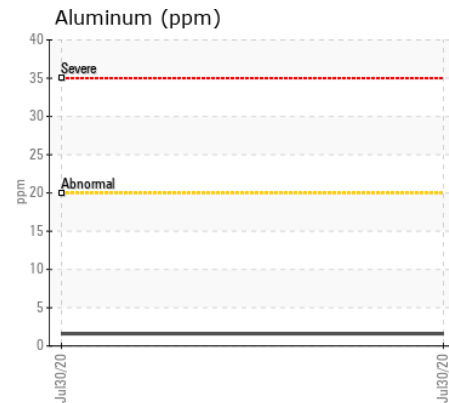
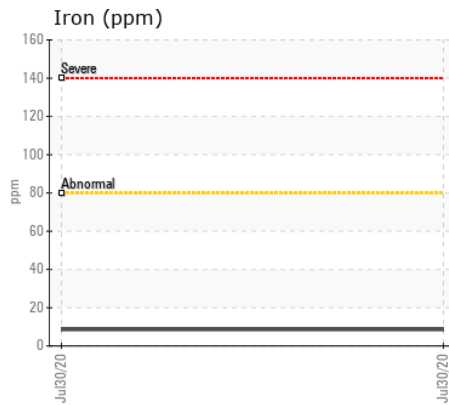
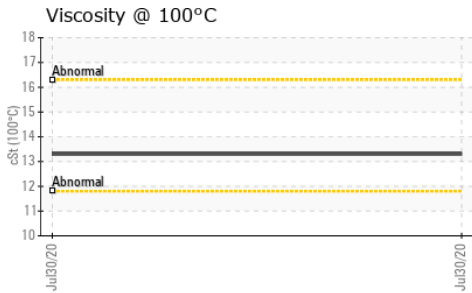
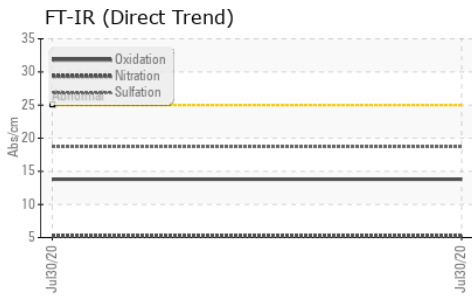
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	---	---
Potassium	ppm	ASTM D5185m	>20	8	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.2	---	---
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 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		2	---	---
Boron	ppm	ASTM D5185m		4	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		60	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		1034	---	---
Calcium	ppm	ASTM D5185m		1103	---	---
Phosphorus	ppm	ASTM D5185m		1034	---	---
Zinc	ppm	ASTM D5185m		1172	---	---
Sulfur	ppm	ASTM D5185m		2730	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	---	---
Visc @ 100°C	cSt	ASTM D445		13.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VPA029135

Lab Number : 05040100

Unique Number : 9130270

Test Package : MOB 1

Received : 10 Aug 2020

Tested : 12 Aug 2020

Diagnosed : 12 Aug 2020 - Angela Borella

Pacific Power Group - VP981534

7215 S 228th St

Kent, WA

US 98032

Contact: STEVE CAREY

scarey@pacificpowergroup.com

T: (253)740-0842

F: x:

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)