



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO PENTA A1113047
Component
Starboard Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

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		VPA036565	---	---
Sample Date		Client Info		22 Feb 2024	---	---
Machine Age	hrs	Client Info		357	---	---
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				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	30	---	---
Chromium	ppm	ASTM D5185m	>6	2	---	---
Nickel	ppm	ASTM D5185m	>2	2	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>20	16	---	---
Lead	ppm	ASTM D5185m	>95	2	---	---
Copper	ppm	ASTM D5185m	>85	4	---	---
Tin	ppm	ASTM D5185m	>9	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

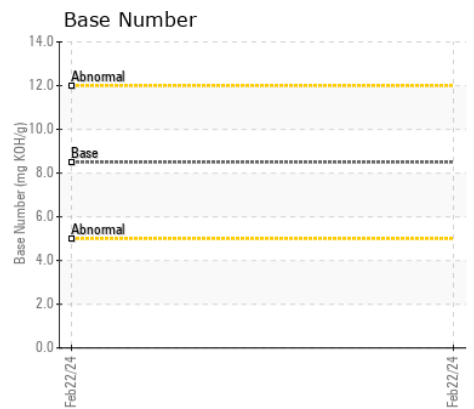
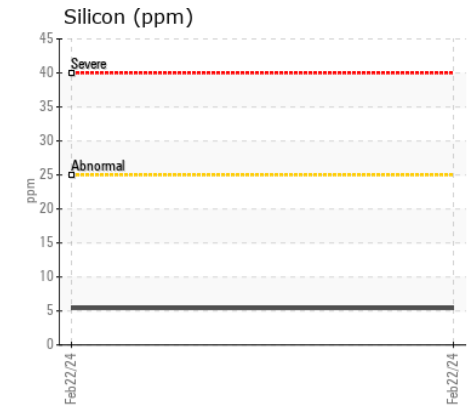
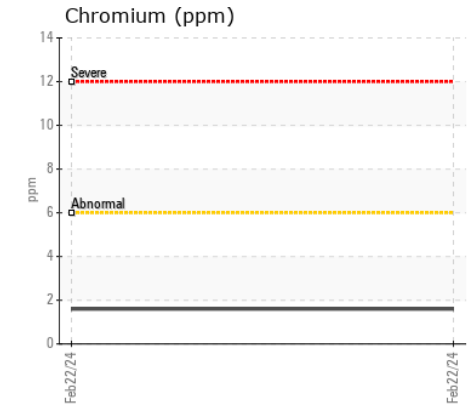
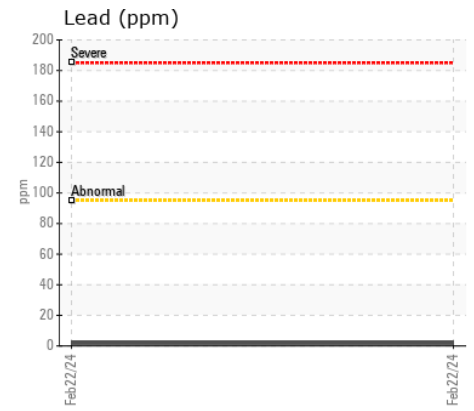
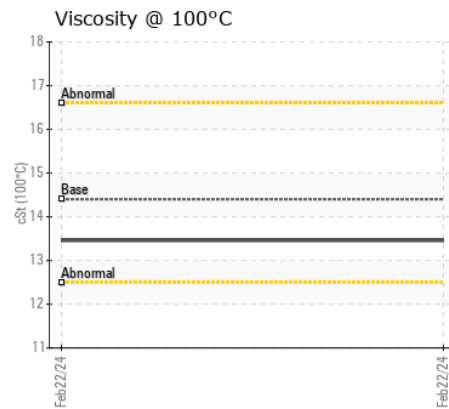
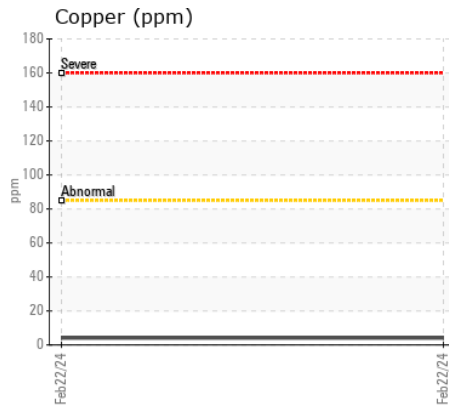
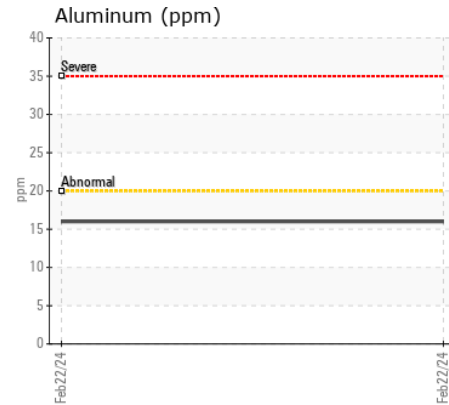
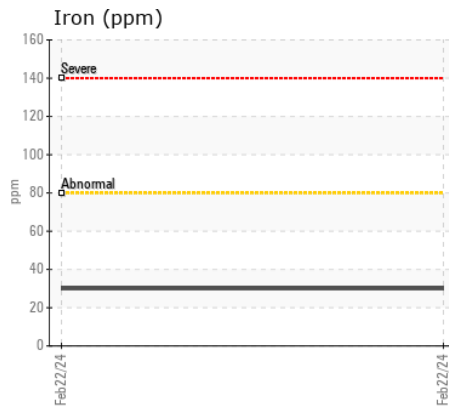
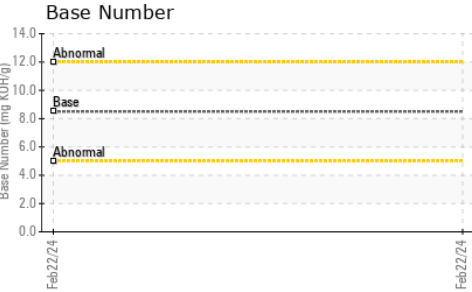
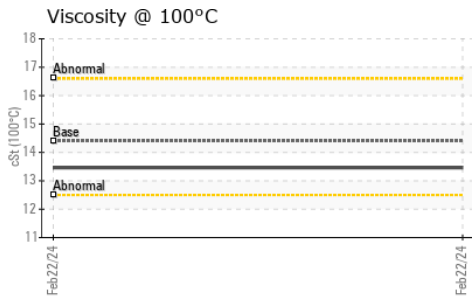
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>25	5	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	---	---
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 condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>158	1	---	---
Boron	ppm	ASTM D5185m	250	3	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	56	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	450	951	---	---
Calcium	ppm	ASTM D5185m	3000	997	---	---
Phosphorus	ppm	ASTM D5185m	1150	1057	---	---
Zinc	ppm	ASTM D5185m	1350	1281	---	---
Sulfur	ppm	ASTM D5185m	4250	3297	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.46	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA036565 **Received** : 23 Feb 2024
Lab Number : 06098854 **Tested** : 23 Feb 2024
Unique Number : 10897084 **Diagnosed** : 23 Feb 2024 - Doug Bogart
Test Package : MOB 1 (Additional Tests: TBN)

SUNCOAST DIESEL MARINE
 6341 PORTER ROAD, SUITE 6
 SARASOTA, FL
 US 34240
 Contact: SERVICE MANAGER
 info@suncoastdmi.com
 T: (941)342-0033
 F:

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)