OIL ANALYSIS REPORT

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Area MURTAGH [MURTAGH] Machine Id VOLVO PENTA A1049738

Component Starboard Diesel Engine

VOLVO PENTA SAE 15W40 (5 GAL)

VOLVOT LITTA OAL 191140 (J GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA057330		
	Sample Date		Client Info		07 May 2024		
	Machine Age	hrs	Client Info		248		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>80	8		
Metal levels are typical for a new component breaking in.	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	2		
	Tin	ppm	ASTM D5185m	>9	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
CONTAMINATION	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		- <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	4.9		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9		
	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	Sodium	ppm	ASTM D5185m		0		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		0		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		62		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		958		
	Calcium	ppm	ASTM D5185m		1087		
	Phosphorus	ppm	ASTM D5185m		1191		
	Zinc	ppm	ASTM D5185m		1263		
	Sulfur	ppm	ASTM D5185m		3790		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2		

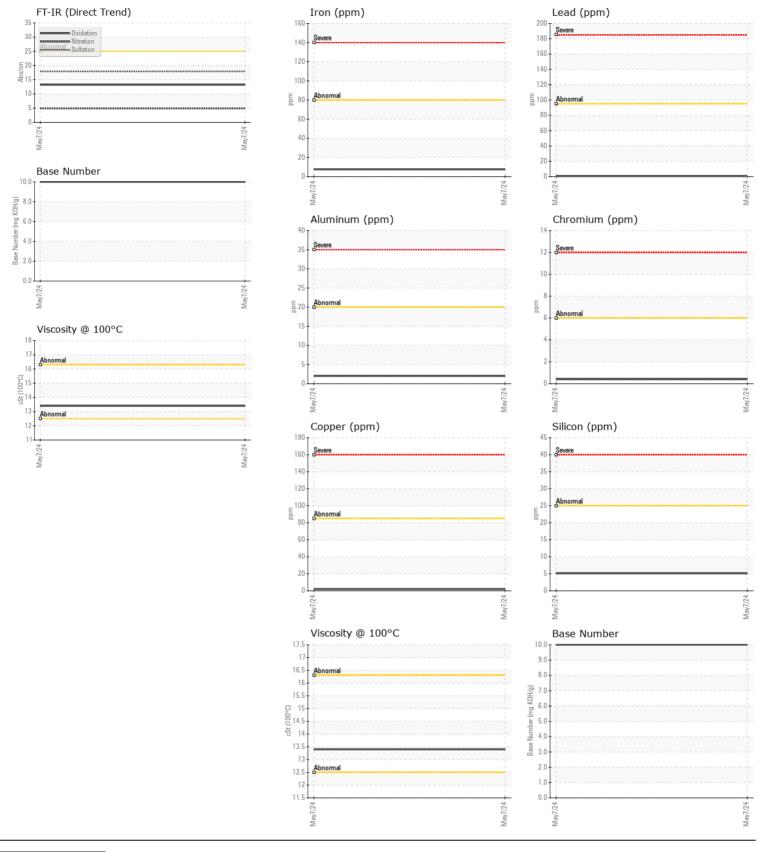
Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

10.0

13.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Suncoast Diesel Marine Inc. Sample No. Received 610 Mount Vernan St : VPA057330 : 13 May 2024 Lab Number : 06176824 Tested : 14 May 2024 OLDSMAR, FL : 14 May 2024 - Sean Felton US 34677 Unique Number : 11022877 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: MARK WARREN Certificate L2367 oldsmar@suncoastdmi.com 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. T: (813)475-5942 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (813)475-5943

Contact/Location: MARK WARREN - VP945077