WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

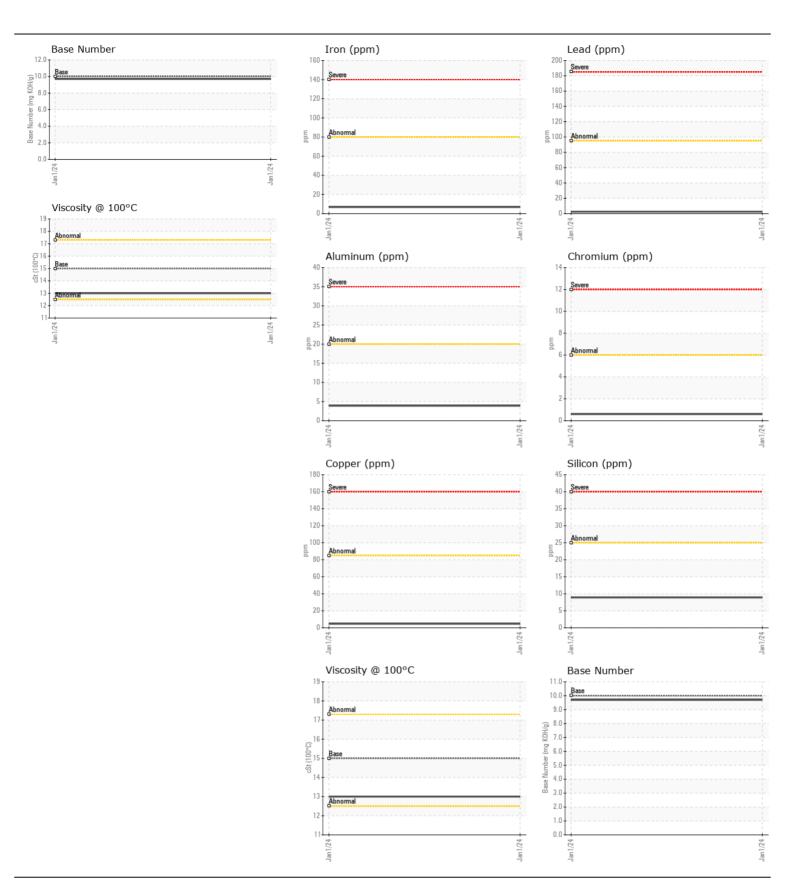
TAYLOR HARVEY [DANIEL/502595]

VOLVO PENTA A1144485

Port Diesel Engine

VOLVO III TRA DIESEL ENGINE OIL 15W40 VDS-3 (5 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
HEOOMINIENDATION	Sample Number	JOIN	Client Info		VPA059350		
Resample at the next service interval to monitor.	Sample Date		Client Info		01 Jan 2024		
	Machine Age	hrs	Client Info		264		
	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		
VEAR	Iron	ppm	ASTM D5185m		7		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		5		
	Tin	ppm	ASTM D5185m	>9	1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	9		
ONTAMINATION	Potassium	ppm	ASTM D5185m	-	2		
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	,	NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.1		
	Sulfation	Abs/.1mm	*ASTM D7415		19.4		
	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		
LUID CONDITION	Sodium	ppm	ASTM D5185m		1		
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		47		
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		64		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		912		
	Calcium	ppm	ASTM D5185m	2057	1059		
	Phosphorus	ppm	ASTM D5185m		1056		
	Zinc	ppm		1223	1209		
	Sulfur	ppm	ASTM D5185m		3126		
		Aho/1mm	*ASTM D7414	~25	14.1		
	Oxidation Base Number (BN)	Abs/.1mm mg KOH/g	ASTM D2896		9.7		





Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number**

: 10836348

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 18 Jan 2024 : VPA059350 : 06064966 Diagnosed : 22 Jan 2024 Diagnostician : Angela Borella

Test Package : MOB 1 (Additional Tests: TBN)

* - 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)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Endor Marine LLC - Coastal Marine - 152124

4300 11th Ave. NW SEATTLE, WA US 98107

Contact: WILLOW YANARELLA service@coastalmarineengine.com

T: (206)784-3703

F: (206)784-8823