

RICK MORRIS [JF] VOLVO PENTA A408296

Component Port Diesel Engine

VOLVO PENTA SAE 15W40 (6 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA052565		
	Sample Date		Client Info		09 Jul 2024		
	Machine Age	hrs	Client Info		309		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				NORMAL		
WEAR	Iron	nnm	ASTM D5185m	~80	8		
All component wear rates are normal.	Chromium	ppm ppm	ASTM D5185m		ہ <1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		1		
	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	6		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel			>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol	0/	WC Method		NEG		
	Soot %	%	*ASTM D7844	00	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.7		
	Sulfation Silt	Abs/.1mm	*ASTM D7415 *Visual	>30 NONE	16.8 NONE		
	Debris	scalar scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.1	NEG		
		Jouran	VISUUI	20.1			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		85		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		48		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		372		
	Calcium	ppm	ASTM D5185m		2000		
	Phosphorus	ppm	ASTM D5185m		785		
	Zinc	ppm	ASTM D5185m		968		
	Sulfur	ppm	ASTM D5185m		3022		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4		

Base Number (BN) mg KOH/g ASTM D2896

Visc @ 100°C cSt

ASTM D445

10.3

14.2



TOTAL MARINE OF MARYLAND INC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VPA052565 Received 106 WELLS COVE ROAD SUITE 2 : 10 Jul 2024 Lab Number : 06232066 Tested GRASONVILLE, MD : 10 Jul 2024 Diagnosed Unique Number : 11115559 : 11 Jul 2024 - Don Baldridge US 21638 Test Package : MOB 1 (Additional Tests: TBN) Contact: JAMIE FLAHERTY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jflaherty@totalmarine.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (410)604-6000 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: JAMIE FLAHERTY - VP1130693 Page 2 of 2