WEAR CONTAMINATION FLUID CONDITION

NORMAL ABNORMAL NORMAL

STORMER Machine Id

VOLVO PENTA 3940014501

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		VPA052142	VPA051039	VPA04122
	Sample Date		Client Info		21 Jun 2024	22 Jan 2024	19 Dec 202
	Machine Age	hrs	Client Info		1200	1293	347
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR	PQ		ASTM D8184		38	36	14
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>275	115	229	85
	Chromium	ppm	ASTM D5185m	>4	1	1	<1
	Nickel	ppm	ASTM D5185m	>4	<1	4	<1
	Titanium	ppm	ASTM D5185m	>3	0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>10	2	3	1
	Lead	ppm	ASTM D5185m	>4	0	0	0
	Copper	ppm	ASTM D5185m		6	22	7
	Tin	ppm	ASTM D5185m	>3	0	<1	0
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>35	9	16	7
There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.	Potassium	ppm	ASTM D5185m	>20	2	2	0
	Water	%	ASTM D6304	>0.2	0.269	△ 0.605	
	ppm Water	ppm	ASTM D6304		<u>^</u> 2690	▲ 6050	
	Silt	scalar	*Visual	NONE	MODER	▲ HEAVY	NONE
	Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance			NORML	NORML	MILKY	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	0.2% 	0.2%	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		16	38	2
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		250	60	323
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		<1	0	<1
	Manganese	ppm	ASTM D5185m		2	4	1
	Magnesium	ppm	ASTM D5185m		3	6	0
	Calaium	10 10 100	ASTM D5185m		22	16	17
	Calcium	ppm	ASTIVI DOTOSIII		22	10	17

Phosphorus

Zinc

Sulfur

ASTM D5185m

ASTM D5185m

ASTM D5185m

ppm

ppm

ppm

434

18034

14

1387

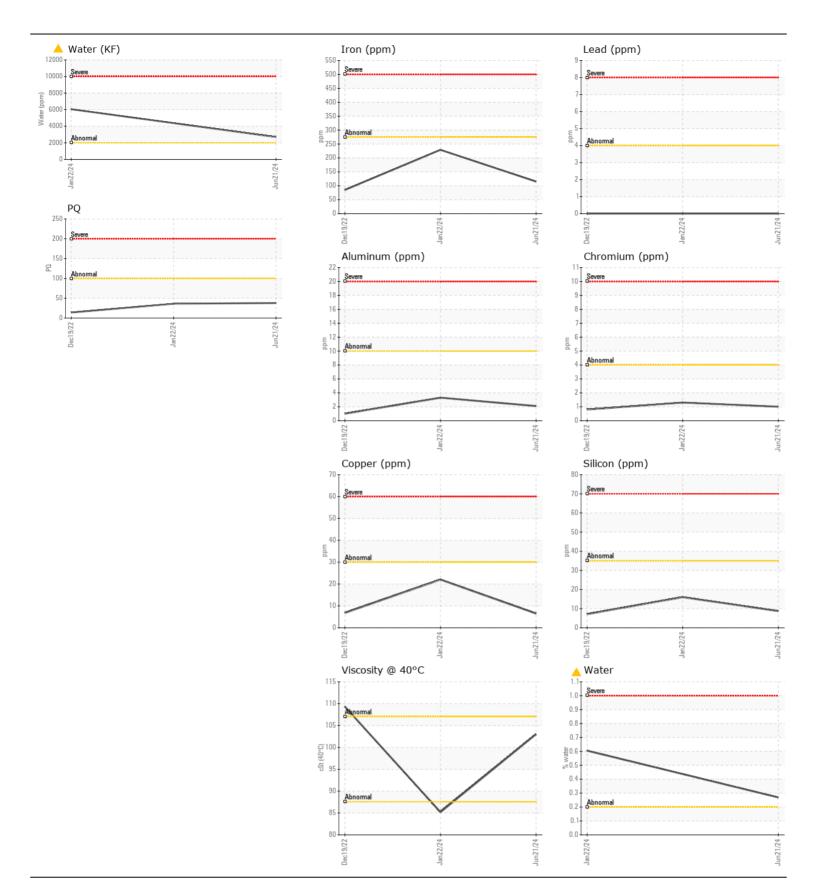
27886

39

4

1406

27422







Certificate L2367

Report Id: VP1298996 [WUSCAR] 06220434 (Generated: 06/27/2024 13:07:37) Rev: 1

Laboratory Sample No.

Lab Number : 06220434 Unique Number : 11098631

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VPA052142

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

Received **Tested**

: 25 Jun 2024 Diagnosed Test Package: MOB 1 (Additional Tests: KF, PQ)

: 26 Jun 2024 : 27 Jun 2024 - Angela Borella **FULL KEEL MARINE SERVICES** 314 LEGION AVE ANNAPOLIS, MD

US 21401

T: (410)507-3542

Contact: Service Manager FULLKEELMARINESERIVES@GMAIL.COM

* - 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)

F: