

NADINE URCIUOLI [BEN KOPF] Machine Id VOLVO PENTA 3950006145 Port IPS Fluid VOLVO PENTA GL-5 SAE 75W90 (4 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

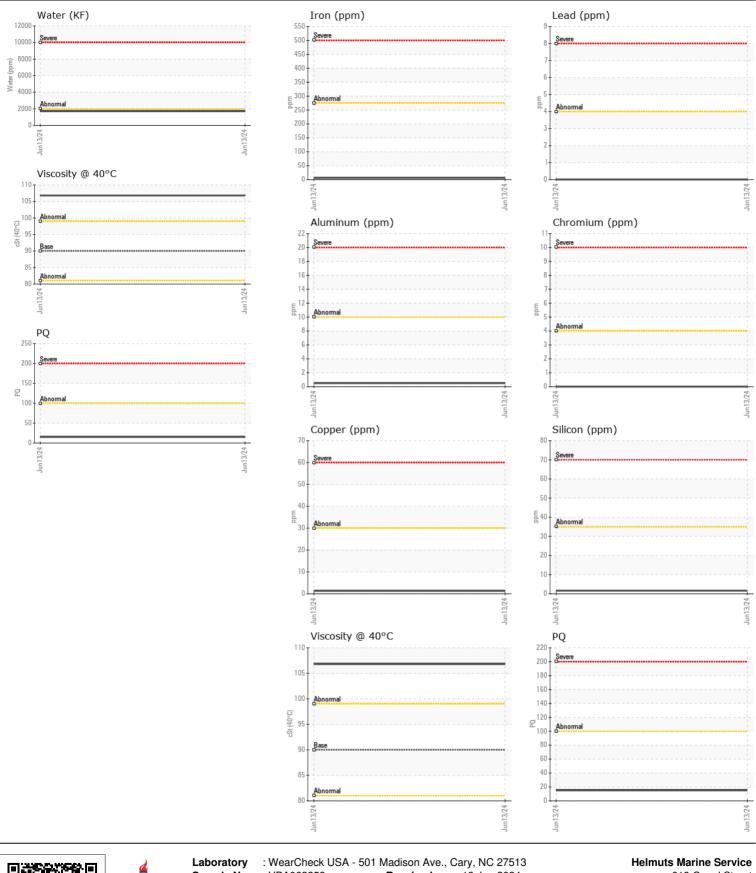
There is no indication of any contamination in the oil.

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA062258		
Sample Date		Client Info		13 Jun 2024		
Machine Age	hrs	Client Info		489		
Oil Age	hrs	Client Info		489		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Not Changd		
Sample Status				NORMAL		
DO				4 5		
PQ		ASTM D8184	075	15		
Iron	ppm	ASTM D5185m	>275	6		
Chromium	ppm	ASTM D5185m	>4	0		
Nickel Titanium	ppm	ASTM D5185m ASTM D5185m	>4	<1		
Silver	ppm		>3	0		
Aluminum	ppm	ASTM D5185m ASTM D5185m	>10	-		
Lead	ppm	ASTM D5185m ASTM D5185m	>10 >4	<1 0		
	ppm			1		
Copper	ppm	ASTM D5185m	>30	ו <1		
Tin Vanadium	ppm	ASTM D5185m ASTM D5185m	>3	<1 0		
White Metal	ppm scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
		visuai				
Silicon	ppm	ASTM D5185m	>35	2		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	>0.2	0.170		
ppm Water	ppm	ASTM D6304	>2000	1700		
Silt	scalar	*\/:	NONE			
		*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Debris Sand/Dirt	scalar scalar					
		*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual *Visual *Visual *Visual	NONE NONE	NONE NONE		
Sand/Dirt Appearance	scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML		
Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NORE NORML 0.2%		
Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NONE NORML 0.2% 3		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1 6		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1 6 <1		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1 6 <1 6 <1 1520		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1 6 <1 6 <1 1520 3		
Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML 0.2% 3 300 0 0 <1 6 <1 6 <1 1520		

Contact/Location. NADINE URCIUOLI - VP152741



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **Helmuts Marine Service** Sample No. Received 619 Canal Street : VPA062258 : 19 Jun 2024 : 06215242 Lab Number Tested SAN RAFAEL, CA : 19 Jun 2024 Unique Number : 11088106 : 19 Jun 2024 - Doug Bogart US 94901-3545 Diagnosed Test Package : MOB 1 (Additional Tests: KF, PQ) Contact: NADINE URCIUOLI Certificate L2367 SERVICE@HELMUTSMARINE.COM To discuss this sample report, contact Customer Service at 1-800-237-1369. T: x: * - 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: x: