**WEAR CONTAMINATION FLUID CONDITION**  **ABNORMAL NORMAL NORMAL** 

GRIFF WILSON [6778]

## VOLVO PENTA HS3AE-C 51220294490

**Inboard Gearbox** 

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.	Sample Number		Client Info		VPA049025		
	Sample Date		Client Info		15 Jul 2024		
	Machine Age	hrs	Client Info		203		
	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				ABNORMAL		
WEAR	PQ		ASTM D8184		26		
Clutch and/or bushing/bearing wear is indicated.	Iron	ppm	ASTM D5185m	>150	28		
	Chromium	ppm	ASTM D5185m	>10	<1		
	Nickel	ppm	ASTM D5185m	>10	0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m	>5	4		
	Lead	ppm	ASTM D5185m	>65	<u> </u>		
	Copper	ppm	ASTM D5185m	>80	<b>^</b> 22		
	Tin	ppm	ASTM D5185m	>8	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION  There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>20	3		
	Potassium	ppm	ASTM D5185m	>20	2		
	Water		WC Method	>0.2	NEG		
	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	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		66		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		4		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		11		
	Calcium	ppm	ASTM D5185m		93		
	Phosphorus	ppm	ASTM D5185m		187		
	Zinc	ppm	ASTM D5185m		69		
	Sulfur	ppm	ASTM D5185m		1540		

Visc @ 40°C

cSt

ASTM D445





Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

: VPA049025 Lab Number : 06240630 Unique Number : 11129464

Test Package: MOB 1 (Additional Tests: PQ)

Received : 18 Jul 2024 **Tested** : 19 Jul 2024 Diagnosed

: 19 Jul 2024 - Doug Bogart

**Northwest Diesel Power** 1325 ROEDER AVE SUITE 103 BELLINGHAM, WA US 98225

Contact: BRANDON ROBERTSON parts@nwdieselpower.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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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