WEAR CONTAMINATION FLUID CONDITION

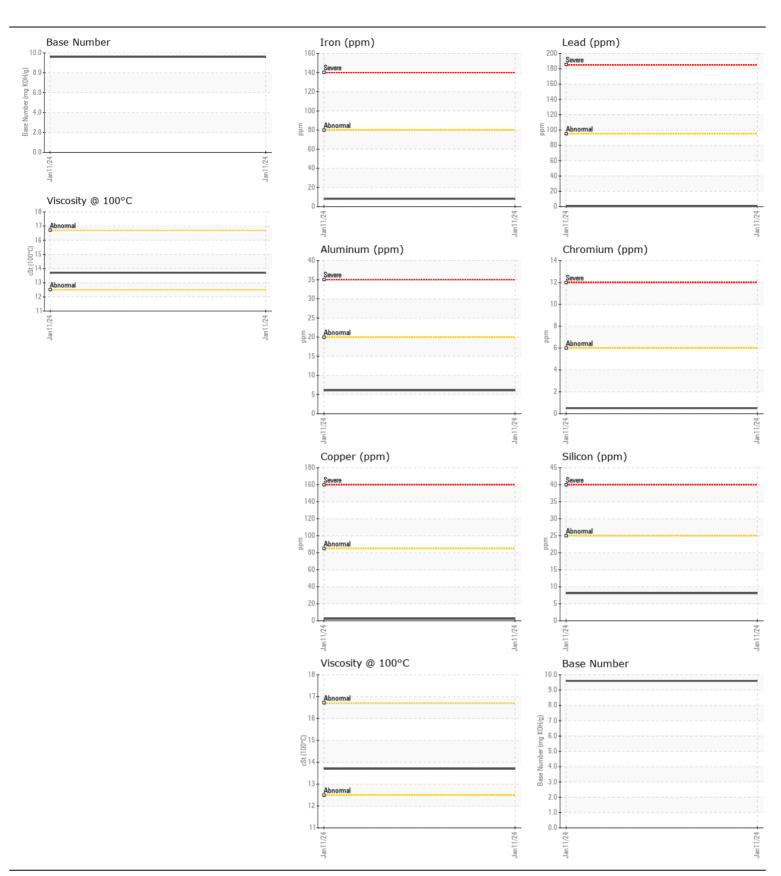
NORMAL NORMAL NORMAL

Aroa

GARY MERNELSTREN [6506] Machine Id VOLVO PENTA D6-340D-G A1099846

Port Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number	UCIVI	Client Info	LIIIIUAUII	VPA060165		
Resample at the next service interval to monitor.	Sample Date		Client Info		11 Jan 2024		
	Machine Age	hrs	Client Info		180		
	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		
VEAR	Iron	ppm	ASTM D5185m	\80	8		
WEAR	Chromium	ppm	ASTM D5185m		<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		6		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	le le	WC Method		- <1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	4.9		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1		
The DNI was the indicates that there is suitable all all risks we reciving in the	Boron	ppm	ASTM D5185m		319		
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.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		109		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		663		
	Calcium	ppm	ASTM D5185m		1507		
	Phosphorus	ppm	ASTM D5185m		718		
	Zinc	ppm	ASTM D5185m		862		
	Sulfur	ppm	ASTM D5185m		2581		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6		
	Base Number (BN)	mg KOH/g	ASTM D2896		9.6		
	Visc @ 100°C	cSt	ASTM D445		13.7		







Laboratory Sample No. Lab Number **Unique Number**

: VPA060165 : 06061830 : 10833212

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

Recieved Diagnosed

: 16 Jan 2024 : 18 Jan 2024 Diagnostician : Don Baldridge

Contact: BRANDON ROBERTSON parts@nwdieselpower.com

Northwest Diesel Power

BELLINGHAM, WA

1325 ROEDER AVE SUITE 103

Test Package : MOB 1 (Additional Tests: TBN) 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) US 98225

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