

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

TODD LARSON [1610088] Machine Id VOLVO PENTA A478421

Component Center Diesel Engine

{not provided} (--- GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA054935		
Resample at the next service interval to monitor.	Sample Date		Client Info		16 Apr 2024		
	Machine Age	hrs	Client Info		315		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
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WEAR	Iron	ppm	ASTM D5185m		26		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>6	<1		
	Nickel	ppm	ASTM D5185m	>2	0		
	Titanium	ppm	ASTM D5185m	>2	0		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>20	3		
	Lead	ppm	ASTM D5185m	>95	0		
	Copper	ppm	ASTM D5185m	>85	4		
	Tin	ppm	ASTM D5185m	>9	3		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	0.11			0.5	•		
CONTAMINATION	Silicon	ppm	ASTM D5185m		9		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		<1		
	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	5.8		
	Sulfation	Abs/.1mm			20.4		
	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		21		
I LOID CONDITION	Boron	ppm	ASTM D5185m		257		
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0		
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		102		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		806		
	Calcium	ppm	ASTM D5185m		1338		
	Phosphorus	ppm	ASTM D5185m		792		
	Zinc	ppm	ASTM D5185m		928		
	Sulfur	ppm	ASTM D5185m		3086		
	Oxidation		*ASTM D310311	>25	14.1		
	D			~	1-7.1		

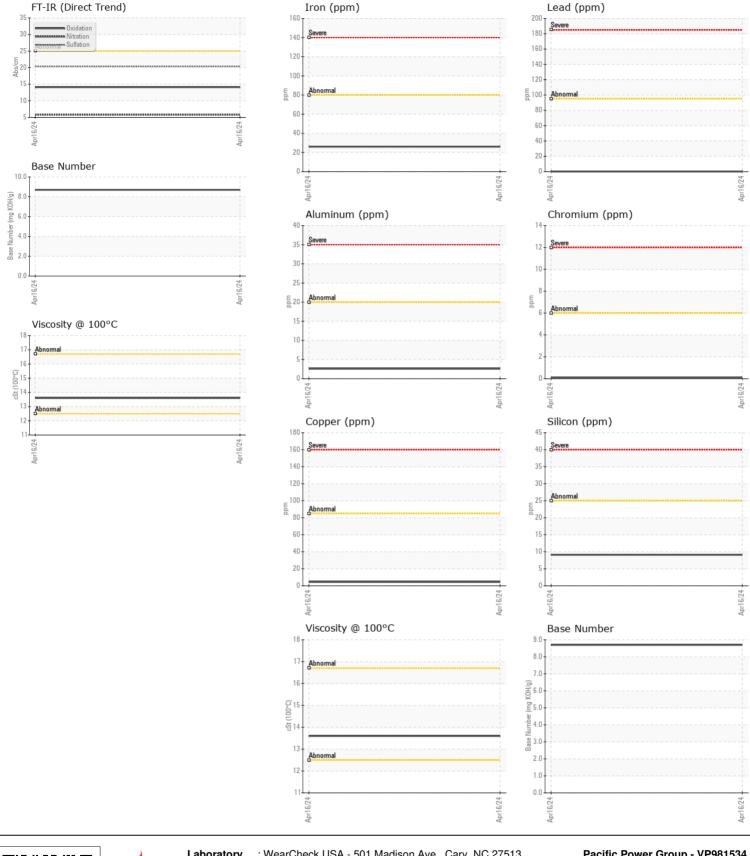
Base Number (BN) mg KOH/g ASTM D2896

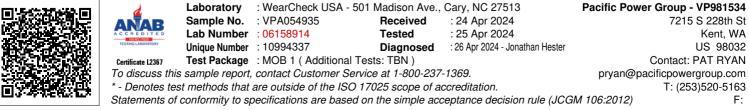
ASTM D445

Visc @ 100°C cSt

8.7

13.6





Contact/Location: PAT RYAN - VP99031103 Page 2 of 2