

## Machine Id 5200212 mponer **Diesel Engine** VALVOLINE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0808658		
	Sample Date		Client Info		05 Feb 2024		
	Machine Age	hrs	Client Info		934		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	32		
	Chromium	ppm	ASTM D5185m	>20	1		
	Nickel	ppm	ASTM D5185m	>4	2		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	2		
	Lead	ppm	ASTM D5185m	>40	10		
	Copper	ppm	ASTM D5185m	>330	3		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION					•		
	Silicon	ppm	ASTM D5185m	-	8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	13.4		
	Sulfation	Abs/.1mm	*ASTM D7415		22.4		
	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	>0.2	NEG		
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium	nnm	ASTM D5185m		3		
	Boron	ppm	ASTM D5185m	30	28		
	Barium	ppm					
	Molybdenum	ppm	ASTM D5185m ASTM D5185m		0 53		
		ppm	ASTM D5185m				
	Manganese Magnesium	ppm			<1 746		
	0	ppm	ASTM D5185m		746		
	Calcium	ppm	ASTM D5185m		1397		
	Phosphorus	ppm	ASTM D5185m		816		
	Zinc	ppm	ASTM D5185m		1038		
	Sulfur	ppm	ASTM D5185m		2866		
	Oxidation	Abs/.1mm	*ASTM D7414		22.9		
	Base Number (BN)	ing KOH/g	ASTM D2896	0.9	8.3		

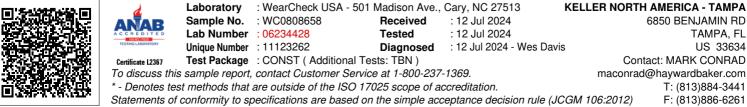
Visc @ 100°C cSt

ASTM D445 13.6

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12.5





Contact/Location: MARK CONRAD - HAYTAM Page 2 of 2