

OIL ANALYSIS REPORT



Machine Id **2286** Component **Natural Gas Engine** Fluid **VALVOLINE PREMIUM BLUE 9200 15W40 (--- GAL)**

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

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.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0937270		
Sample Date		Client Info		12 Jun 2024		
Machine Age	kms	Client Info		8528		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	56		
Chromium	ppm	ASTM D5185(m)	>4	<1		
Nickel	ppm	ASTM D5185(m)	>2	1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>9	4		
Lead	ppm	ASTM D5185(m)	>30	<1		
Copper	ppm	ASTM D5185(m)	>35	18		
Tin	ppm	ASTM D5185(m)	>4	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		20		
Barium	ppm	ASTM D5185(m)		4		
Molybdenum	ppm	ASTM D5185(m)		52		
Manganese	ppm	ASTM D5185(m)		13		
Magnesium	ppm	ASTM D5185(m)		748		
Calcium	ppm	ASTM D5185(m)		1117		
Phosphorus	ppm	ASTM D5185(m)		643		
Zinc	ppm	ASTM D5185(m)		845		
Sulfur	ppm	ASTM D5185(m)		1867		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	42		
Sodium	ppm	ASTM D5185(m)		5		
Potassium	ppm	ASTM D5185(m)	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0		
	Abs/cm	ASTM D7624*	>20	11.6		
Nitration						
Nitration Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6		
		ASTM D7415*				
Sulfation			>30 limit/base >25	21.6 current 19.6	 history1	 history2



Abnormal

3

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FT-IR (Direct Trend)

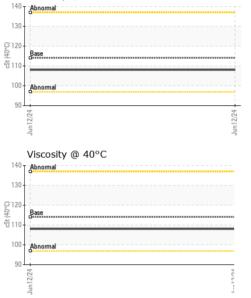
Oxidation

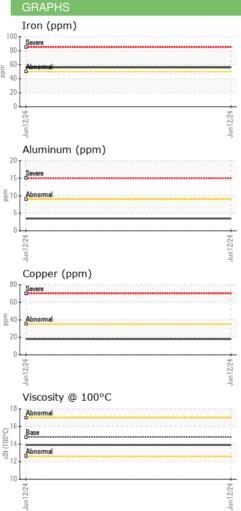
Sulfation

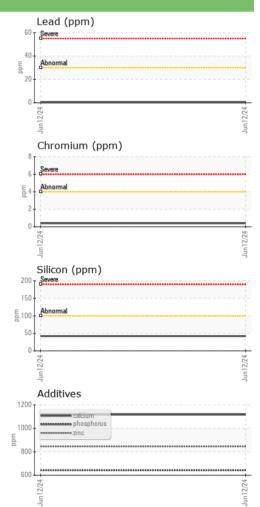
Viscosity @ 40°C

OIL ANALYSIS REPORT

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
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		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	114	108		
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	13.9		
Viscosity Index (VI)	Scale	ASTM D2270*	133	129		







Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CITY OF HAMILTON** CALA 2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM Sample No. : WC0937270 Received : 13 Jun 2024 Lab Number : 02641670 Tested : 14 Jun 2024 MOUNT HOPE, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5799209 Diagnosed : 14 Jun 2024 - Wes Davis CA LOR 1W0 Test Package : MOB 1 (Additional Tests: KV40, VI, Visual) Contact: Jeff Parr To discuss this sample report, contact Customer Service at 1-800-268-2131. jeff.parr@hamilton.ca T: (905)546-2424 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied. F: (905)679-4502

Report Id: HAMHAM [WCAMIS] 02641670 (Generated: 06/14/2024 11:44:17) Rev: 1

Contact/Location: Jeff Parr - HAMHAM

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