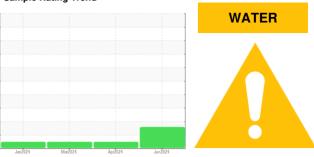


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 2281

Natural Gas Engine

VALVOLINE PREMIUM BLUE 9200 15W40 (

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. 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 a moderate concentration of water present in the oil. Test for glycol is negative.

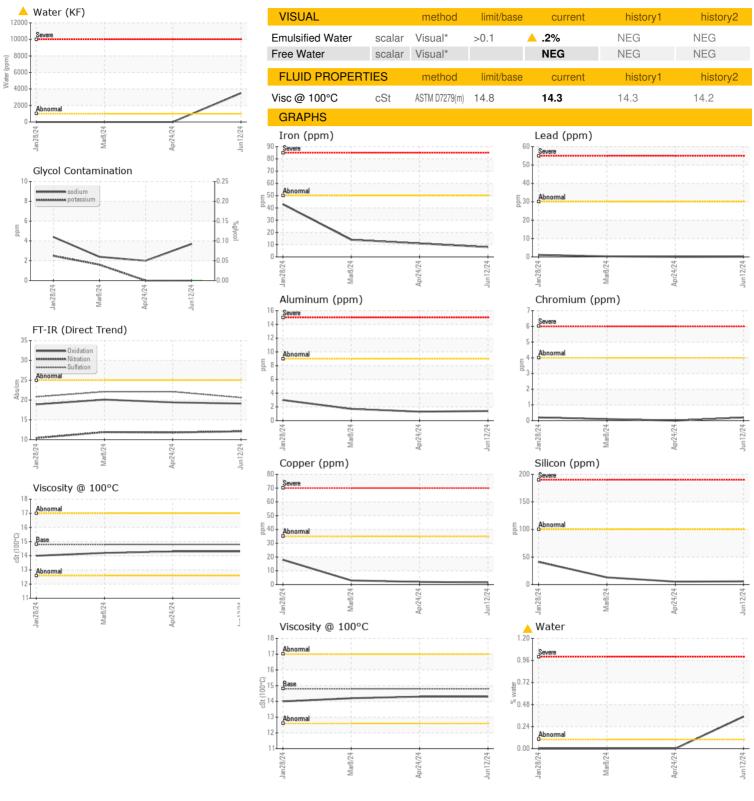
Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

GAL)		Jan 202	4 Mar2024	Apr2024	Jun2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0937143	WC0917663	WC0917642
Sample Date		Client Info		12 Jun 2024	24 Apr 2024	08 Mar 2024
Machine Age	kms	Client Info		34478	26130	15965
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	8	11	14
Chromium	ppm	ASTM D5185(m)	>4	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)		1	1	2
Lead	ppm	ASTM D5185(m)	>30	<1	0	<1
Copper	ppm		>35	2	2	3
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	21	0	0	0
Vanadium		ASTM D5185(m)		0	0	0
	ppm	. ,		0	0	0
Beryllium	ppm	ASTM D5185(m)				
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		15	11	11
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		52	54	51
Manganese	ppm	ASTM D5185(m)		<1	<1	1
Magnesium	ppm	ASTM D5185(m)		780	784	739
Calcium	ppm	ASTM D5185(m)		1222	1223	1156
Phosphorus	ppm	ASTM D5185(m)		654	628	595
Zinc	ppm	ASTM D5185(m)		842	822	795
Sulfur	ppm	ASTM D5185(m)		1931	1903	1983
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	6	5	13
Sodium	ppm	ASTM D5185(m)		4	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	0	2
Water	%	ASTM D6304*	>0.1	△ 0.349		
opm Water	ppm	ASTM D6304*	>1000	△ 3492		
Glycol	%	ASTM D7922*		0.0		
INFRA-RED	70	method	limit/base		history1	
	0/		iiiiii/base	current		history2
Soot %	%	ASTM D7844*	00	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.1	11.8	11.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	22.1	22.1
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.1	19.4	20.1



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Report Id: HAMHAM [WCAMIS] 02642560 (Generated: 06/20/2024 09:00:21) Rev: 1

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Lab Number : 02642560 Unique Number : 5800099

: WC0937143

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: Glycol, KF)

: 18 Jun 2024 : 20 Jun 2024 : 20 Jun 2024 - Kevin Marson

2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM MOUNT HOPE, ON CA LOR 1W0

Contact: Jeff Parr jeff.parr@hamilton.ca T: (905)546-2424

CITY OF HAMILTON

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