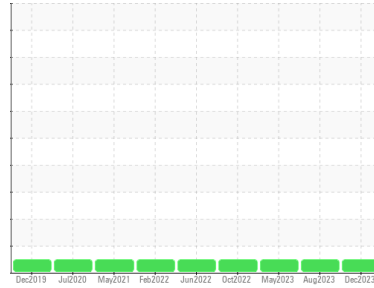




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Bob**  
 Machine Id  
**BOB'S RAM**  
 Component  
**Gasoline Engine**  
 Fluid  
**CASTROL GTX 5W20 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is no indication of any contamination in the oil.

**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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0888641</b>	WC0851678	WC0817016
Sample Date	Client Info			<b>10 Dec 2023</b>	22 Aug 2023	01 May 2023
Machine Age	kms	Client Info		<b>0</b>	128074	115525
Oil Age	kms	Client Info		<b>0</b>	89161	89161
Oil Changed	Client Info			<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	<b>19</b>	12	13
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>40	<b>2</b>	2	3
Lead	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>155	<b>13</b>	15	16
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

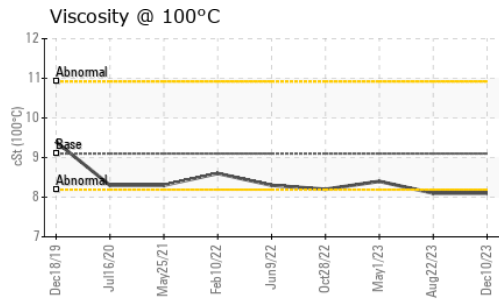
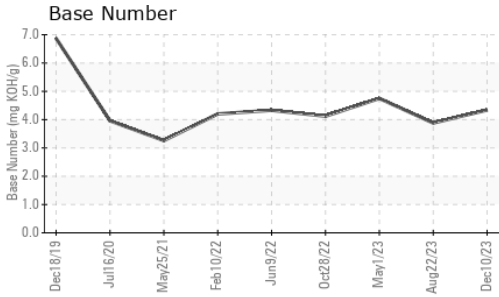
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>18</b>	21	33
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>135</b>	129	53
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>433</b>	462	733
Calcium	ppm	ASTM D5185(m)	2500	<b>1186</b>	1129	1134
Phosphorus	ppm	ASTM D5185(m)	1000	<b>593</b>	616	571
Zinc	ppm	ASTM D5185(m)	1100	<b>713</b>	689	651
Sulfur	ppm	ASTM D5185(m)		<b>1526</b>	1475	1789
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<b>11</b>	11	10
Sodium	ppm	ASTM D5185(m)	>400	<b>4</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.2</b>	10.6	11.1
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>21.5</b>	22.4	22.3



# OIL ANALYSIS REPORT

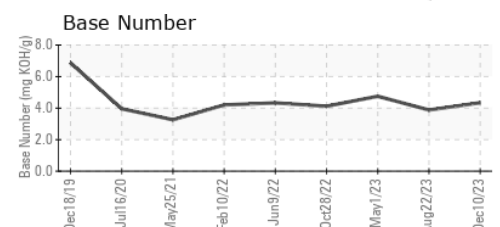
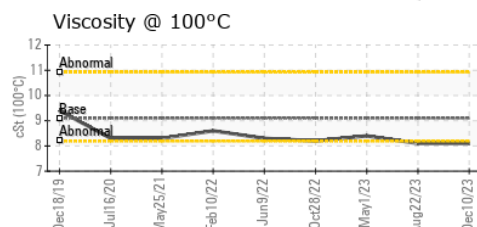
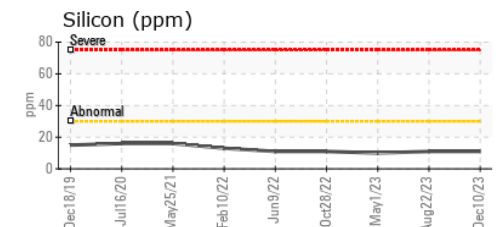
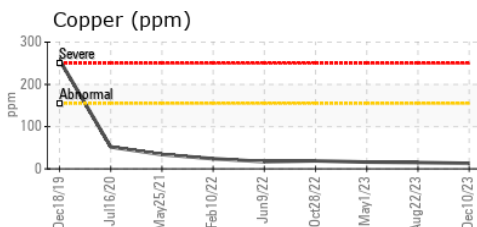
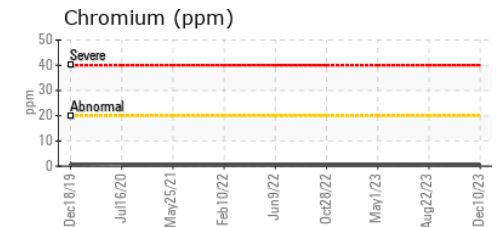
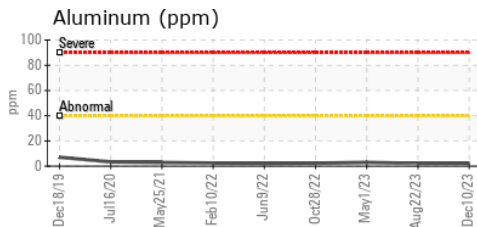
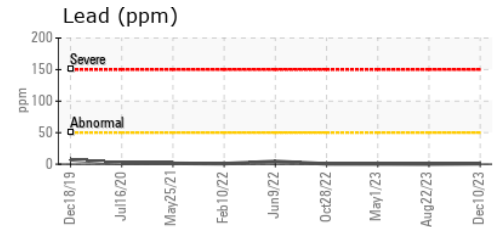
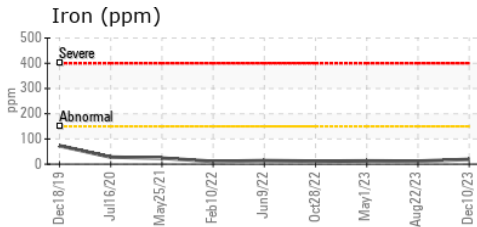


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.5</b>	15.8	13.5
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>4.34</b>	3.88	4.75

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	9.1	<b>8.1</b>	8.1	8.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0888641 **Received** : 11 Dec 2023  
**Lab Number** : **02602245** **Diagnosed** : 14 Dec 2023  
**Unique Number** : 5695330 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2

**WEARCHECK CANADA INC.**  
 C8-1175 Appleby Line  
 BURLINGTON, ON  
 CA L7L 5H9  
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 dorian.anderson@wearcheck.com  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 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.