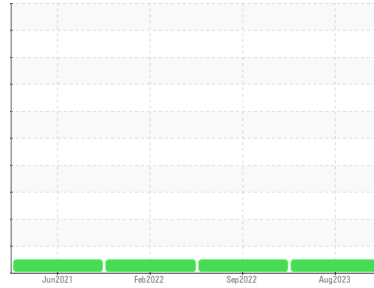


# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**E3**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

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

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

**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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0078193</b>	PC0050434	PC0054307
Sample Date	Client Info			<b>10 Aug 2023</b>	06 Sep 2022	10 Feb 2022
Machine Age	kms	Client Info		<b>248097</b>	236673	229844
Oil Age	kms	Client Info		<b>6000</b>	8000	7000
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>5	<b>&lt;1.0</b>	<1.0	<1.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>19</b>	19	9
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>40	<b>5</b>	3	1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

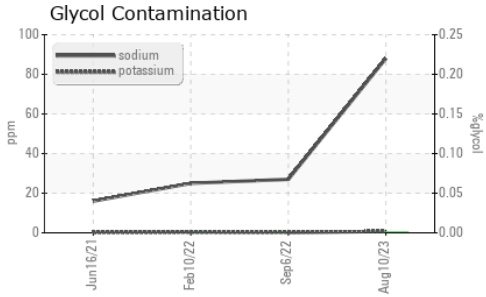
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>2</b>	1	1
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>57</b>	61	60
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>975</b>	1008	1047
Calcium	ppm	ASTM D5185(m)	3000	<b>1024</b>	1115	1059
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1050</b>	1120	1102
Zinc	ppm	ASTM D5185(m)	1350	<b>1182</b>	1235	1234
Sulfur	ppm	ASTM D5185(m)	4250	<b>2573</b>	2700	2718
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	4	3
Sodium	ppm	ASTM D5185(m)	>158	<b>88</b>	27	25
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0

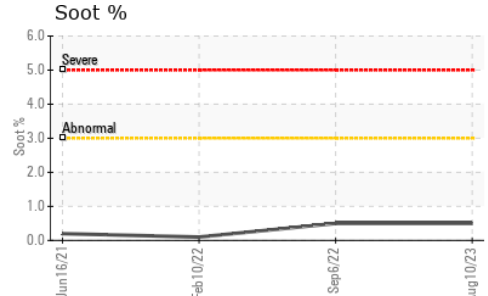
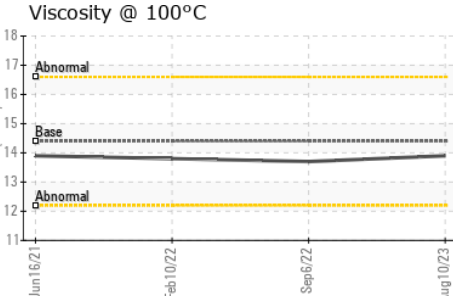
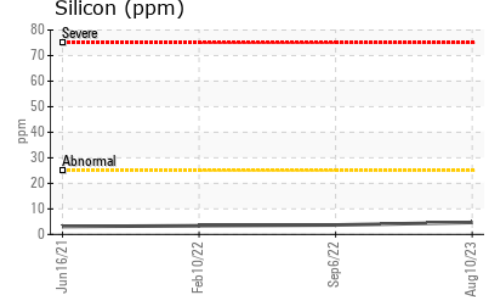
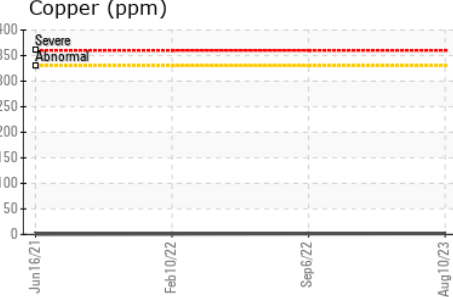
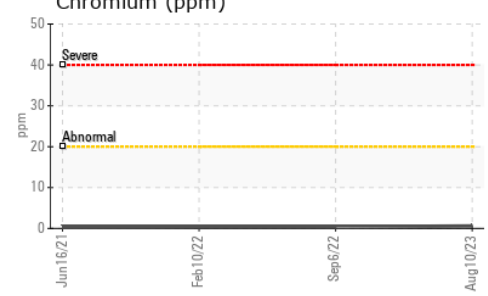
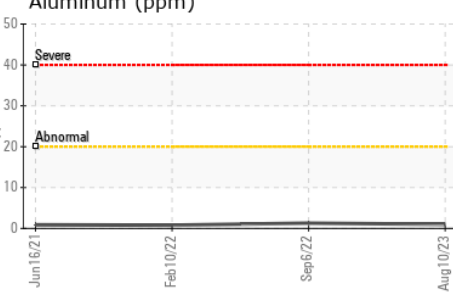
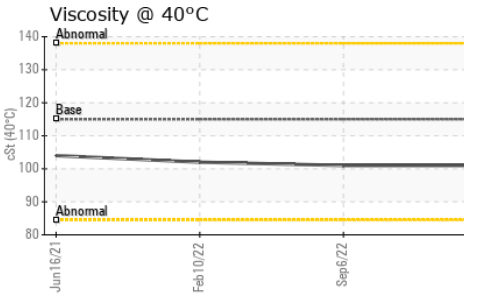
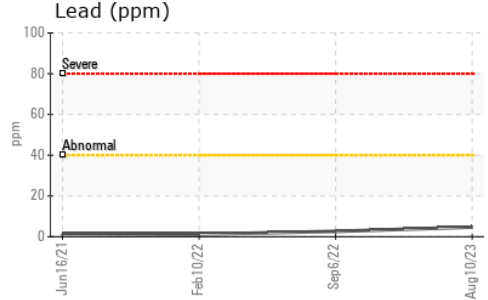
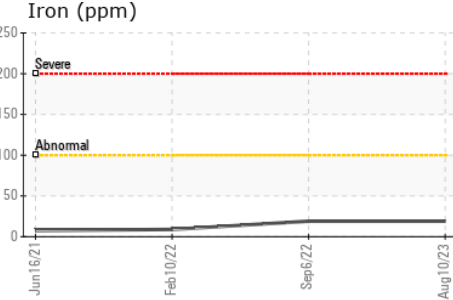
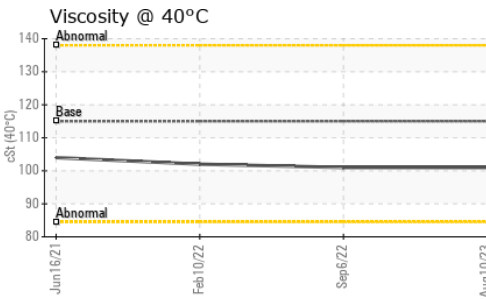
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	0.5	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.7</b>	7.7	6.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	20.4	19.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.0</b>	14.9	14.2

# OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
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 @ 40°C	cSt	ASTM D7279(m)	115	<b>101</b>	101	102
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.9</b>	13.7	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	126	<b>139</b>	136	136



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078193  
**Lab Number** : 02577687  
**Unique Number** : 5630747  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KV40, VI )

**HAMILTON FIRE DEPT**  
 MECHANICAL DIV., 177 BAY STREET NORTH  
 HAMILTON, ON  
 CA L8R 2P8  
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 F: (905)961-9116

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.