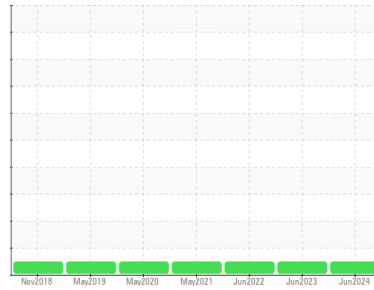




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PERKINS GR009

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (20 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0918853	WC0763978	WC0634066
Sample Date	Client Info		14 Jun 2024	07 Jun 2023	03 Jun 2022
Machine Age	hrs	Client Info	26	20	11
Oil Age	hrs	Client Info	6	8	8
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>250	2	2	2
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<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)	>35	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>100	0	0	<1
Copper	ppm	ASTM D5185(m)	>60	<1	1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	3	5	10
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	1	4	11
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	14	22	60
Calcium	ppm	ASTM D5185(m)	3000	2143	2185	2121
Phosphorus	ppm	ASTM D5185(m)	1150	809	934	941
Zinc	ppm	ASTM D5185(m)	1350	937	988	1010
Sulfur	ppm	ASTM D5185(m)	4250	2933	3062	3080
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

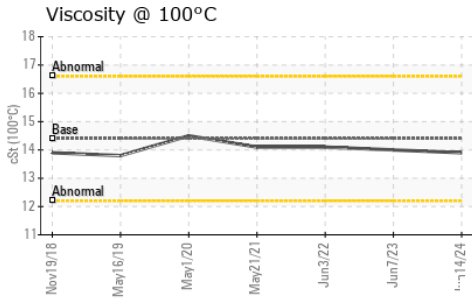
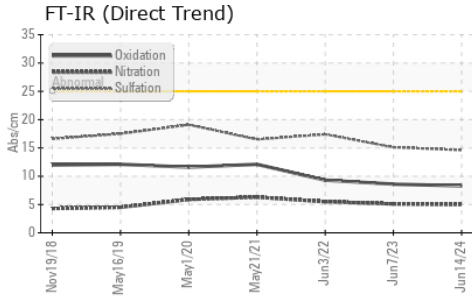
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	1	2	3
Sodium	ppm	ASTM D5185(m)	>158	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.0	5.1	5.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	14.6	15.1	17.4



OIL ANALYSIS REPORT

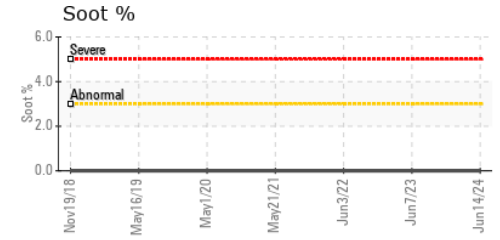
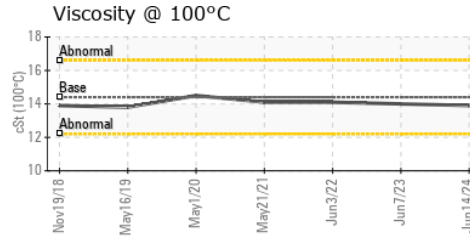
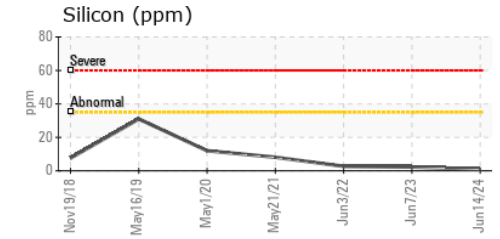
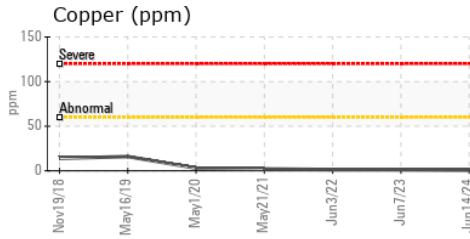
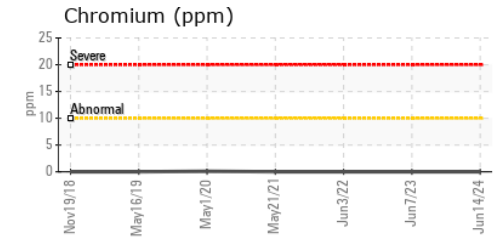
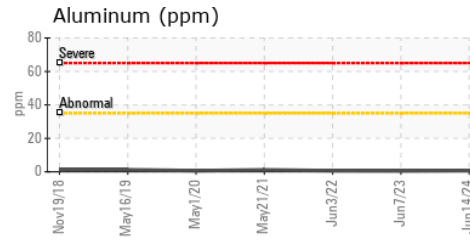
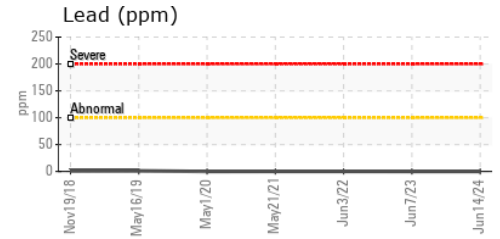
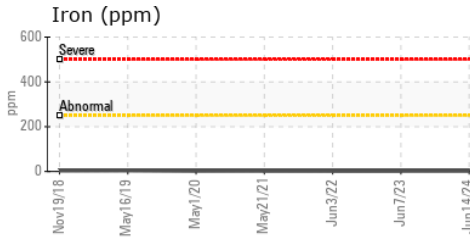


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	8.3	8.6	9.3

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	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.9	14.0	14.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0918853 **Received** : 03 Jul 2024
Lab Number : **02645126** **Tested** : 03 Jul 2024
Unique Number : 5802665 **Diagnosed** : 03 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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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.