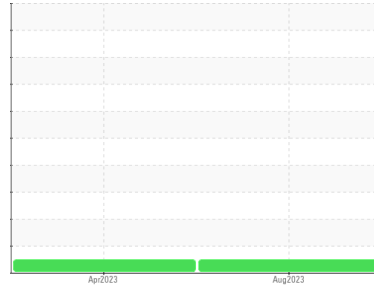




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
WESTERN STAR 309

Component
Diesel Engine

Fluid
KENDALL 10W30 (--- 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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0838804	WC0755296	---
Sample Date	Client Info			03 Aug 2023	24 Apr 2023	---
Machine Age	hrs	Client Info		16473	15162	---
Oil Age	hrs	Client Info		0	496	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	<1.0	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	18	25	---
Chromium	ppm	ASTM D5185(m)	>20	<1	1	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)	>2	21	37	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>30	2	3	---
Lead	ppm	ASTM D5185(m)	>30	4	2	---
Copper	ppm	ASTM D5185(m)	>30	<1	2	---
Tin	ppm	ASTM D5185(m)	>15	1	1	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		<1	<1	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		75	72	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		56	54	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		125	214	---
Calcium	ppm	ASTM D5185(m)		2280	1941	---
Phosphorus	ppm	ASTM D5185(m)		1098	1051	---
Zinc	ppm	ASTM D5185(m)		1229	1112	---
Sulfur	ppm	ASTM D5185(m)		3086	3156	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

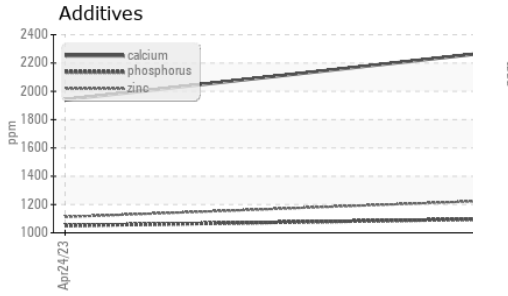
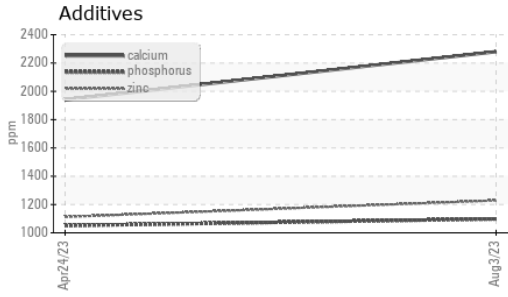
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	4	6	---
Sodium	ppm	ASTM D5185(m)		2	4	---
Potassium	ppm	ASTM D5185(m)	>20	3	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.6	0.5	---
Nitration	Abs/cm	ASTM D7624*	>20	8.4	8.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	19.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.8	14.2	---



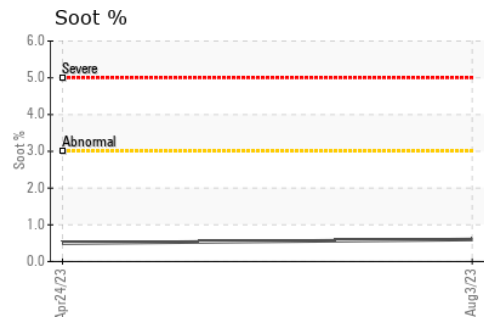
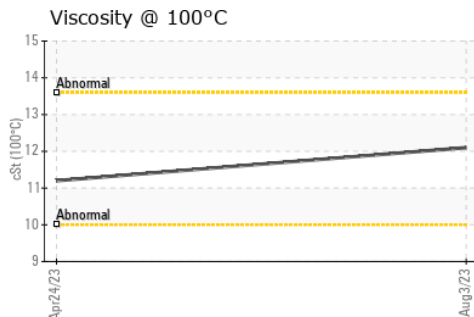
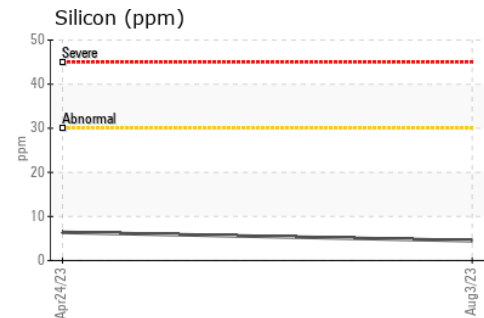
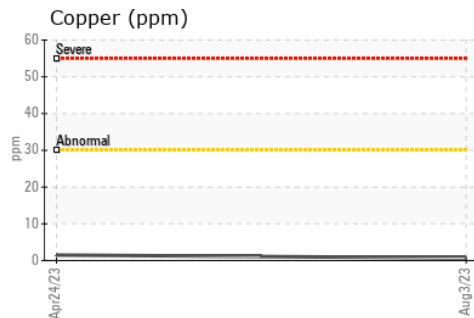
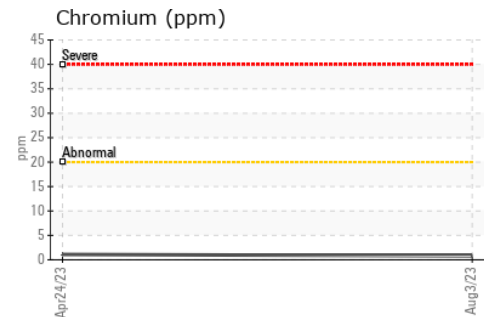
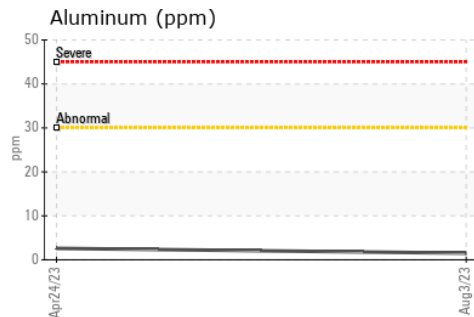
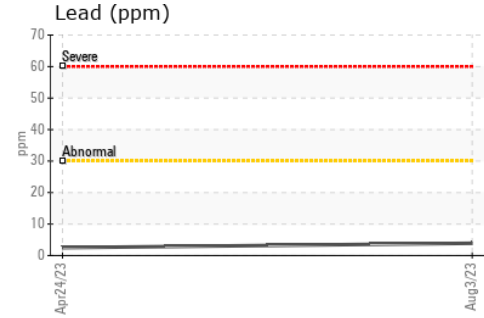
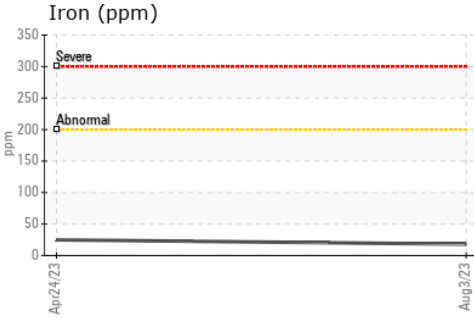
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	11.2	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0838804 **Received** : 11 Aug 2023
Lab Number : 02575299 **Diagnosed** : 11 Aug 2023
Unique Number : 5620350 **Diagnostician** : Wes Davis
Test Package : MOB 1

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 Hamilton, ON
 CA L7L 8K3
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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.