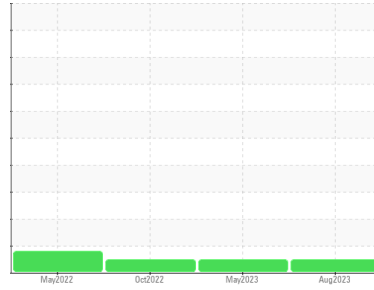




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
52904

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 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			WC0720925	WC0813093	WC0744910
Sample Date	Client Info			02 Aug 2023	25 May 2023	24 Oct 2022
Machine Age	kms	Client Info		445864	240301	120009
Oil Age	kms	Client Info		0	40833	40327
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	18	20	22
Chromium	ppm	ASTM D5185(m)	>20	2	2	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>30	8	10	10
Lead	ppm	ASTM D5185(m)	>30	<1	<1	1
Copper	ppm	ASTM D5185(m)	>30	9	14	55
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
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	9	9
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	63	74	78
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	875	491	365
Calcium	ppm	ASTM D5185(m)	3000	1219	1780	1860
Phosphorus	ppm	ASTM D5185(m)	1150	1017	1002	1017
Zinc	ppm	ASTM D5185(m)	1350	1191	1153	1158
Sulfur	ppm	ASTM D5185(m)	4250	2264	2577	2402
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

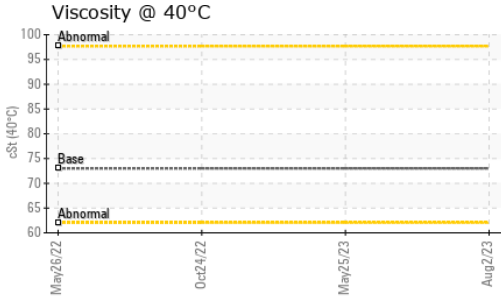
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	7	6	6
Sodium	ppm	ASTM D5185(m)		7	12	2
Potassium	ppm	ASTM D5185(m)	>20	3	5	12

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.6	0.5	0.7
Nitration	Abs/cm	ASTM D7624*	>20	8.2	9.3	9.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	22.8	23.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.3	18.1	19.2



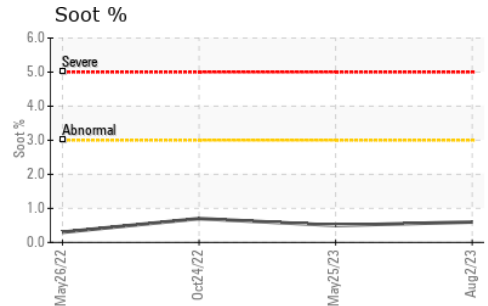
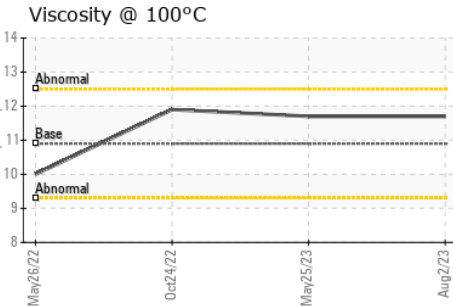
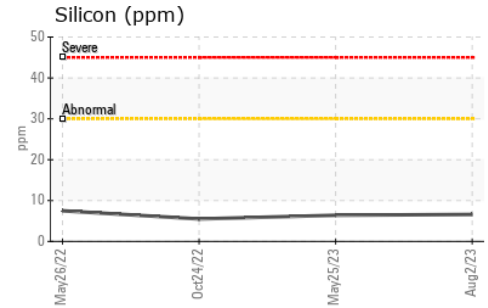
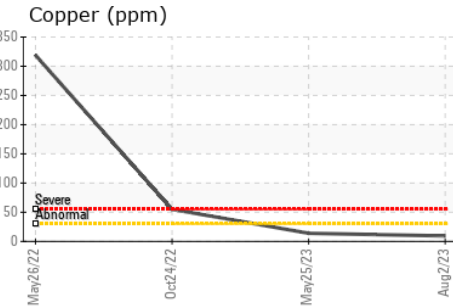
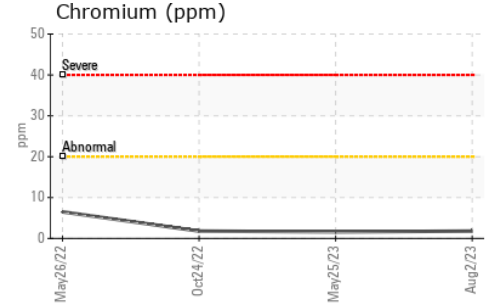
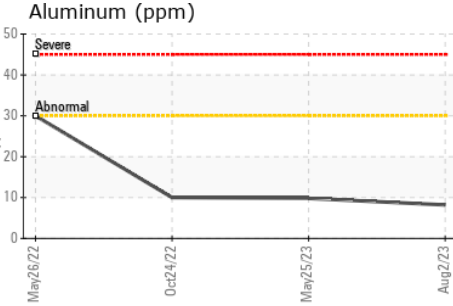
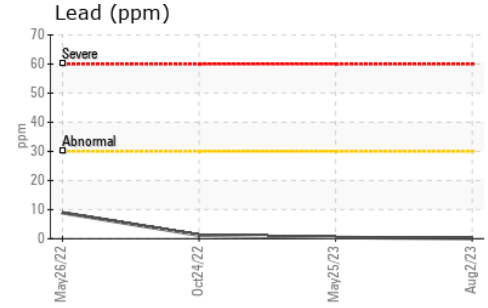
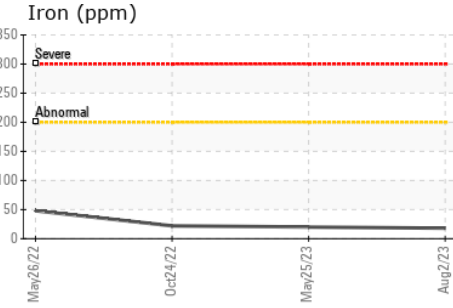
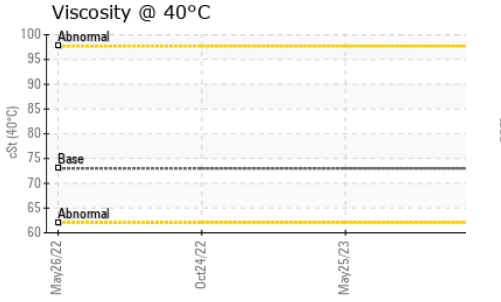
OIL ANALYSIS REPORT



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 @ 40°C	cSt	ASTM D7279(m)	73	78.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.7	11.9
Viscosity Index (VI)	Scale	ASTM D2270*	138	142	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0720925 **Received** : 16 Aug 2023
Lab Number : 02576093 **Diagnosed** : 16 Aug 2023
Unique Number : 5629153 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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.