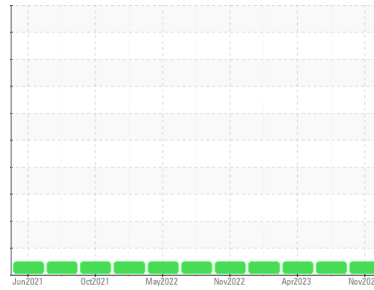




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
51000 series
 Machine Id
Freightliner 51904

Component
Diesel Engine
 Fluid

PETRO CANADA DURON SHP 10W30 (40 LTR)

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		WC0817322	WC0828306	WC0797641
Sample Date	Client Info		26 Nov 2023	08 Jul 2023	30 Apr 2023
Machine Age	mls	Client Info	525110	454218	418792
Oil Age	mls	Client Info	182769	35476	36477
Oil Changed	Client Info		Changed	Changed	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)	>80	16	18	18
Chromium	ppm	ASTM D5185(m)	>5	2	2	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>30	11	10	15
Lead	ppm	ASTM D5185(m)	>30	<1	0	<1
Copper	ppm	ASTM D5185(m)	>150	4	4	5
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
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)	2	1	2	1
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	62	61
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	979	1019	1004
Calcium	ppm	ASTM D5185(m)	1050	1052	1098	1103
Phosphorus	ppm	ASTM D5185(m)	995	959	1063	1063
Zinc	ppm	ASTM D5185(m)	1180	1185	1209	1188
Sulfur	ppm	ASTM D5185(m)	2600	2297	2237	2351
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

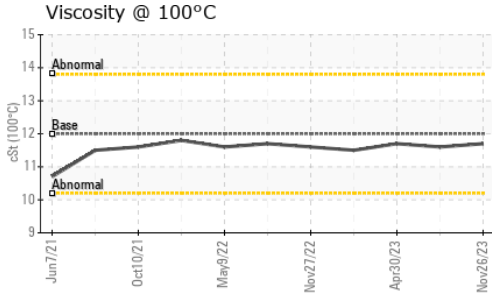
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	4	3	3
Sodium	ppm	ASTM D5185(m)		2	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	2	1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.6	0.6	0.5
Nitration	Abs/cm	ASTM D7624*	>20	8.3	8.5	8.2
Sulfation	Abs./1mm	ASTM D7415*	>30	19.9	21.0	20.2



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2
Abs.:1mm	ASTM D7414*	>25	17.0	16.2

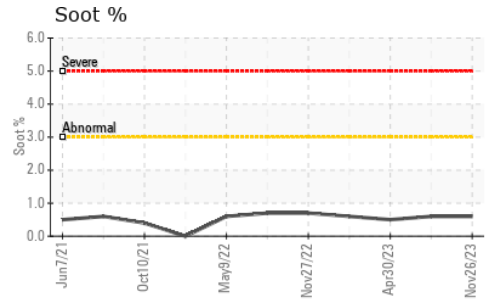
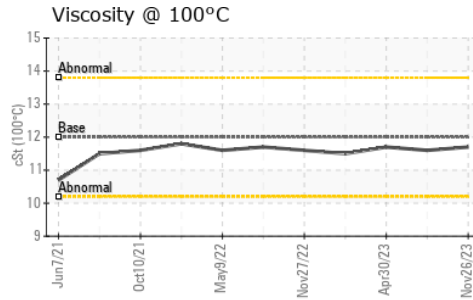
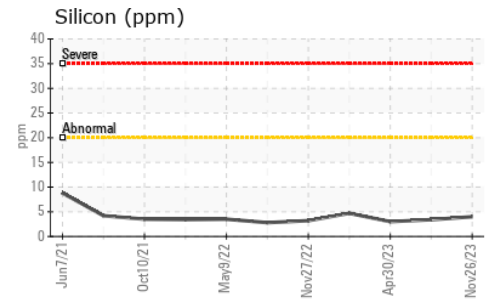
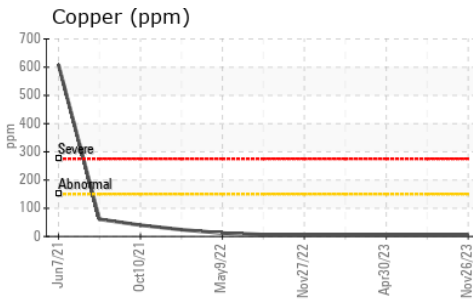
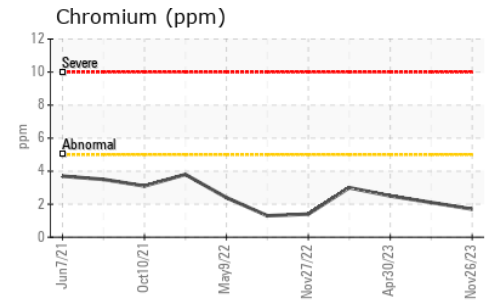
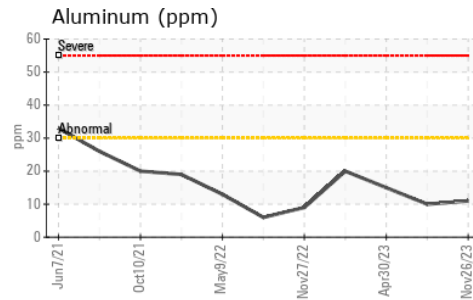
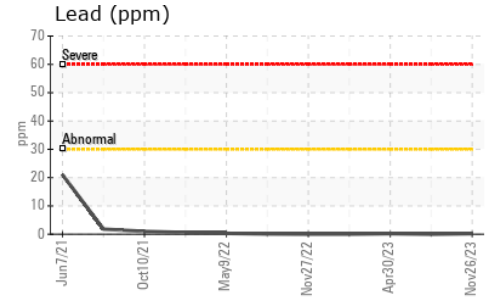
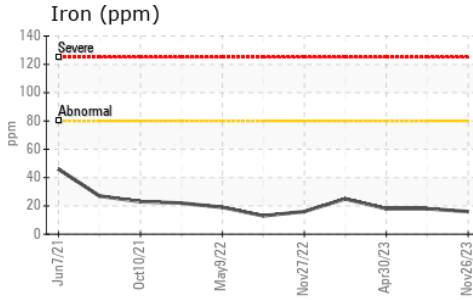
VISUAL

method	limit/base	current	history1	history2
scalar	Visual*	>0.2	NEG	NEG
scalar	Visual*	NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	12.00	11.6	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0817322 **Received** : 05 Dec 2023 1335 SHAWSON DRIVE
Lab Number : 02600882 **Diagnosed** : 05 Dec 2023 MISSISSAUGA, ON
Unique Number : 5693967 **Diagnostician** : Wes Davis CA L4W 1C4
Test Package : MOB 1 **Contact:** Travis Spence

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.

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