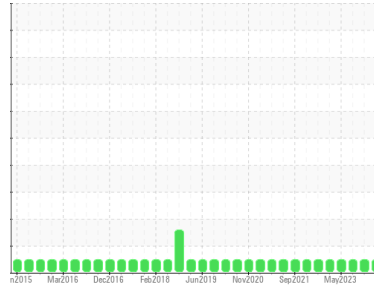




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
52000 series
 Machine Id
Navistar 52647

Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (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		WC0886683	WC0828340	WC0828195
Sample Date	Client Info		30 Dec 2023	07 Sep 2023	01 Aug 2023
Machine Age	mls	Client Info	619378	600488	1057764
Oil Age	mls	Client Info	18890	19283	0
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
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)	>165	11	35	23
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	5
Lead	ppm	ASTM D5185(m)	>150	0	<1	7
Copper	ppm	ASTM D5185(m)	>90	<1	<1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
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)	0	7	4	33
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	61	63	33
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	975	1130	505
Calcium	ppm	ASTM D5185(m)	1070	1121	1146	1783
Phosphorus	ppm	ASTM D5185(m)	1150	1039	1189	1104
Zinc	ppm	ASTM D5185(m)	1270	1195	1355	1272
Sulfur	ppm	ASTM D5185(m)	2060	2747	2837	2844
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

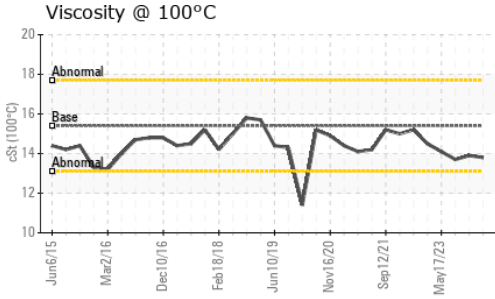
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	19	4	5
Sodium	ppm	ASTM D5185(m)		4	2	5
Potassium	ppm	ASTM D5185(m)	>20	3	<1	9

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>7.5	0.1	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	7.4	11.0	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	22.6	24.5

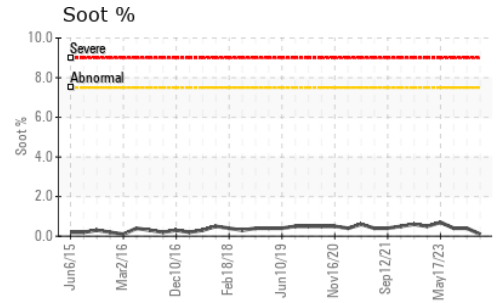
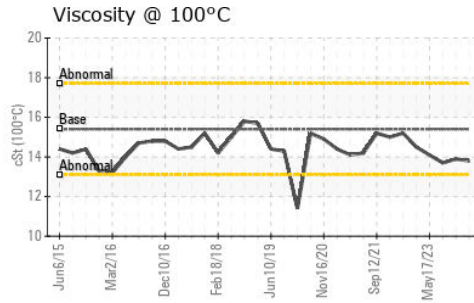
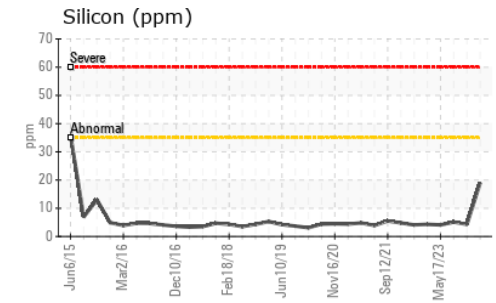
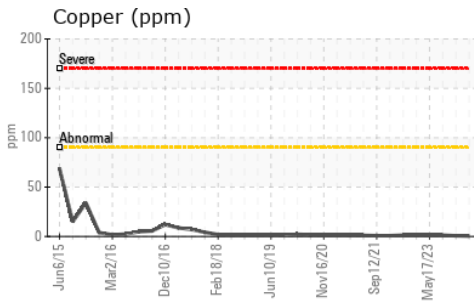
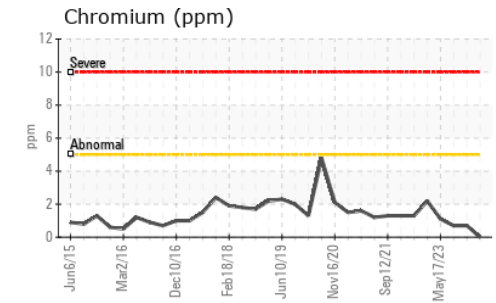
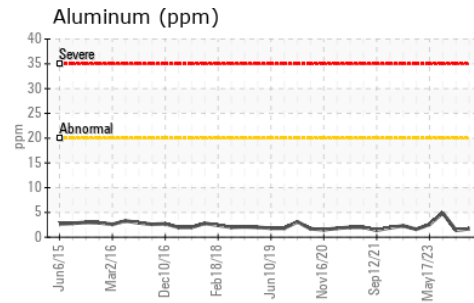
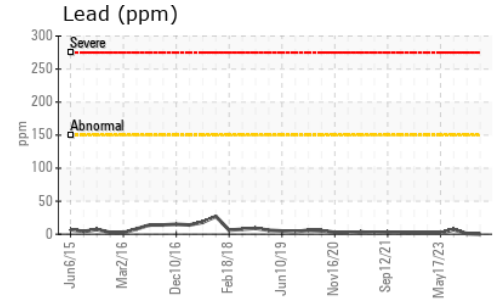
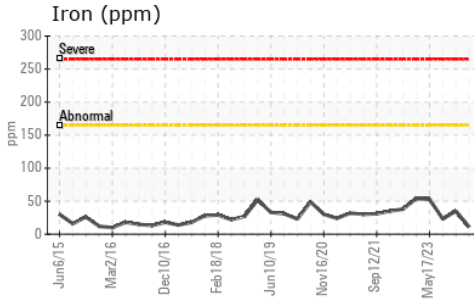


OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.6	19.5	18.7
VISUAL		method	limit/base	current	history1	history2
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)	15.4	13.8	13.9	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0886683 **Received** : 09 Jan 2024 1335 SHAWSON DRIVE
Lab Number : **02607411** **Diagnosed** : 09 Jan 2024 MISSISSAUGA, ON
Unique Number : 5708497 **Diagnostician** : Wes Davis CA L4W 1C4
Test Package : MOB 1

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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