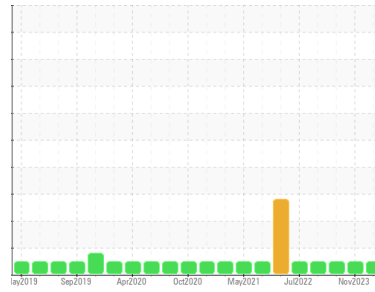




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
52000 series
 Machine Id
Navistar 52821
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	WC0948304	WC0864027	WC0844388	
Sample Date	Client Info	01 Jun 2024	02 Nov 2023	11 Aug 2023	
Machine Age	mls	Client Info	62354	566742	540946
Oil Age	mls	Client Info	26596	28796	28676
Oil Changed	Client Info	Changed	Changed	Changed	
Sample Status		NORMAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >2.0	<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) >100	30	22	22
Chromium	ppm ASTM D5185(m) >20	2	2	1
Nickel	ppm ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m) >3	0	<1	0
Aluminum	ppm ASTM D5185(m) >20	4	3	4
Lead	ppm ASTM D5185(m) >40	<1	<1	1
Copper	ppm ASTM D5185(m) >330	4	6	30
Tin	ppm ASTM D5185(m) >15	0	0	<1
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) 2	17	4	13
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 50	10	63	17
Manganese	ppm ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm ASTM D5185(m) 950	782	1040	801
Calcium	ppm ASTM D5185(m) 1050	1321	1212	1360
Phosphorus	ppm ASTM D5185(m) 995	717	1075	781
Zinc	ppm ASTM D5185(m) 1180	833	1282	872
Sulfur	ppm ASTM D5185(m) 2600	2477	2742	2452
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

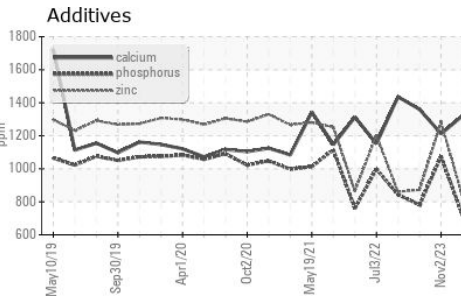
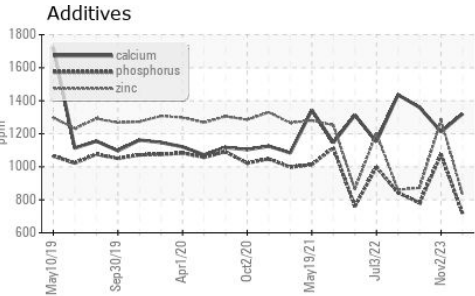
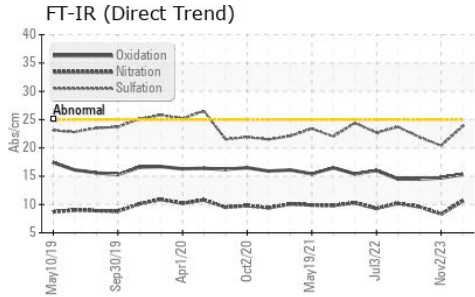
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	7	7	9
Sodium	ppm ASTM D5185(m)	4	3	4
Potassium	ppm ASTM D5185(m) >20	4	2	7

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	1.8	0.9	0.8
Nitration	Abs/cm ASTM D7624* >20	10.6	8.3	9.6
Sulfation	Abs/.1mm ASTM D7415* >30	23.8	20.4	21.9



OIL ANALYSIS REPORT

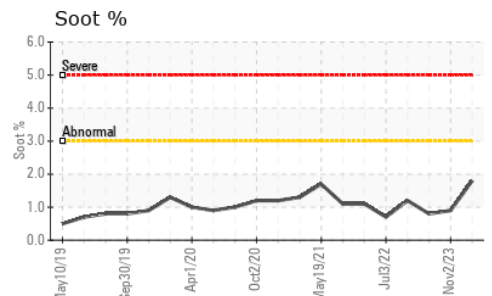
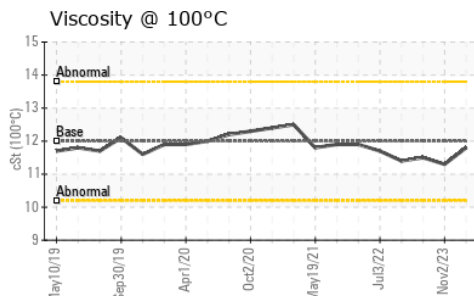
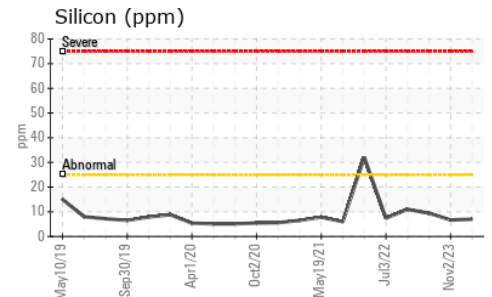
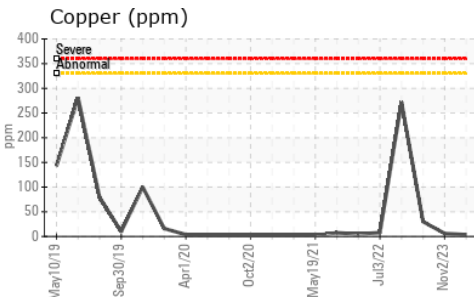
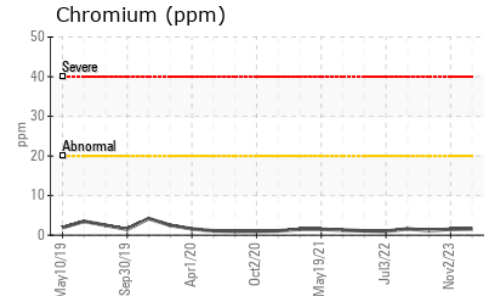
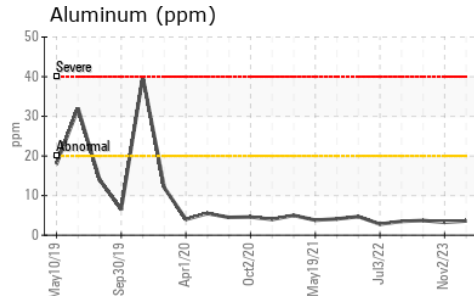
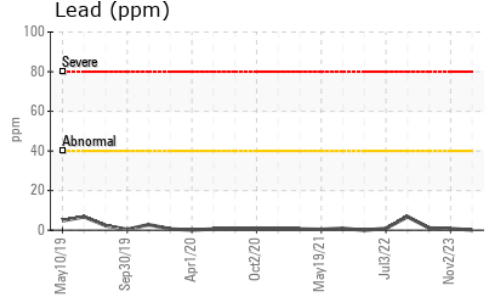
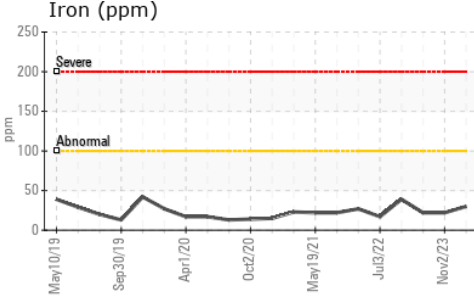


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.3	14.7	14.5

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)	12.00	11.8	11.3	11.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0948304 **Received** : 11 Jun 2024 1335 SHAWSON DRIVE
Lab Number : **02641042** **Tested** : 11 Jun 2024 MISSISSAUGA, ON
Unique Number : 5798581 **Diagnosed** : 11 Jun 2024 - Kevin Marson CA L4W 1C4
Test Package : MOB 1 Contact: Travis Spence
 tspence@manitoulintransport.com

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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