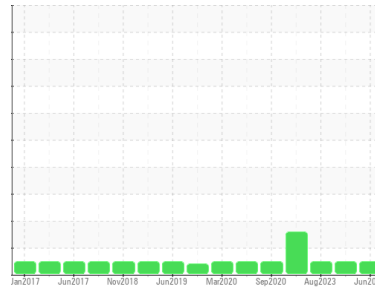




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
52000 series
 Machine Id
Navistar 52704
 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			WC0948256	WC0886656	WC0837231
Sample Date	Client Info			11 Jun 2024	05 Feb 2024	10 Aug 2023
Machine Age	mls	Client Info		597890	569970	541233
Oil Age	mls	Client Info		27920	28737	28031
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)	>100	31	51	56
Chromium	ppm	ASTM D5185(m)	>20	1	2	4
Nickel	ppm	ASTM D5185(m)	>4	<1	2	3
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	5	5
Lead	ppm	ASTM D5185(m)	>40	5	6	7
Copper	ppm	ASTM D5185(m)	>330	2	3	4
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
Antimony	ppm	ASTM D5185(m)		<1	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

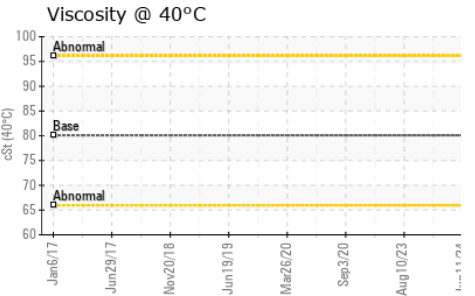
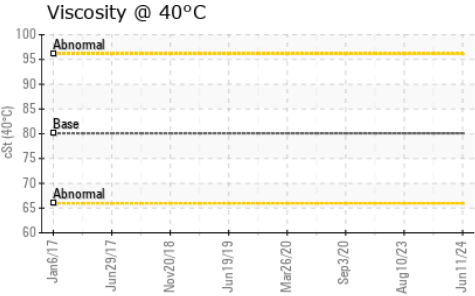
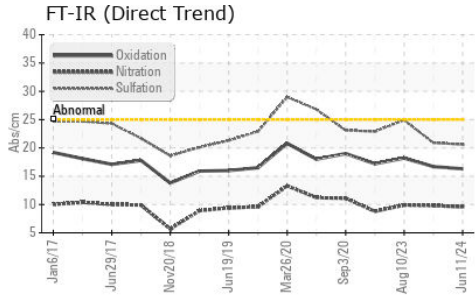
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	3	6	68
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	61	55	14
Manganese	ppm	ASTM D5185(m)	0	<1	<1	1
Magnesium	ppm	ASTM D5185(m)	950	978	884	202
Calcium	ppm	ASTM D5185(m)	1050	1122	1226	1978
Phosphorus	ppm	ASTM D5185(m)	995	1026	1018	981
Zinc	ppm	ASTM D5185(m)	1180	1257	1213	1145
Sulfur	ppm	ASTM D5185(m)	2600	2613	2724	2773
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	9	11
Sodium	ppm	ASTM D5185(m)		2	2	4
Potassium	ppm	ASTM D5185(m)	>20	<1	2	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.6	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	9.6	9.8	9.9
Sulfation	Abs./1mm	ASTM D7415*	>30	20.6	20.9	24.9



OIL ANALYSIS REPORT

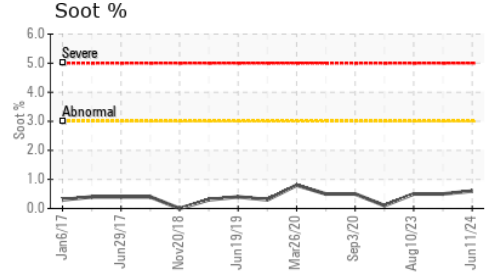
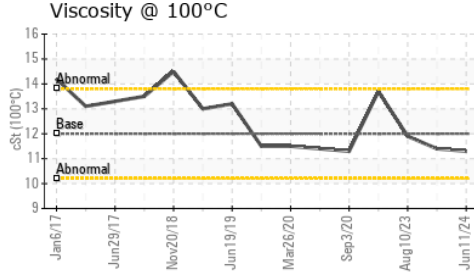
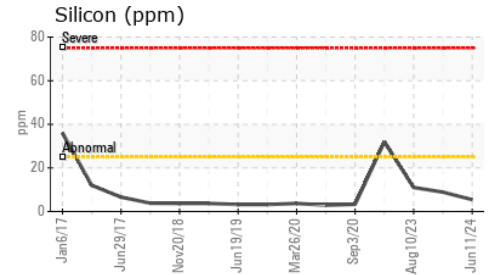
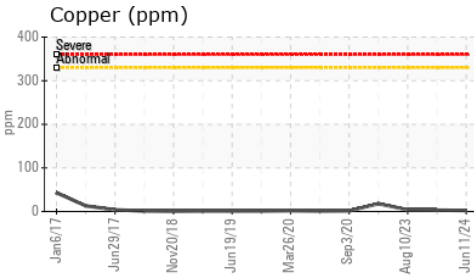
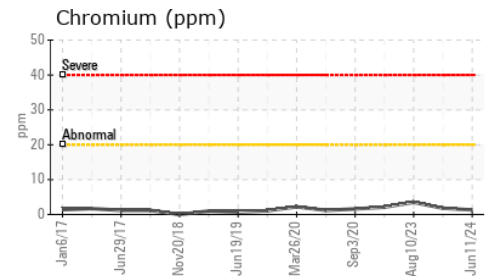
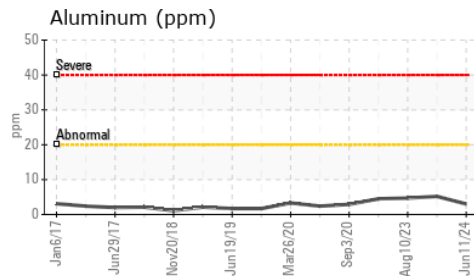
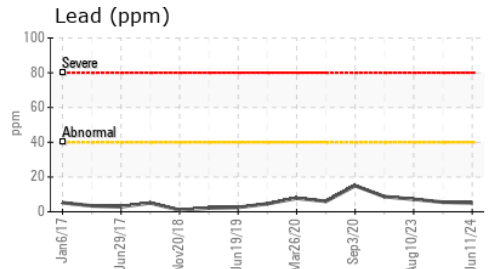
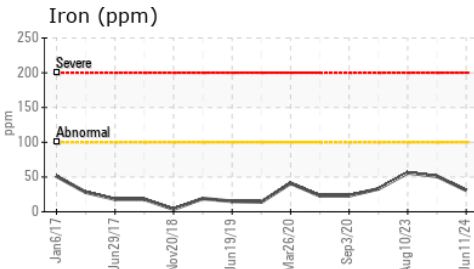


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	16.3	16.7	18.2

VISUAL	method	limit/base	current	history1	history2	
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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 @ 40°C	cSt	ASTM D7279(m)	80.1	75.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.4	11.9
Viscosity Index (VI)	Scale	ASTM D2270*	144	142	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0948256
Lab Number : 02642467
Unique Number : 5800006
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

MANITOU LIN TRANSPORT (GARAGE)
 1335 SHAWSON DRIVE
 MISSISSAUGA, ON
 CA L4W 1C4
 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.

T:
 F: (905)564-6361