



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
52000 series
 Machine Id
Navistar 52655
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934978	WC0899628	WC0817339
Sample Date		Client Info		21 Jun 2024	02 Feb 2024	28 Oct 2023
Machine Age	mls	Client Info		0	604129	580230
Oil Age	mls	Client Info		0	23899	29058
Filter Age	mls	Client Info		0	23899	29058
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	41	36	27
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	5	2
Lead	ppm	ASTM D5185(m)	>40	3	2	5
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

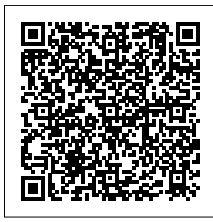
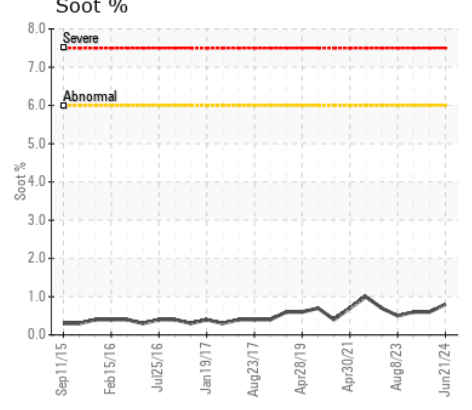
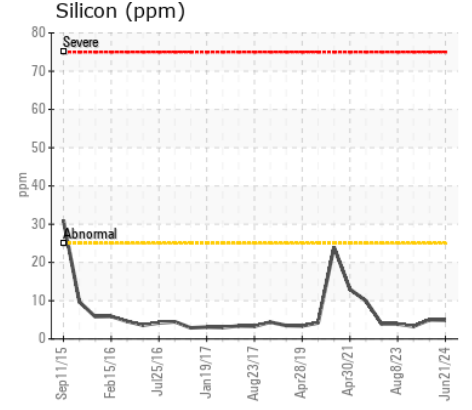
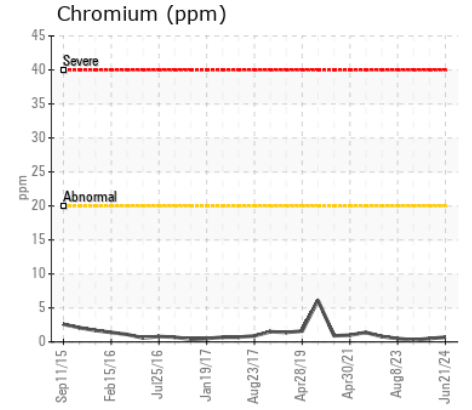
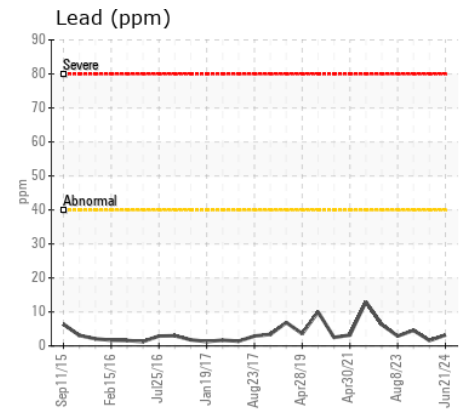
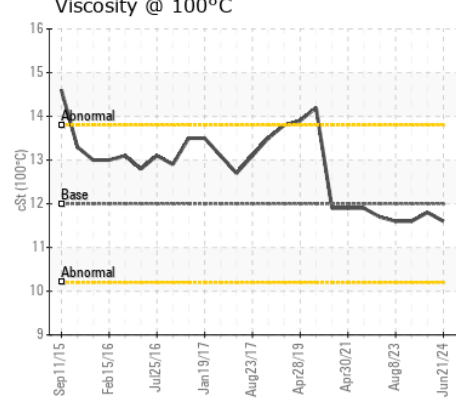
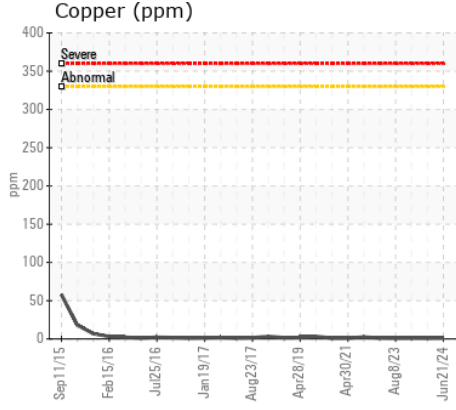
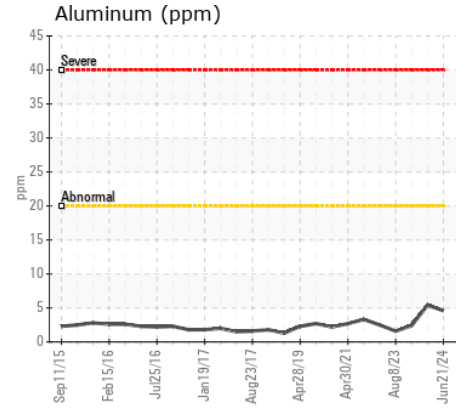
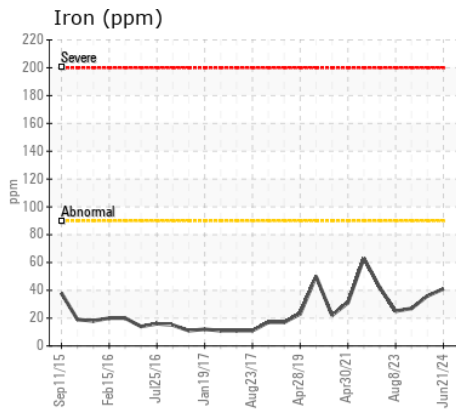
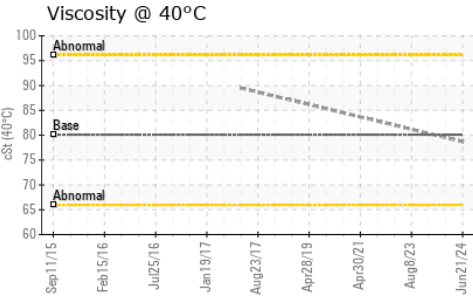
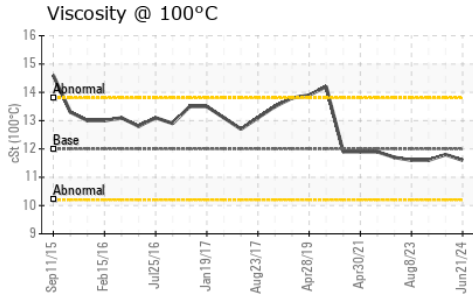
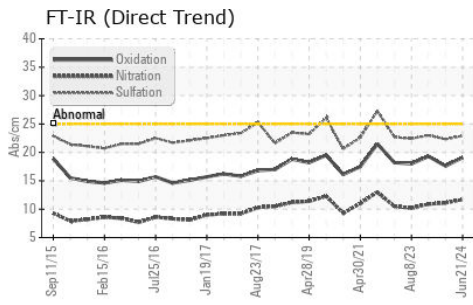
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	5	3
Potassium	ppm	ASTM D5185(m)	>20	<1	2	0
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
Soot %	%	ASTM D7844*	>6	0.8	0.6	0.6
Nitration	Abs/cm	ASTM D7624*	>20	11.7	11.1	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	22.3	23.0
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	2	2	3	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	63	63	64
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	950	1011	1024	1032
Calcium	ppm	ASTM D5185(m)	1050	1104	1156	1113
Phosphorus	ppm	ASTM D5185(m)	995	1050	1073	1062
Zinc	ppm	ASTM D5185(m)	1180	1274	1269	1279
Sulfur	ppm	ASTM D5185(m)	2600	2520	2794	2521
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.1	17.6	19.3
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	78.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.6	11.8	11.6
Viscosity Index (VI)	Scale	ASTM D2270*	144	139	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0934978 **Received** : 05 Jul 2024
Lab Number : 02645802 **Tested** : 08 Jul 2024
Unique Number : 5803341 **Diagnosed** : 08 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

MANITOU LIN TRANSPORT
 75 MUMFORD ROAD
 LIVELY, ON
 CA P3Y 1L1
 Contact: Todd Smith
 tosmith@manitoulintransport.com
 T: (705)562-3302
 F: x:

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.