



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
51000 series
 Machine Id
Navistar 51746
 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		WC0934983	WC0665923	WC0530572
Sample Date		Client Info		22 Jun 2024	13 May 2022	12 Apr 2021
Machine Age	mls	Client Info		781306	718104	627266
Oil Age	mls	Client Info		18790	21832	19870
Filter Age	mls	Client Info		18790	21832	19870
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)	>165	53	24	21
Chromium	ppm	ASTM D5185(m)	>5	2	2	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	6	3	4
Lead	ppm	ASTM D5185(m)	>150	4	1	3
Copper	ppm	ASTM D5185(m)	>90	2	1	<1
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

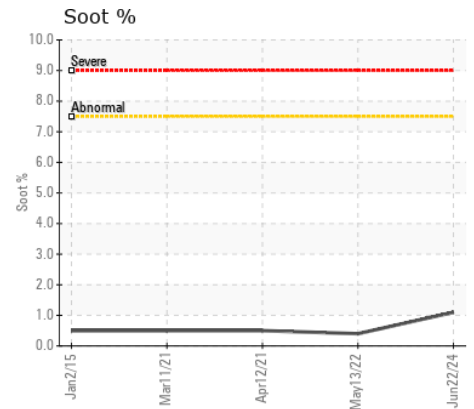
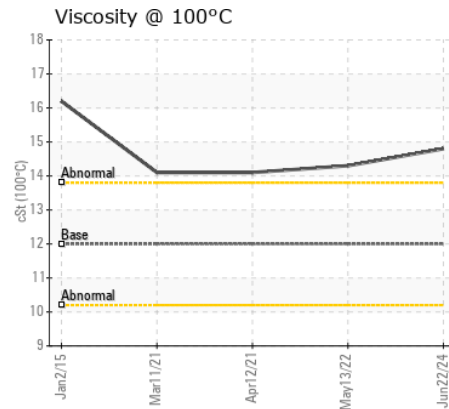
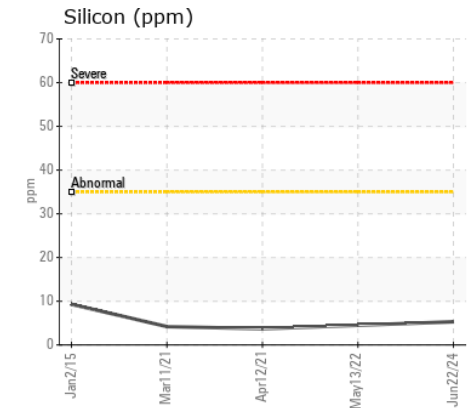
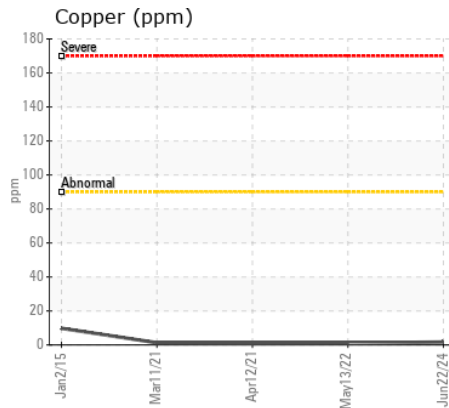
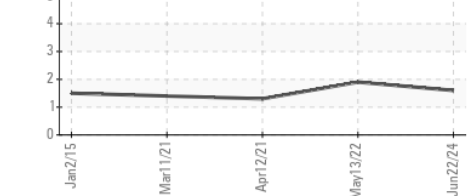
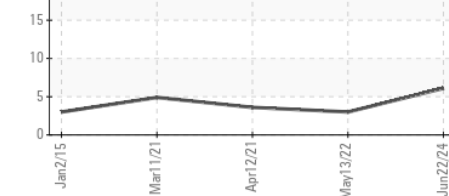
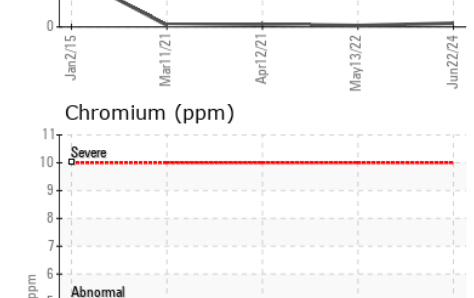
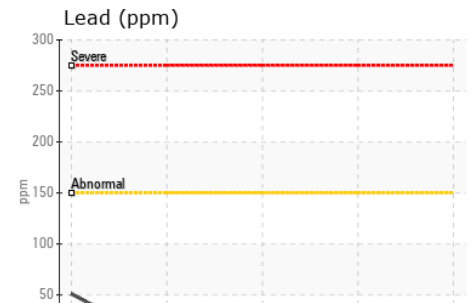
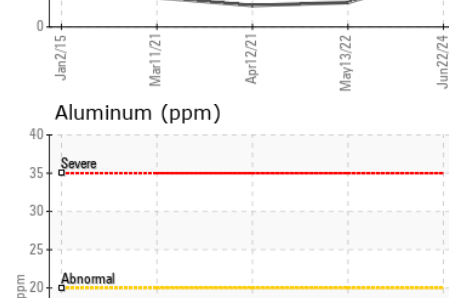
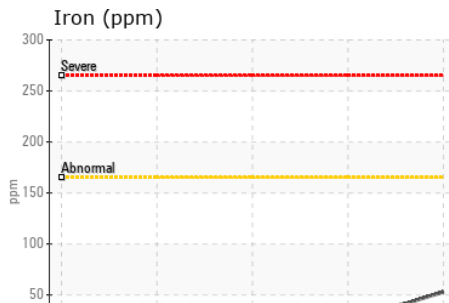
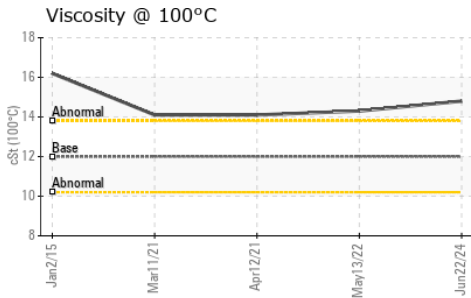
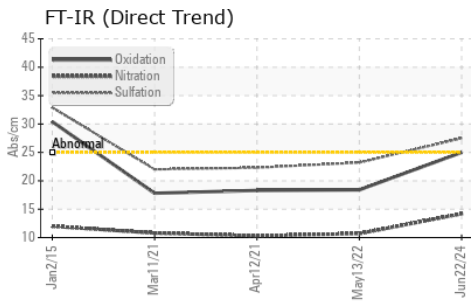
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	5	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
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*	>7.5	1.1	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	14.2	10.7	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.5	23.2	22.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		5	2	3
Boron	ppm	ASTM D5185(m)	2	1	2	1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	64	63	61
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	1026	1080	1030
Calcium	ppm	ASTM D5185(m)	1050	1132	1119	1106
Phosphorus	ppm	ASTM D5185(m)	995	1053	1120	1046
Zinc	ppm	ASTM D5185(m)	1180	1287	1323	1333
Sulfur	ppm	ASTM D5185(m)	2600	2287	2624	2661
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.0	18.4	18.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	14.8	14.3	14.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0934983
Lab Number : 02645801
Unique Number : 5803340
Test Package : MOB 1

Received : 05 Jul 2024
Tested : 05 Jul 2024
Diagnosed : 05 Jul 2024 - Kevin Marson

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 75 MUMFORD ROAD
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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.