



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
54000 series
 Machine Id
Navistar 54159
 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		WC0915494	WC0854873	WC0864025
Sample Date		Client Info		17 Mar 2024	05 Jan 2024	15 Oct 2023
Machine Age	mls	Client Info		54159	32574	780111
Oil Age	mls	Client Info		3176	32574	0
Filter Age	mls	Client Info		3176	32574	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	35	25	31
Chromium	ppm	ASTM D5185(m)	>20	2	2	2
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<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	12	8	6
Lead	ppm	ASTM D5185(m)	>40	9	6	10
Copper	ppm	ASTM D5185(m)	>330	2	1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

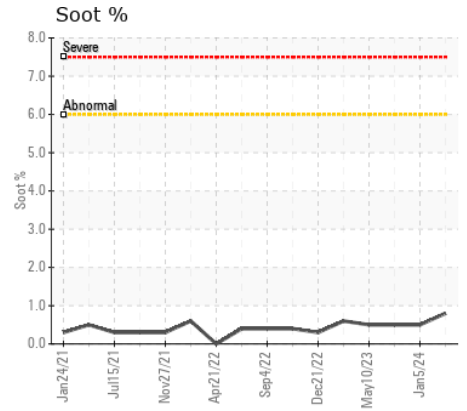
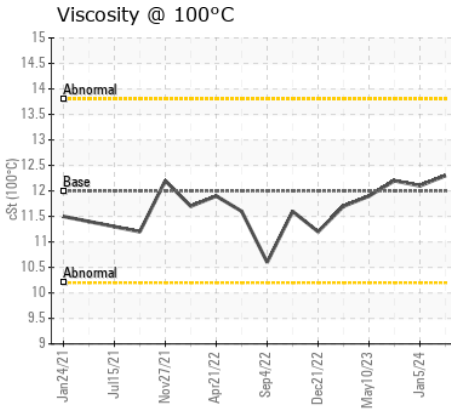
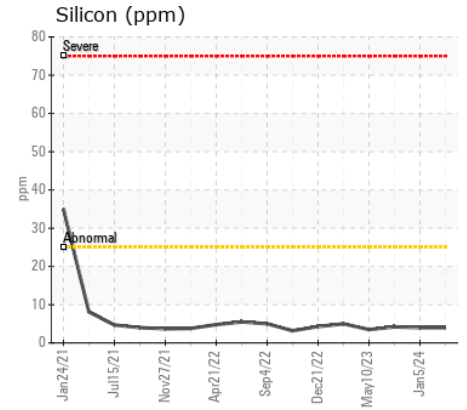
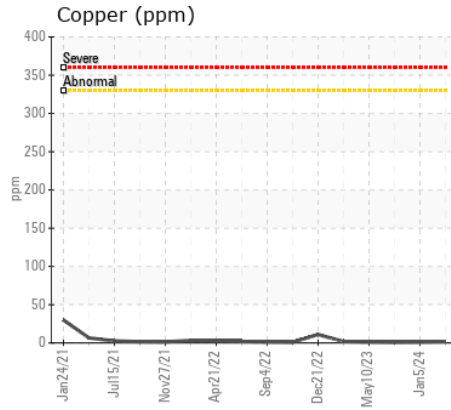
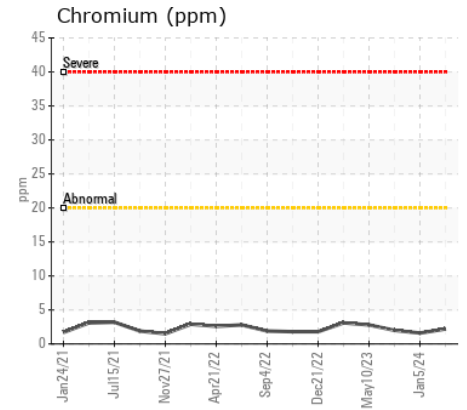
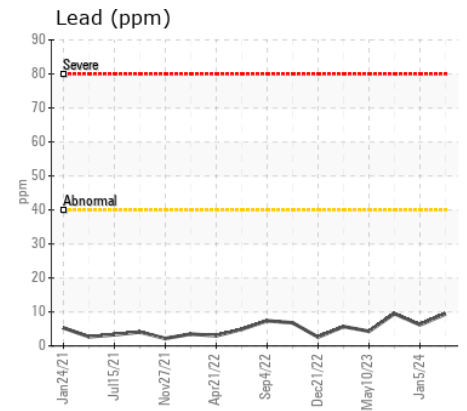
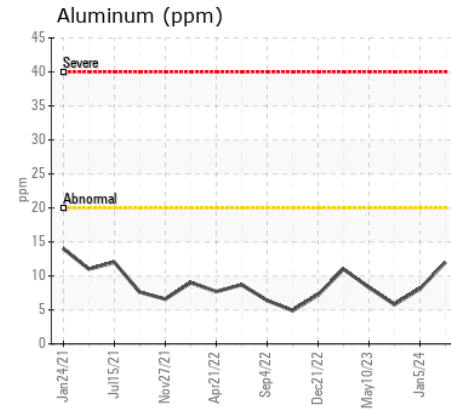
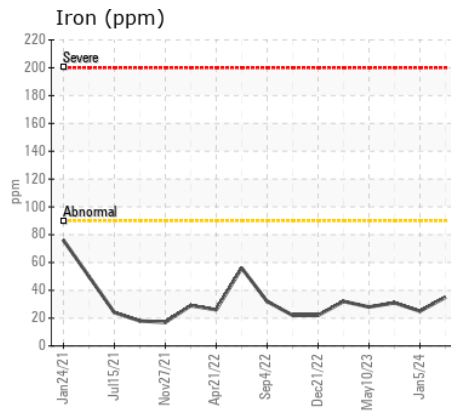
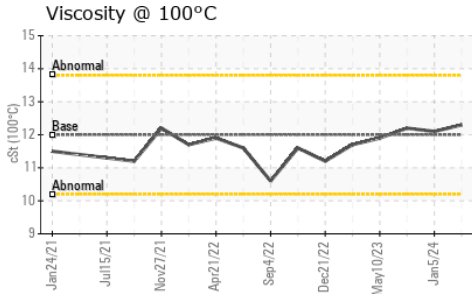
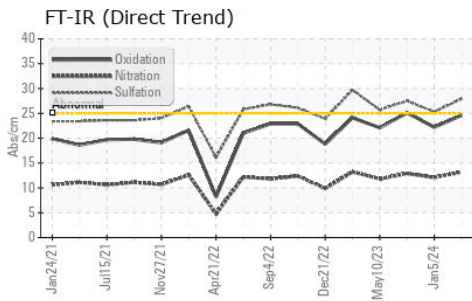
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	1	2	<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*	>6	0.8	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	13.2	12.1	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.9	25.3	27.5
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)		3	2	3
Boron	ppm	ASTM D5185(m)	2	2	1	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	72	67	74
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	1187	1094	1188
Calcium	ppm	ASTM D5185(m)	1050	1246	1202	1315
Phosphorus	ppm	ASTM D5185(m)	995	1189	1142	1226
Zinc	ppm	ASTM D5185(m)	1180	1468	1341	1476
Sulfur	ppm	ASTM D5185(m)	2600	2652	2776	2750
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.6	22.2	25.1
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	12.3	12.1	12.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915494
Lab Number : 02627263
Unique Number : 5760395
Test Package : MOB 1

Received : 08 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 2024 - Kevin Marson

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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.