



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**52000 series**  
 Machine Id  
**Navistar 52854**  
 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		<b>WC0930261</b>	WC0857703	WC0723106
Sample Date		Client Info		<b>30 Apr 2024</b>	19 Oct 2023	29 Mar 2023
Machine Age	mls	Client Info		<b>356570</b>	290402	224287
Oil Age	mls	Client Info		<b>31483</b>	32461	32503
Filter Age	mls	Client Info		<b>31483</b>	32461	32503
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>17</b>	19	28
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	6	12
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	6	2
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	NONE

## CONTAMINATION

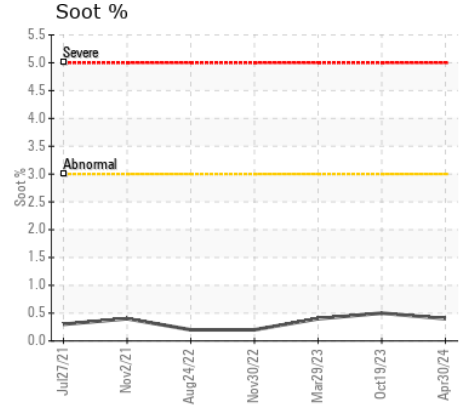
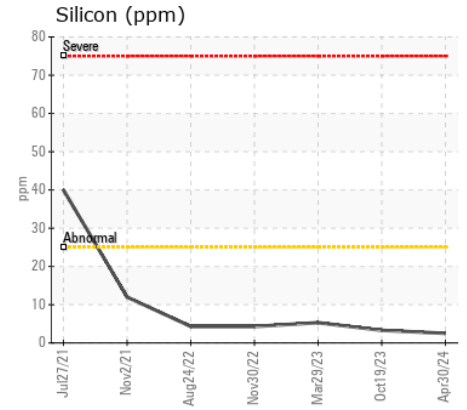
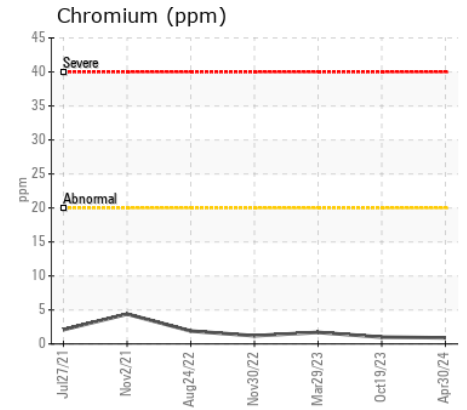
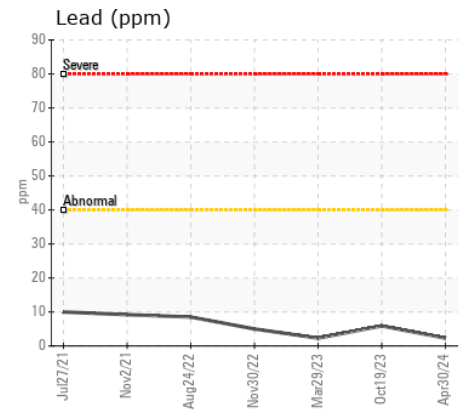
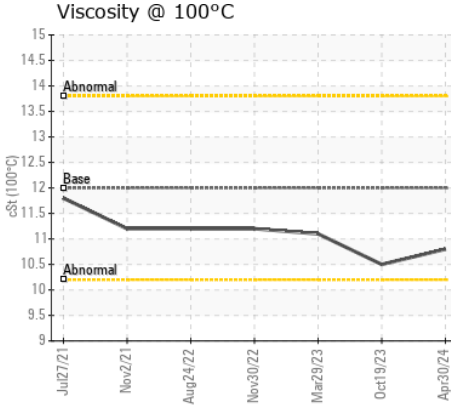
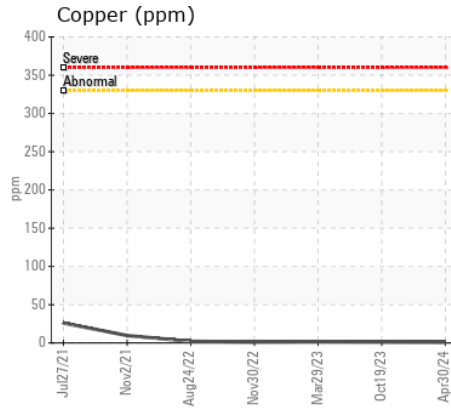
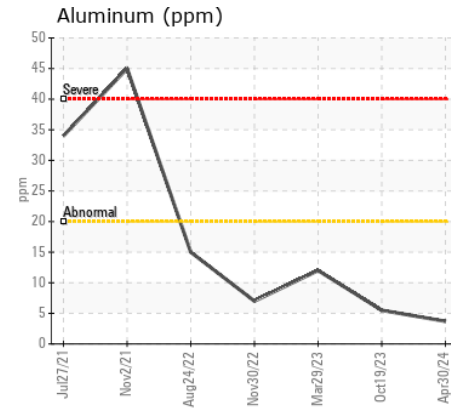
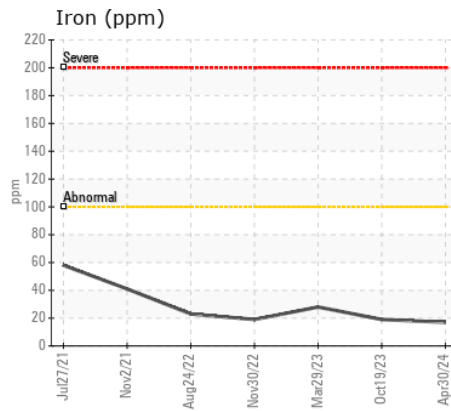
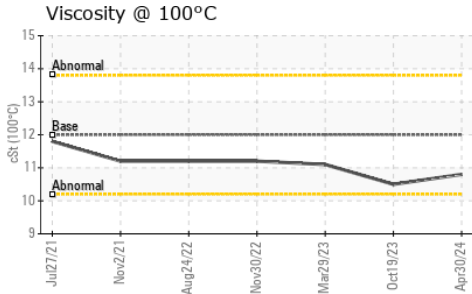
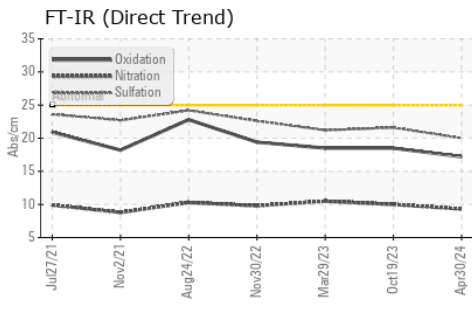
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	5	16
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.3</b>	10.0	10.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.0</b>	21.6	21.2
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	VLITE
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	3
Boron	ppm	ASTM D5185(m)	2	<b>8</b>	6	8
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	61	64
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>945</b>	934	998
Calcium	ppm	ASTM D5185(m)	1050	<b>1073</b>	1057	1160
Phosphorus	ppm	ASTM D5185(m)	995	<b>950</b>	960	1114
Zinc	ppm	ASTM D5185(m)	1180	<b>1186</b>	1161	1235
Sulfur	ppm	ASTM D5185(m)	2600	<b>2408</b>	2371	2637
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.2</b>	18.5	18.5
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>10.8</b>	10.5	11.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0930261 **Received** : 03 Jul 2024  
**Lab Number** : 02645189 **Tested** : 03 Jul 2024  
**Unique Number** : 5802728 **Diagnosed** : 03 Jul 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

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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.