



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**52000 series**  
 Machine Id  
**Navistar 52641**  
 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>WC0844367</b>	WC0828255	WC0813060
Sample Date		Client Info		<b>16 Feb 2024</b>	01 Sep 2023	09 May 2023
Machine Age	mls	Client Info		<b>172155</b>	644555	630378
Oil Age	mls	Client Info		<b>0</b>	14177	15450
Filter Age	mls	Client Info		<b>0</b>	14177	15450
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>40</b>	34	22
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	2	3
Lead	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185(m)	>90	<b>1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

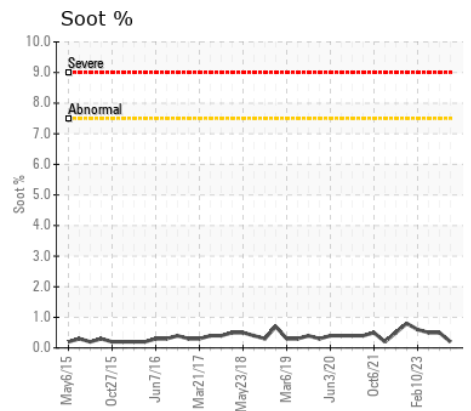
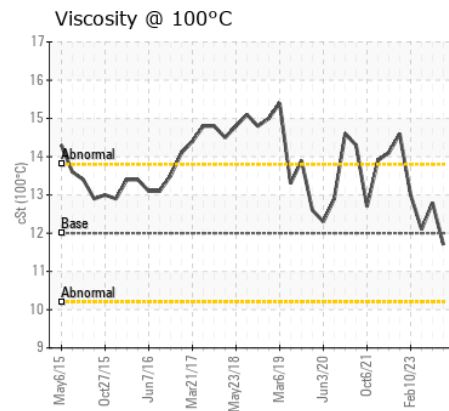
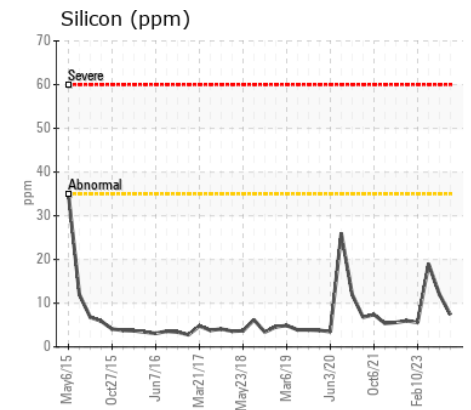
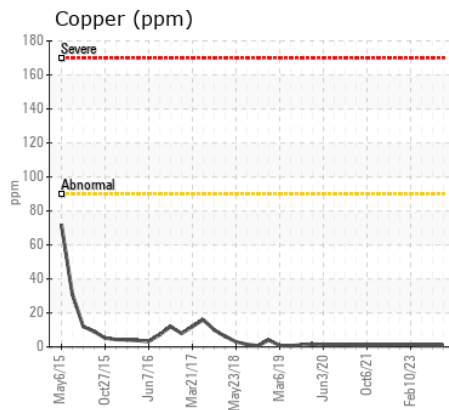
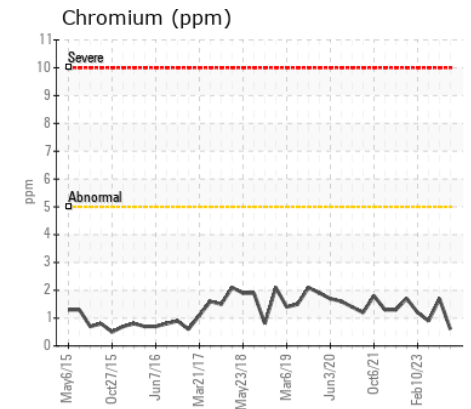
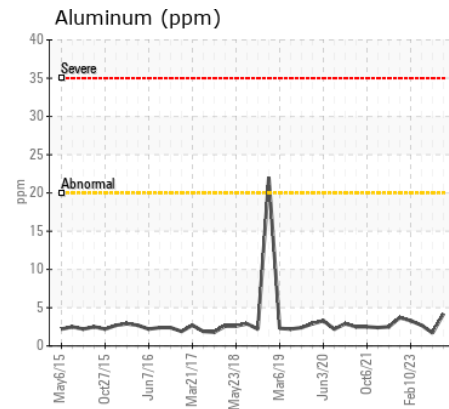
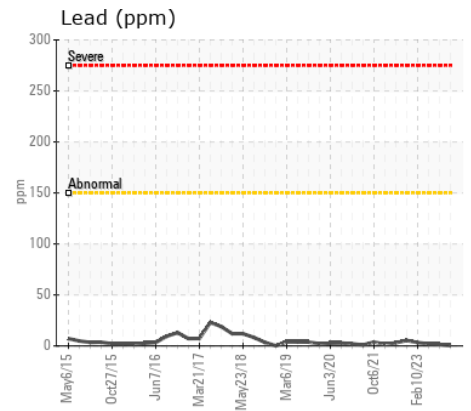
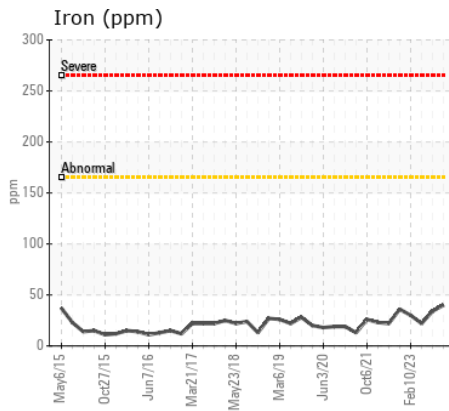
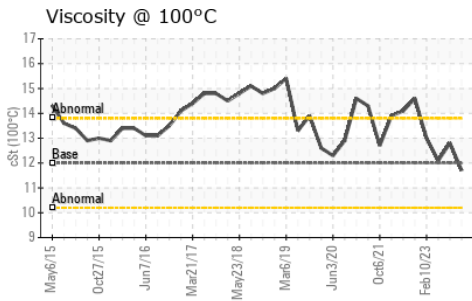
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>7</b>	12	19
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	0
Fuel		WC Method	>3.0	<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*	>7.5	<b>0.2</b>	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.8</b>	13.4	12.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	27.6	25.4
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
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>	3	3
Boron	ppm	ASTM D5185(m)	2	<b>8</b>	3	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>63</b>	68	70
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>1010</b>	1119	1133
Calcium	ppm	ASTM D5185(m)	1050	<b>1122</b>	1208	1302
Phosphorus	ppm	ASTM D5185(m)	995	<b>1089</b>	1180	1273
Zinc	ppm	ASTM D5185(m)	1180	<b>1226</b>	1363	1415
Sulfur	ppm	ASTM D5185(m)	2600	<b>2811</b>	2613	2781
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.2</b>	24.6	22.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.7</b>	12.8	12.1



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0844367  
**Lab Number** : 02616919  
**Unique Number** : 5734029  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**Received** : 21 Feb 2024  
**Tested** : 21 Feb 2024  
**Diagnosed** : 21 Feb 2024 - Wes Davis

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.

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