



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**4900 series**  
 Machine Id  
**Navistar 4952**  
 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>WC0915507</b>	WC0879054	WC0828186
Sample Date		Client Info		<b>07 Apr 2024</b>	11 Dec 2023	26 Jul 2023
Machine Age	kms	Client Info		<b>7466</b>	157239	144179
Oil Age	kms	Client Info		<b>7466</b>	8019	0
Filter Age	kms	Client Info		<b>7466</b>	8019	0
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>14</b>	18	16
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	5	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	8	3
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

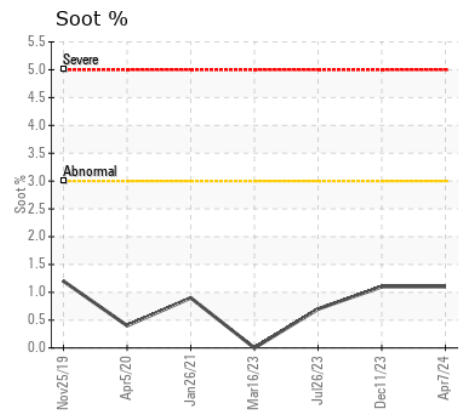
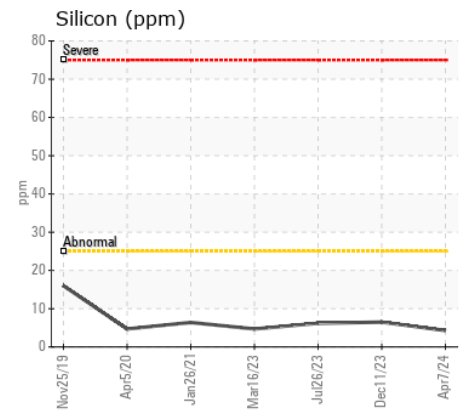
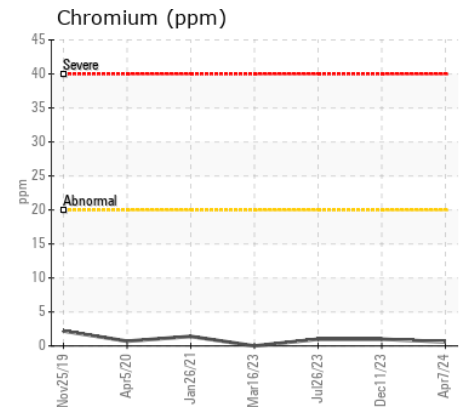
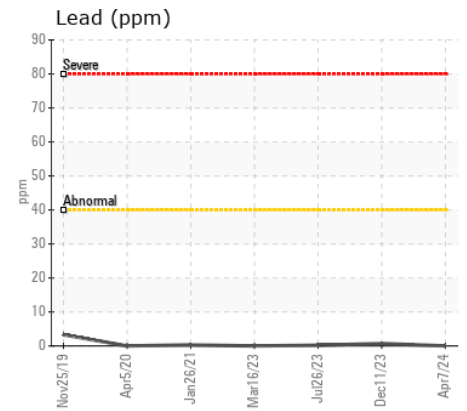
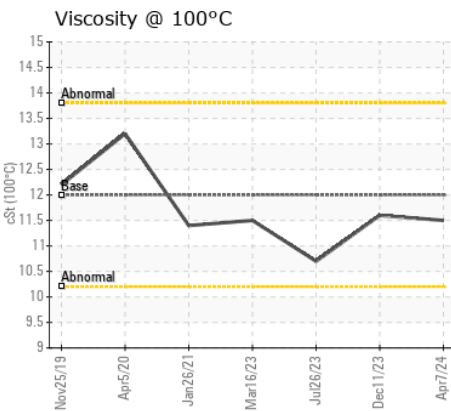
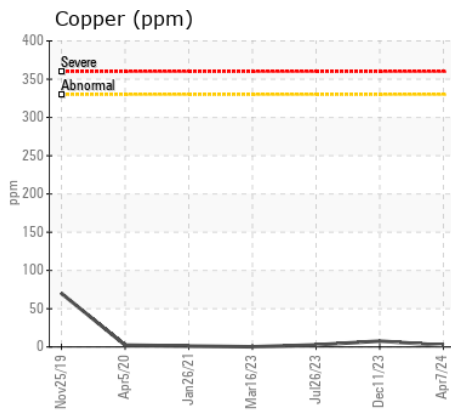
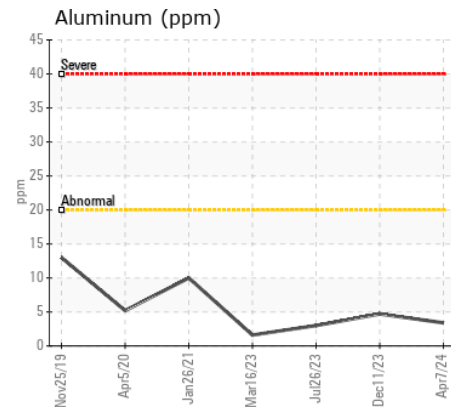
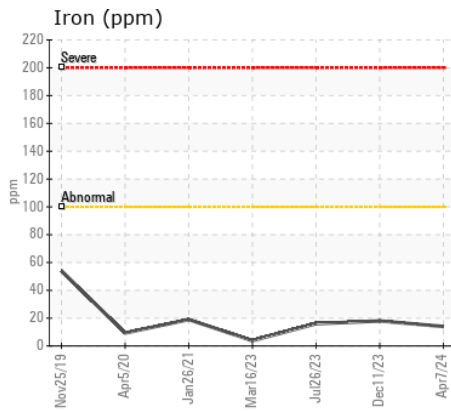
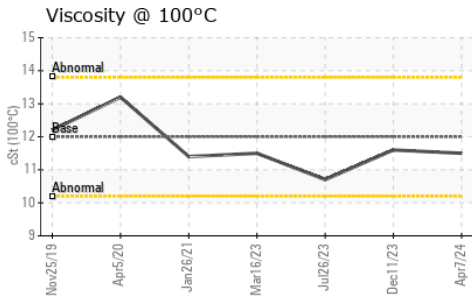
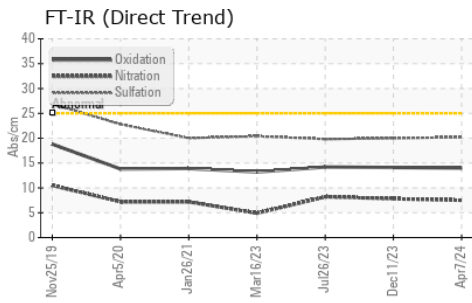
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	8	4
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>	0.0	NEG
Soot %	%	ASTM D7844*	>3	<b>1.1</b>	1.1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	7.8	8.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.2</b>	20.0	19.8
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>5</b>	28	38
Boron	ppm	ASTM D5185(m)	2	<b>5</b>	2	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	61	60
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>974</b>	977	971
Calcium	ppm	ASTM D5185(m)	1050	<b>1058</b>	1048	1029
Phosphorus	ppm	ASTM D5185(m)	995	<b>1019</b>	1016	1055
Zinc	ppm	ASTM D5185(m)	1180	<b>1205</b>	1205	1175
Sulfur	ppm	ASTM D5185(m)	2600	<b>2595</b>	2604	2630
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.0</b>	14.1	14.2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.5</b>	11.6	10.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915507 **Received** : 30 Apr 2024  
**Lab Number** : 02632278 **Tested** : 30 Apr 2024  
**Unique Number** : 5773431 **Diagnosed** : 30 Apr 2024 - Wes Davis  
**Test Package** : MOB 1

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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.