



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**4000 series**  
 Machine Id  
**Navistar 4222**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (12 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0934989</b>	WC0904881	WC0892071
Sample Date		Client Info		<b>01 Jul 2024</b>	03 May 2024	25 Feb 2024
Machine Age	kms	Client Info		<b>0</b>	200299	191126
Oil Age	kms	Client Info		<b>13369</b>	11002	14294
Filter Age	kms	Client Info		<b>13369</b>	11002	14294
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	<b>30</b>	54	19
Chromium	ppm	ASTM D5185(m)	>10	<b>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>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>5</b>	10	4
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>125	<b>2</b>	3	2
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

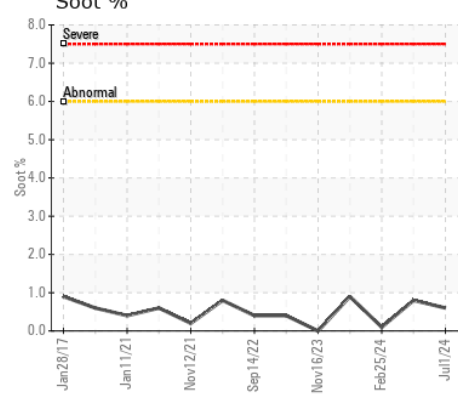
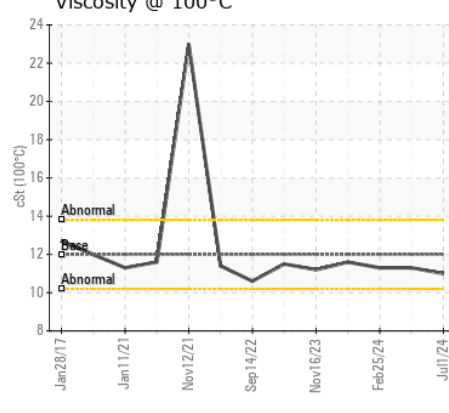
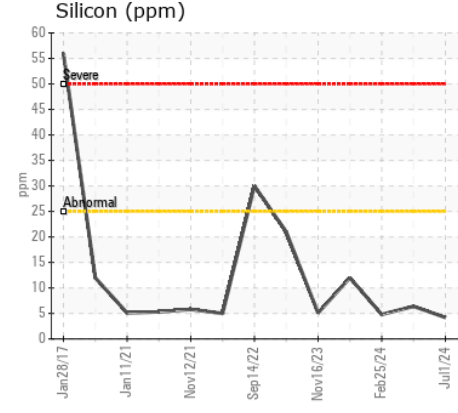
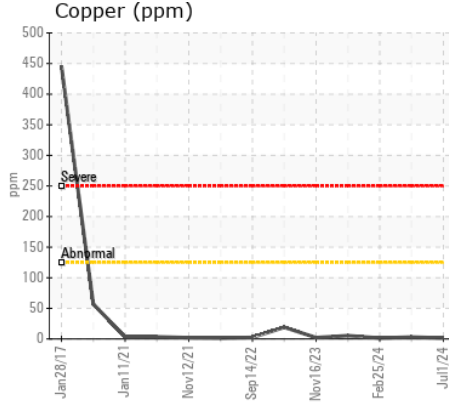
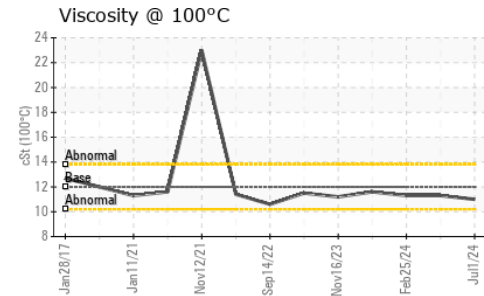
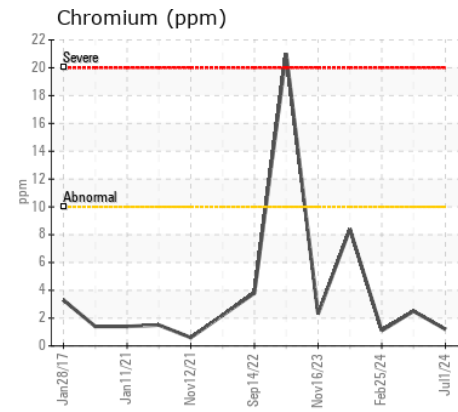
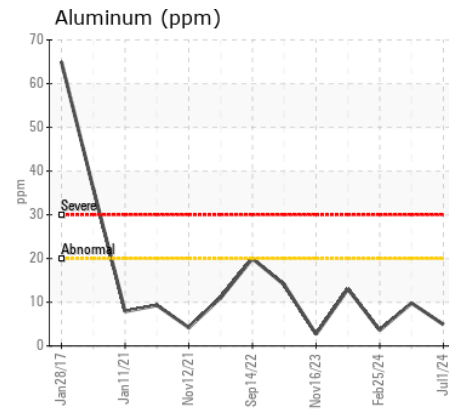
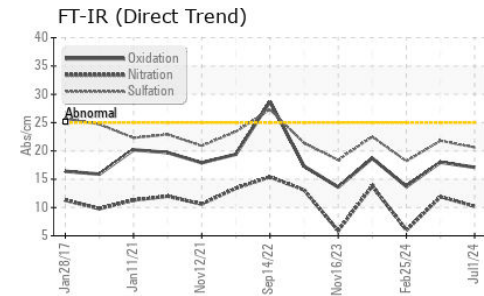
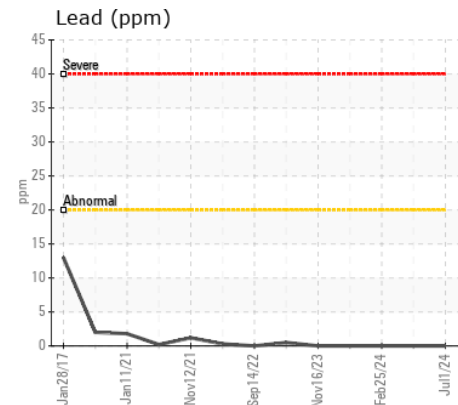
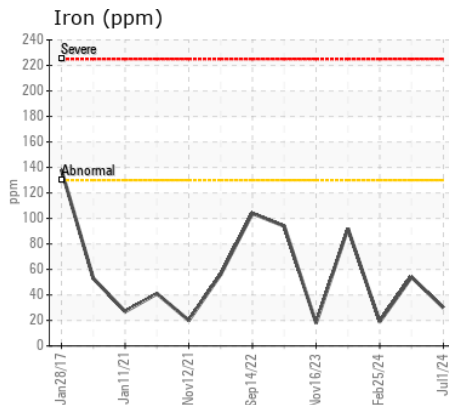
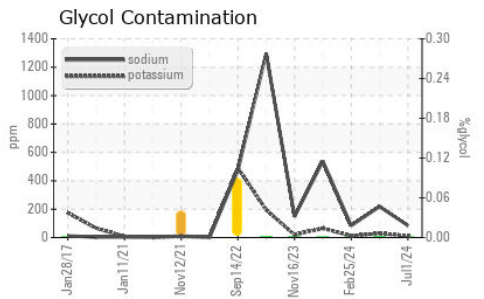
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	5
Potassium	ppm	ASTM D5185(m)	>20	<b>12</b>	29	11
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	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>6	<b>0.6</b>	0.8	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.2</b>	11.9	6.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.6</b>	21.8	18.2
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>85</b>	218	84
Boron	ppm	ASTM D5185(m)	2	<b>4</b>	6	8
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>60</b>	69	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	950	<b>922</b>	1004	938
Calcium	ppm	ASTM D5185(m)	1050	<b>1011</b>	1114	1045
Phosphorus	ppm	ASTM D5185(m)	995	<b>962</b>	1037	1005
Zinc	ppm	ASTM D5185(m)	1180	<b>1162</b>	1240	1162
Sulfur	ppm	ASTM D5185(m)	2600	<b>2394</b>	2546	2770
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.1</b>	18.0	13.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.0</b>	11.3	11.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0934989 **Received** : 05 Jul 2024  
**Lab Number** : 02645812 **Tested** : 05 Jul 2024  
**Unique Number** : 5803351 **Diagnosed** : 05 Jul 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

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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.