



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		WC0892071	WC0904894	WC0879099
Sample Date		Client Info		25 Feb 2024	10 Feb 2024	16 Nov 2023
Machine Age	mls	Client Info		191126	189547	287009
Oil Age	mls	Client Info		14294	12716	0
Filter Age	mls	Client Info		14294	12716	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	19	92	18
Chromium	ppm	ASTM D5185(m)	>10	1	8	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<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	4	13	3
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>125	2	5	2
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

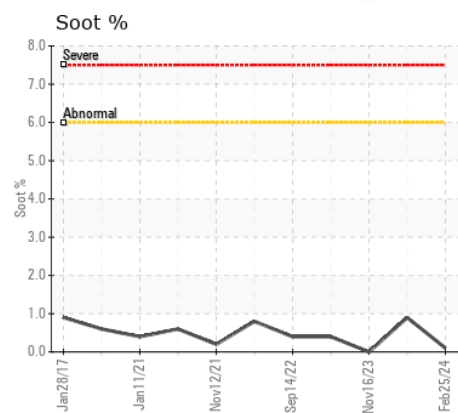
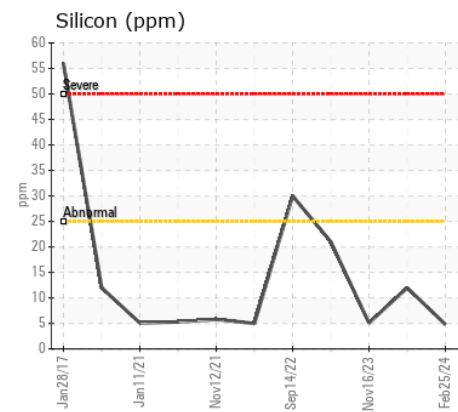
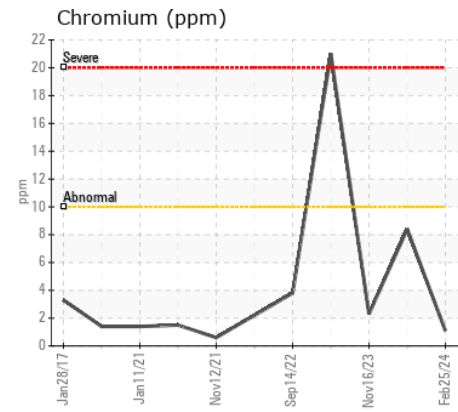
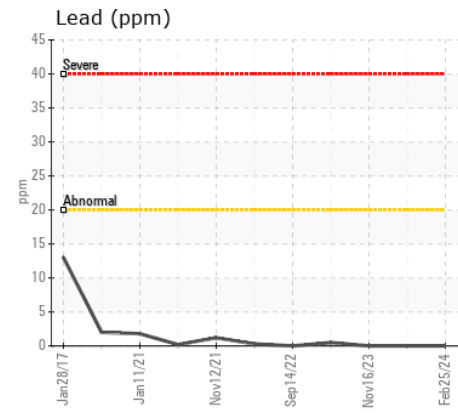
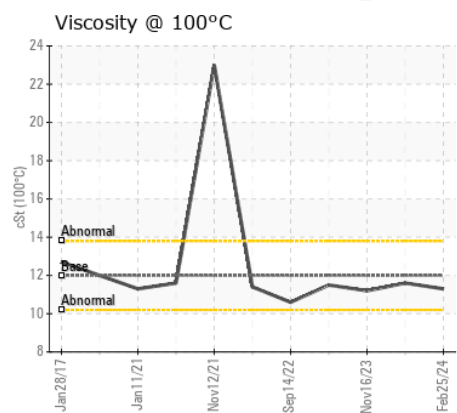
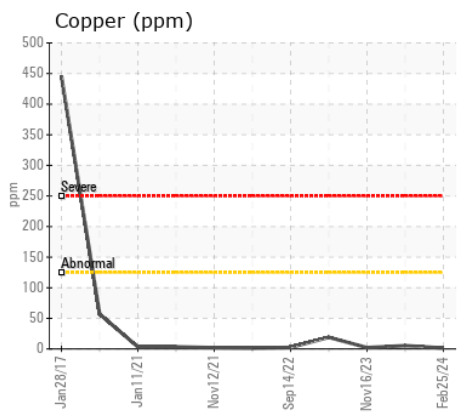
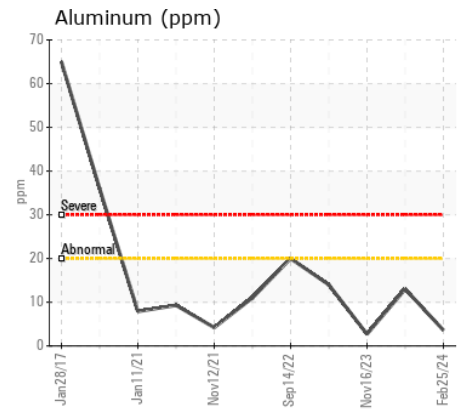
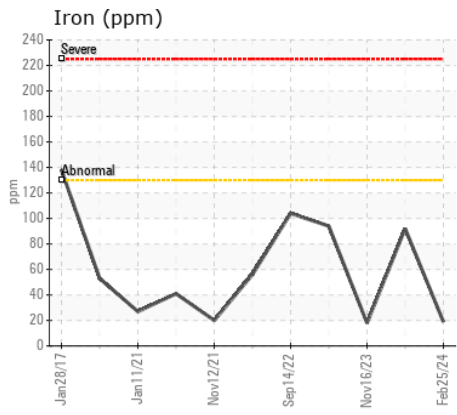
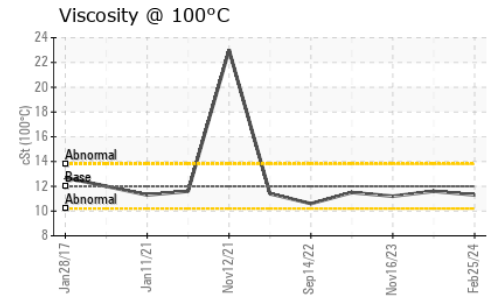
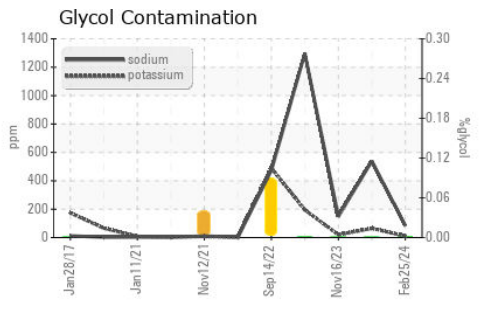
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	12	5
Potassium	ppm	ASTM D5185(m)	>20	11	65	20
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>6	0.1	0.9	0
Nitration	Abs/cm	ASTM D7624*	>20	6.0	13.8	5.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	22.5	18.4
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)		84	538	149
Boron	ppm	ASTM D5185(m)	2	8	9	12
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	61	78	58
Manganese	ppm	ASTM D5185(m)	0	0	<1	0
Magnesium	ppm	ASTM D5185(m)	950	938	965	915
Calcium	ppm	ASTM D5185(m)	1050	1045	1163	1032
Phosphorus	ppm	ASTM D5185(m)	995	1005	995	971
Zinc	ppm	ASTM D5185(m)	1180	1162	1223	1135
Sulfur	ppm	ASTM D5185(m)	2600	2770	2780	2581
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.7	18.7	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.6	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0892071 **Received** : 29 Feb 2024
Lab Number : 02618842 **Tested** : 29 Feb 2024
Unique Number : 5735952 **Diagnosed** : 29 Feb 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.