



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
4900 series
Machine Id
Navistar 4944T
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		WC0892073	WC0864016	WC0813105
Sample Date		Client Info		25 Feb 2024	21 Oct 2023	22 May 2023
Machine Age	mls	Client Info		403397	242912	375569
Oil Age	mls	Client Info		9000	9553	0
Filter Age	mls	Client Info		9000	9553	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	20	31	25
Chromium	ppm	ASTM D5185(m)	>20	<1	2	1
Nickel	ppm	ASTM D5185(m)	>4	2	2	3
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	3
Lead	ppm	ASTM D5185(m)	>40	4	10	2
Copper	ppm	ASTM D5185(m)	>330	1	2	2
Tin	ppm	ASTM D5185(m)	>15	<1	1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

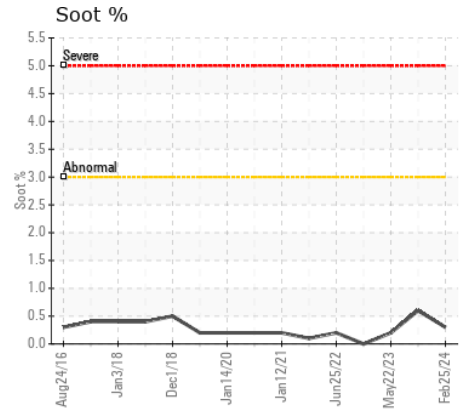
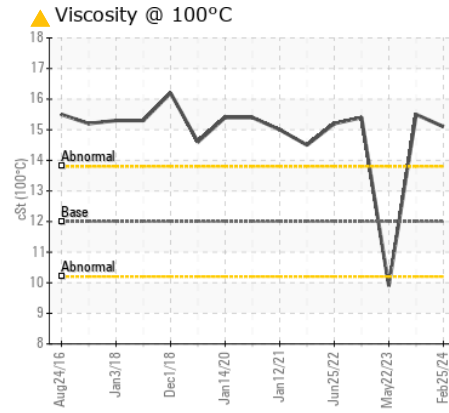
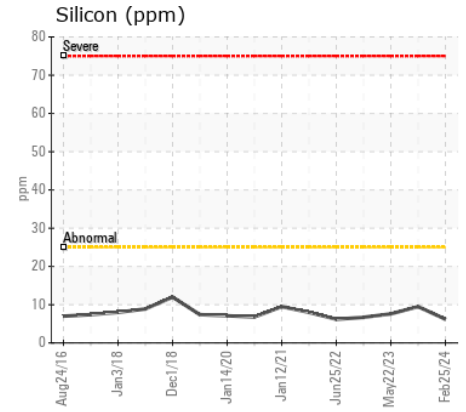
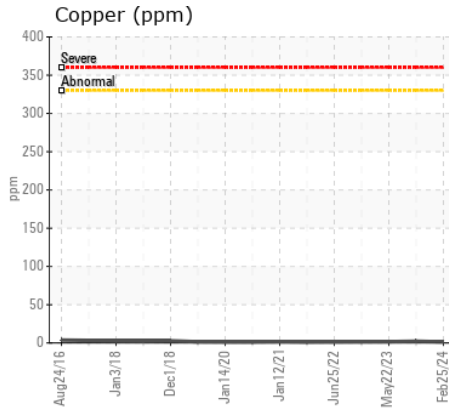
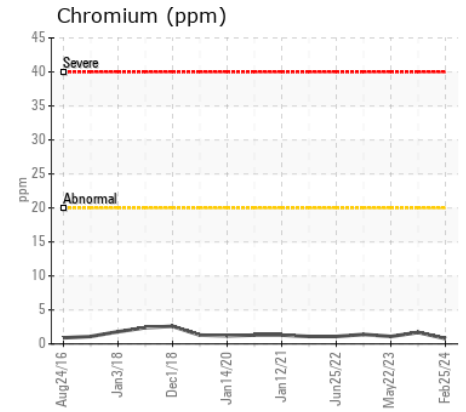
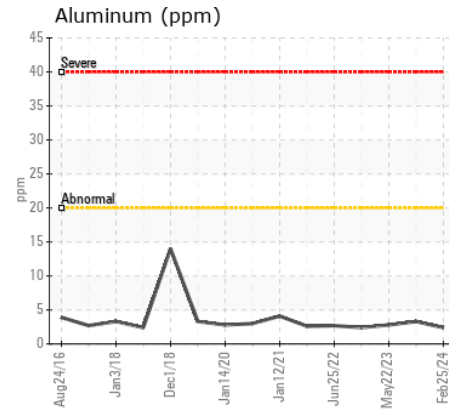
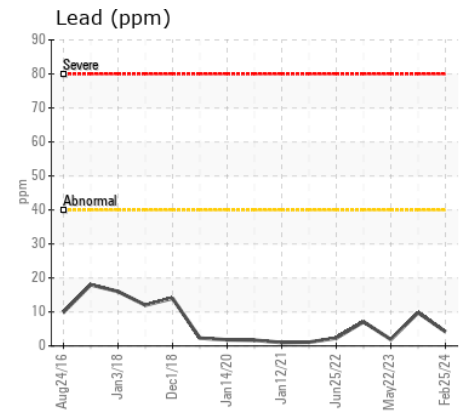
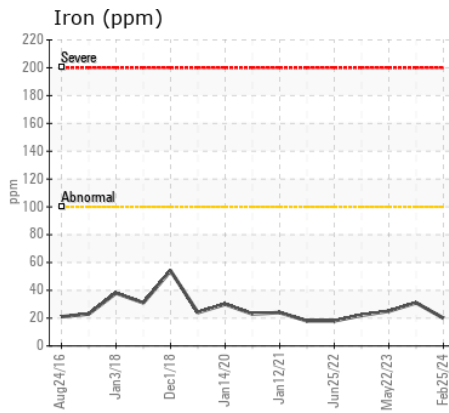
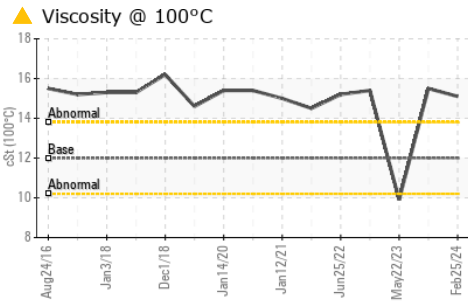
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	10	8
Potassium	ppm	ASTM D5185(m)	>20	1	1	2
Fuel		WC Method	>5	<1.0	<1.0	0.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.6	0.2
Nitration	Abs/cm	ASTM D7624*	>20	13.0	14.2	14.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.7	29.5	24.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	3	15
Boron	ppm	ASTM D5185(m)	2	<1	2	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	67	73	65
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1083	1169	1057
Calcium	ppm	ASTM D5185(m)	1050	1178	1279	1218
Phosphorus	ppm	ASTM D5185(m)	995	1103	1153	1182
Zinc	ppm	ASTM D5185(m)	1180	1274	1429	1328
Sulfur	ppm	ASTM D5185(m)	2600	2822	2766	2814
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.5	28.7	23.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 15.1	15.5	▲ 9.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0892073
Lab Number : 02618906
Unique Number : 5736016
Test Package : MOB 1
Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Kevin Marson

MANITOULIN TRANSPORT
 75 MUMFORD ROAD
 LIVELY, ON
 CA P3Y 1L1
 Contact: Todd Smith
 tosmith@manitoulintransport.com
 T: (705)562-3302
 F: x:

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.