



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
4000 Series
 Machine Id
Navistar 4296
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (16 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915475	WC0879051	WC0828253
Sample Date		Client Info		27 Mar 2024	12 Dec 2023	03 Sep 2023
Machine Age	mls	Client Info		248376	239596	0
Oil Age	mls	Client Info		8781	8093	7826
Filter Age	mls	Client Info		8781	8093	7826
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	26	16	13
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	14	9	9
Lead	ppm	ASTM D5185(m)	>20	0	<1	<1
Copper	ppm	ASTM D5185(m)	>125	1	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

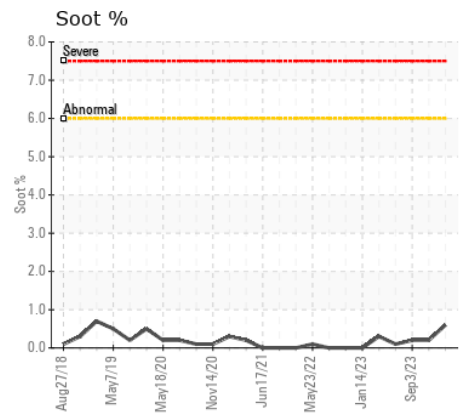
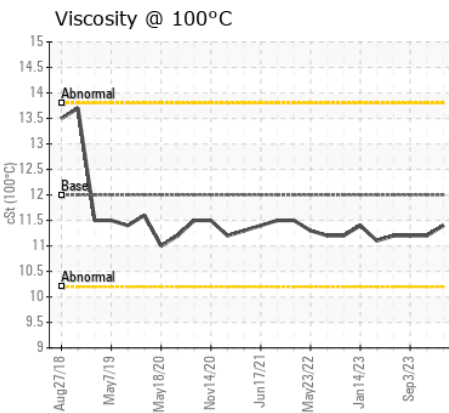
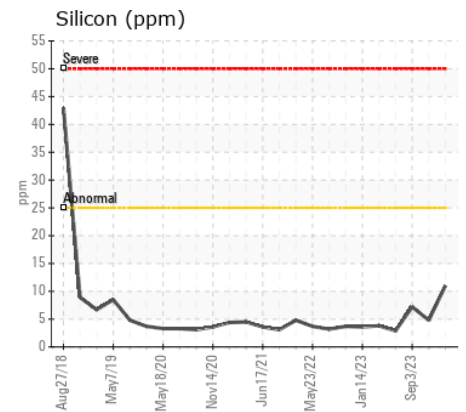
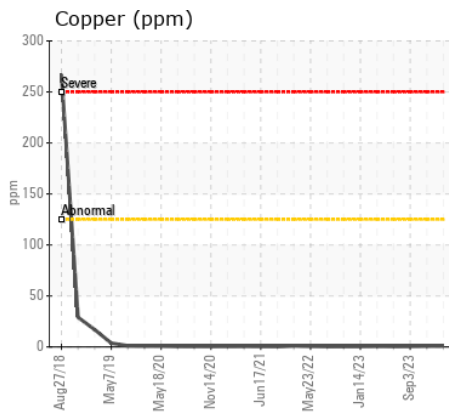
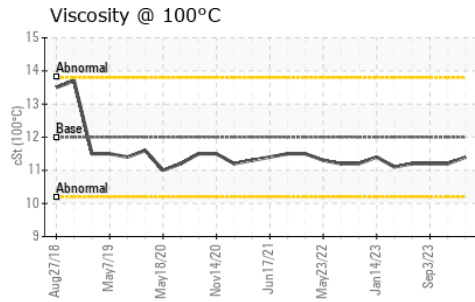
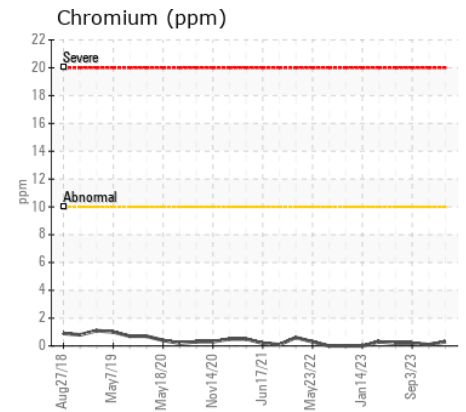
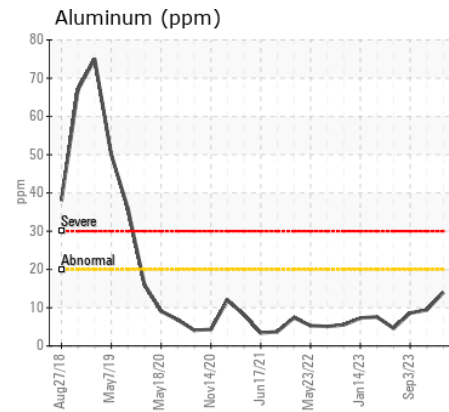
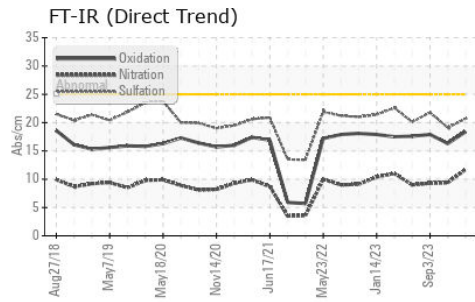
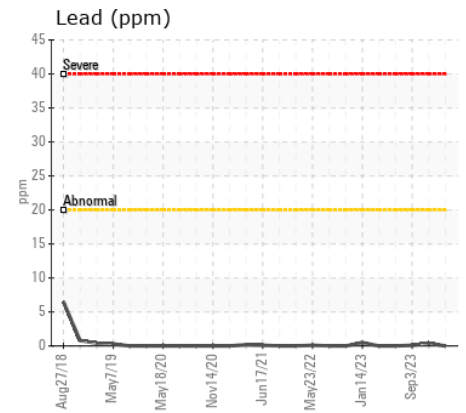
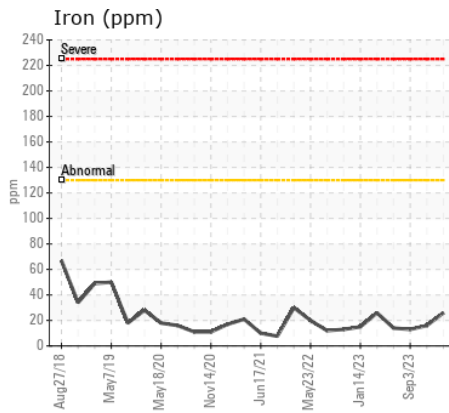
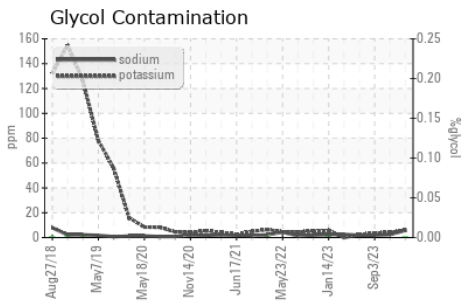
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	11	5	7
Potassium	ppm	ASTM D5185(m)	>20	6	4	4
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.6	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	11.7	9.4	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	19.1	21.8
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)		6	2	2
Boron	ppm	ASTM D5185(m)	2	6	8	8
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	64	63	60
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1035	996	969
Calcium	ppm	ASTM D5185(m)	1050	1112	1113	1080
Phosphorus	ppm	ASTM D5185(m)	995	1071	1038	1052
Zinc	ppm	ASTM D5185(m)	1180	1268	1242	1189
Sulfur	ppm	ASTM D5185(m)	2600	2605	2578	2503
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	16.3	17.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.2	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915475 **Received** : 05 Apr 2024
Lab Number : 02626894 **Tested** : 05 Apr 2024
Unique Number : 5760026 **Diagnosed** : 05 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

MANITOU LIN 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.