MOB

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
4000 Series
Machine Id
Navistar 4354
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (16 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

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.

FLUID CONDITION

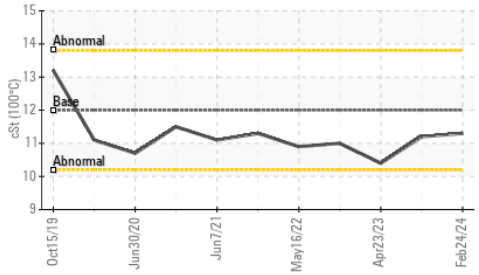
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0892075	WC0854832	WC0813078
Sample Date		Client Info		24 Feb 2024	16 Sep 2023	23 Apr 2023
Machine Age	mls	Client Info		66941	61544	57024
Oil Age	mls	Client Info		5398	4648	7054
Filter Age	mls	Client Info		5398	4648	7054
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>130	20	15	21
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	15	13	13
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>125	1	2	4
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	3	4
Potassium	ppm	ASTM D5185(m)	>20	21	20	16
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.1	7.8	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	19.5	20.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		1	2	2
Boron	ppm	ASTM D5185(m)	2	5	3	5
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	61	61	59
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	975	975	937
Calcium	ppm	ASTM D5185(m)	1050	1089	1073	1124
Phosphorus	ppm	ASTM D5185(m)	995	1044	1013	1091
Zinc	ppm	ASTM D5185(m)	1180	1205	1223	1198
Sulfur	ppm	ASTM D5185(m)	2600	2753	2601	2667
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	15.9	17.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.2	10.4

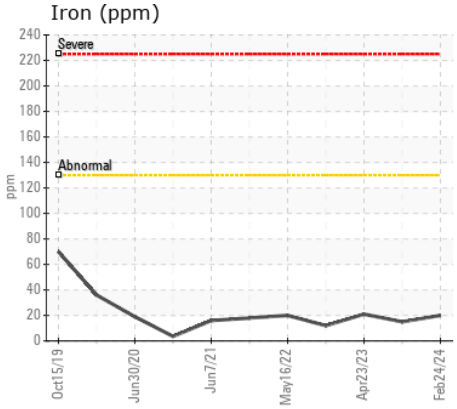
Report Id: MANLIV [WCAMIS] 02618860 (Generated: 02/29/2024 15:49:23) Rev: 1

Contact/Location: Todd Smith - MANLIV

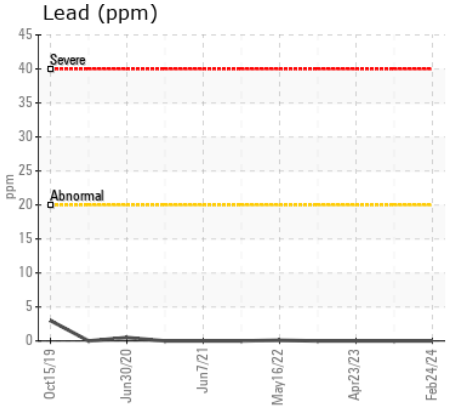
Viscosity @ 100°C



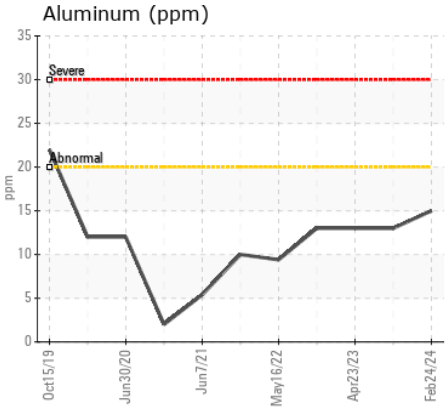
Iron (ppm)



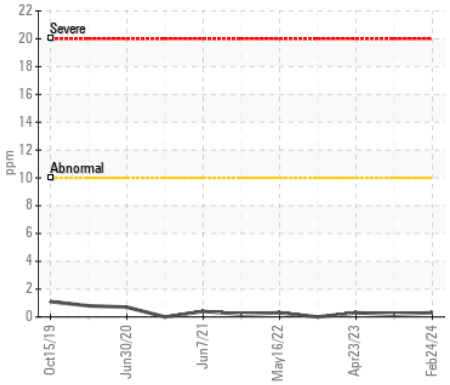
Lead (ppm)



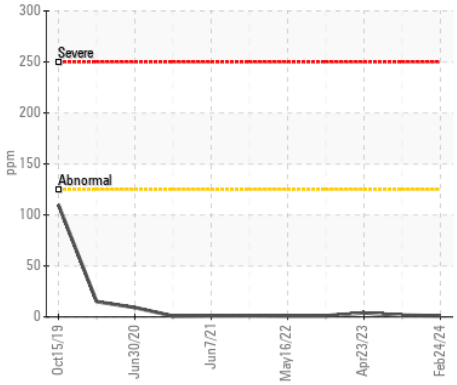
Aluminum (ppm)



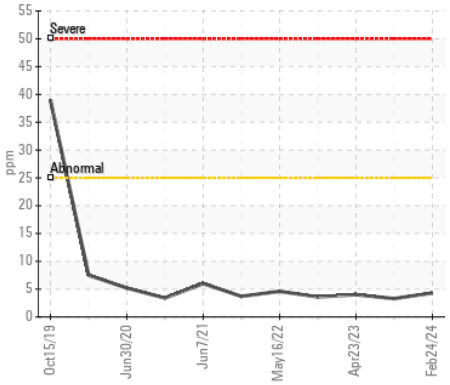
Chromium (ppm)



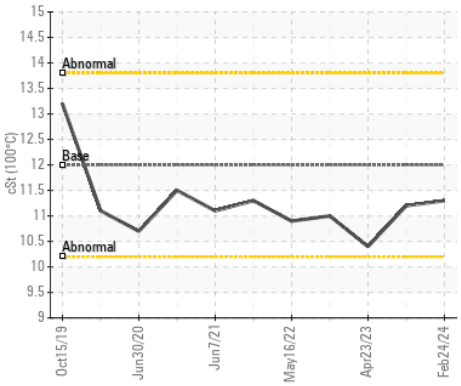
Copper (ppm)



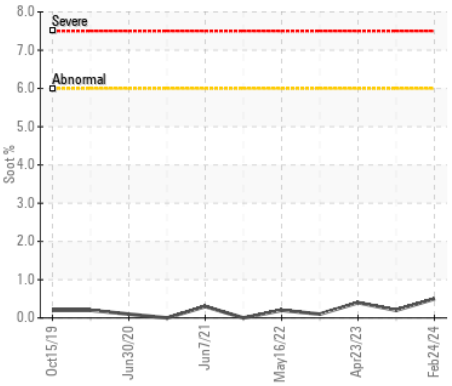
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0892075
Lab Number : 02618860
Unique Number : 5735970
Test Package : MOB 1

Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

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.

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