



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
51000 series
Machine Id
Navistar 51767
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844352	WC0828170	WC0769985
Sample Date		Client Info		20 Feb 2024	15 Jul 2023	30 Dec 2022
Machine Age	mls	Client Info		777113	755737	749641
Oil Age	mls	Client Info		21376	5748	10770
Filter Age	mls	Client Info		21376	5748	10770
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	16	25	25
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	2
Lead	ppm	ASTM D5185(m)	>40	1	1	2
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

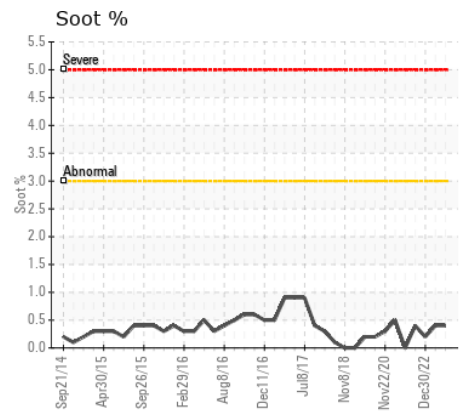
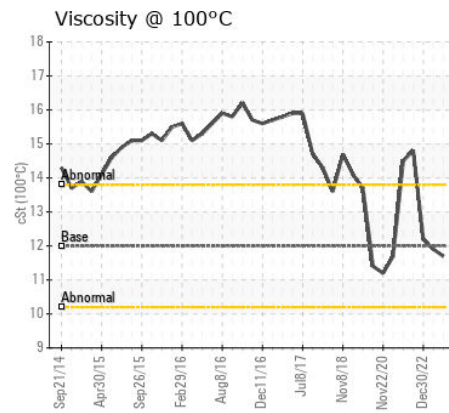
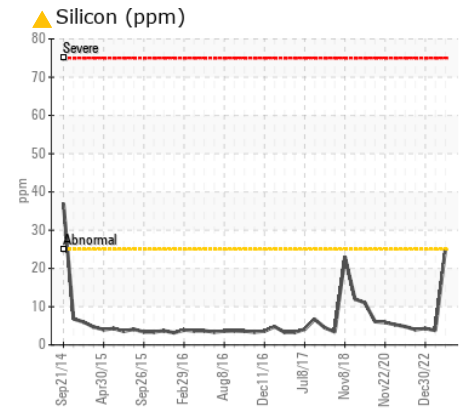
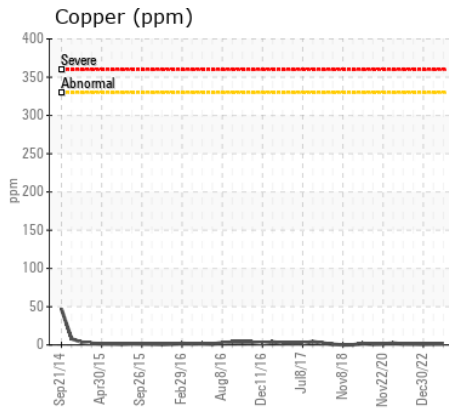
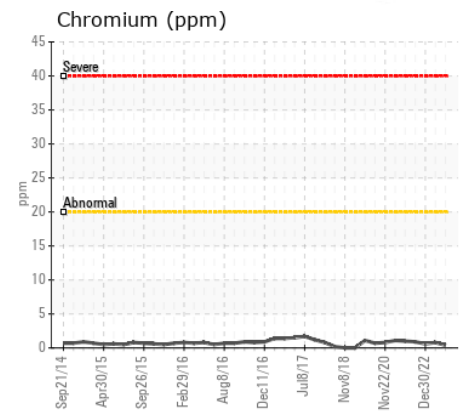
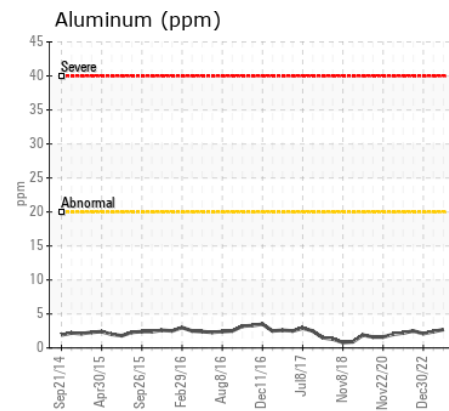
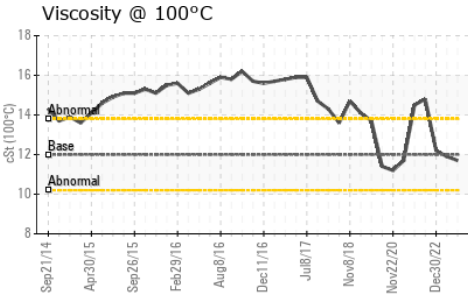
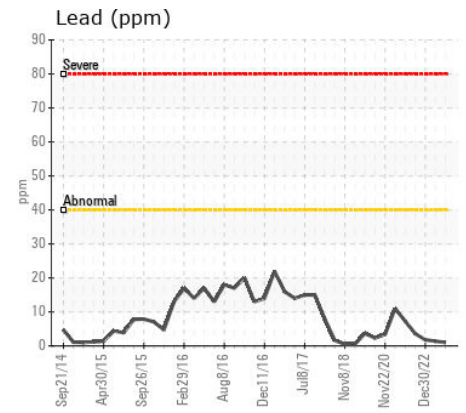
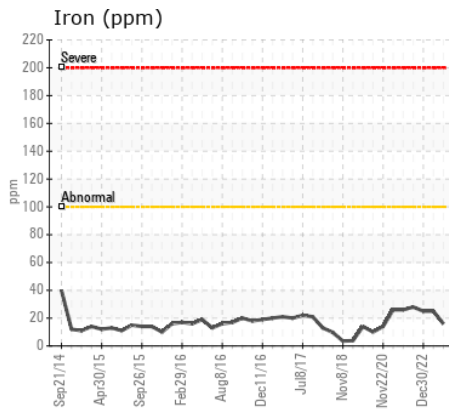
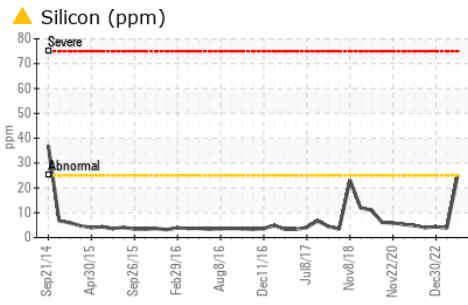
There is a moderate concentration of dirt present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	▲ 25	4	4
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.4	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	10.5	11.2	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	23.6	23.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	2	4	8	5
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	63	65	62
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	1017	1035	1020
Calcium	ppm	ASTM D5185(m)	1050	1132	1141	1216
Phosphorus	ppm	ASTM D5185(m)	995	1077	1108	1148
Zinc	ppm	ASTM D5185(m)	1180	1239	1265	1285
Sulfur	ppm	ASTM D5185(m)	2600	2757	2554	2662
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.4	21.1	20.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.7	11.9	12.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0844352
Lab Number : 02618911
Unique Number : 5736021
Test Package : MOB 1

Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Kevin Marson

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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.