



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
52000 series
 Machine Id
INTERNATIONAL 52662
 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		WC0844348	WC0828252	WC0794944
Sample Date		Client Info		18 Feb 2024	03 Sep 2023	16 Apr 2023
Machine Age	mls	Client Info		986920	587062	654753
Oil Age	mls	Client Info		42126	22309	23314
Filter Age	mls	Client Info		42126	22309	23314
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)	>165	40	53	41
Chromium	ppm	ASTM D5185(m)	>5	1	3	2
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	7	8	8
Lead	ppm	ASTM D5185(m)	>150	9	9	6
Copper	ppm	ASTM D5185(m)	>90	2	2	3
Tin	ppm	ASTM D5185(m)	>5	2	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

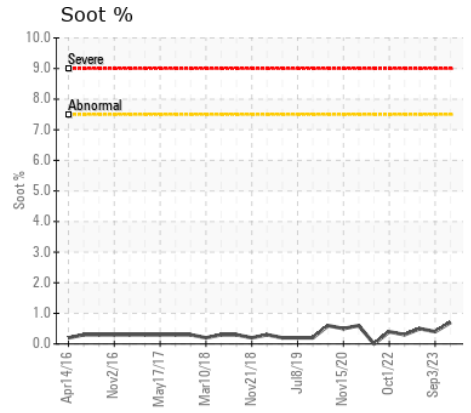
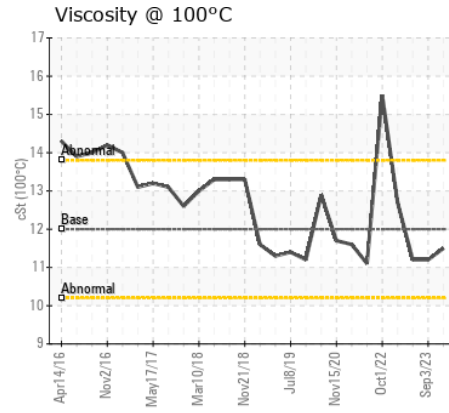
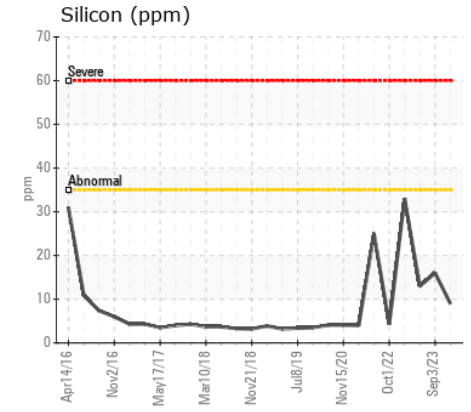
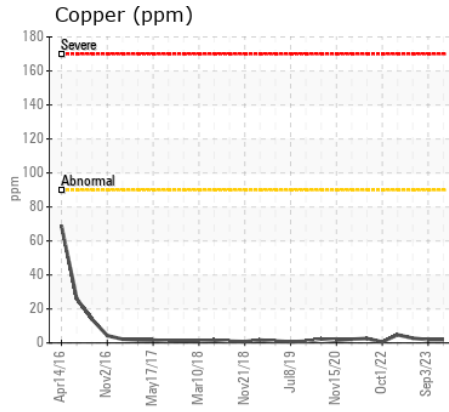
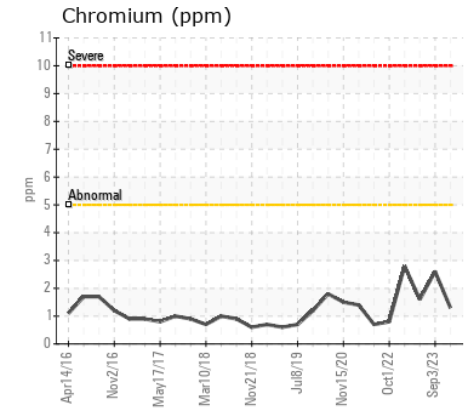
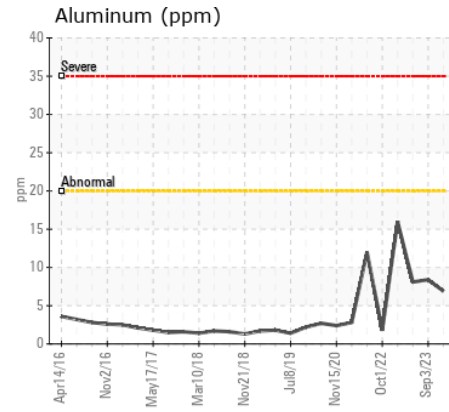
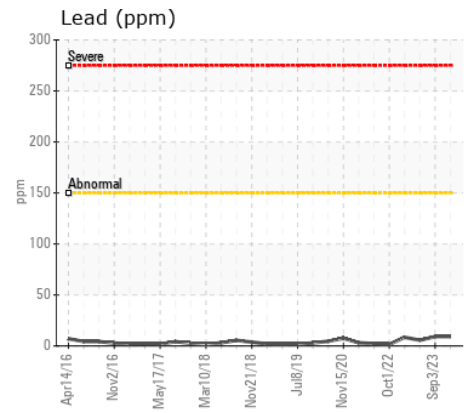
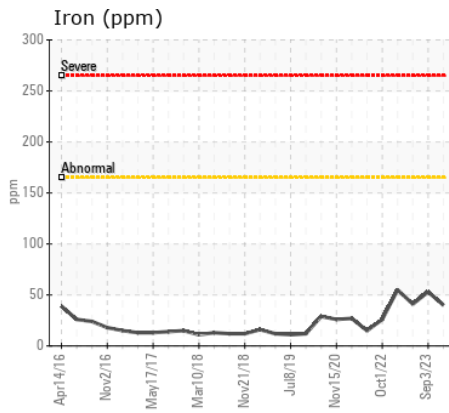
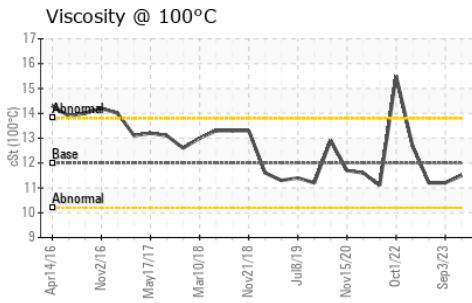
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	9	16	13
Potassium	ppm	ASTM D5185(m)	>20	1	1	<1
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*	>7.5	0.7	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	11.2	9.6	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	22.1	21.6
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		3	4	3
Boron	ppm	ASTM D5185(m)	2	4	3	18
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	65	62	65
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	1024	1020	1056
Calcium	ppm	ASTM D5185(m)	1050	1156	1091	1144
Phosphorus	ppm	ASTM D5185(m)	995	1074	1064	1141
Zinc	ppm	ASTM D5185(m)	1180	1263	1244	1254
Sulfur	ppm	ASTM D5185(m)	2600	2656	2437	2681
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	16.4	17.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.5	11.2	11.2



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0844348 **Received** : 21 Feb 2024
Lab Number : 02616893 **Tested** : 21 Feb 2024
Unique Number : 5734003 **Diagnosed** : 21 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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.