



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		WC0915469	WC0844348	WC0828252
Sample Date		Client Info		17 May 2024	18 Feb 2024	03 Sep 2023
Machine Age	mls	Client Info		633424	986920	587062
Oil Age	mls	Client Info		20185	42126	22309
Filter Age	mls	Client Info		20185	42126	22309
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	24	40	53
Chromium	ppm	ASTM D5185(m)	>5	<1	1	3
Nickel	ppm	ASTM D5185(m)	>4	0	0	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	4	7	8
Lead	ppm	ASTM D5185(m)	>150	6	9	9
Copper	ppm	ASTM D5185(m)	>90	<1	2	2
Tin	ppm	ASTM D5185(m)	>5	<1	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

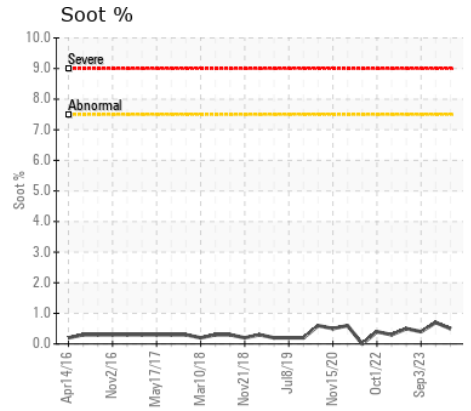
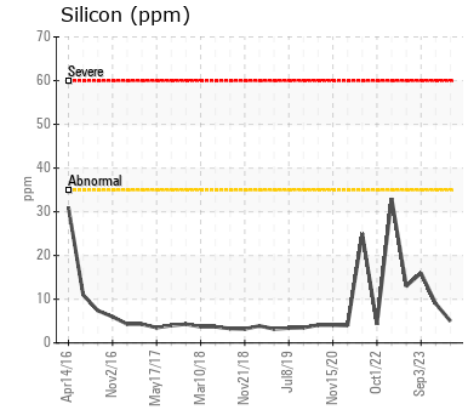
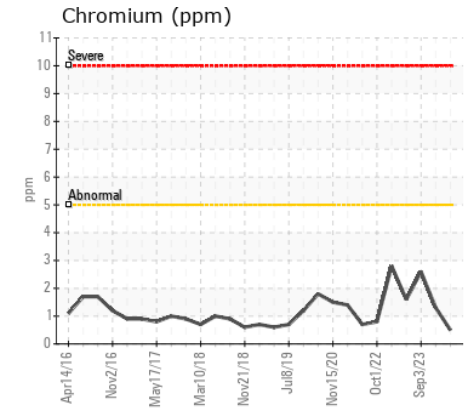
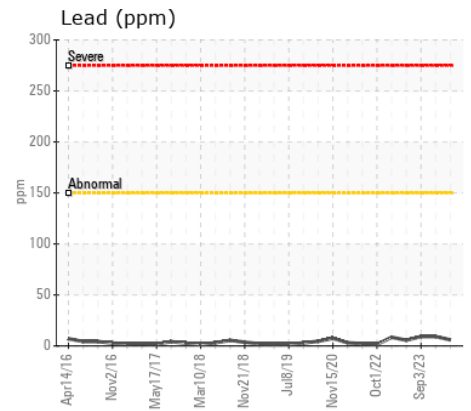
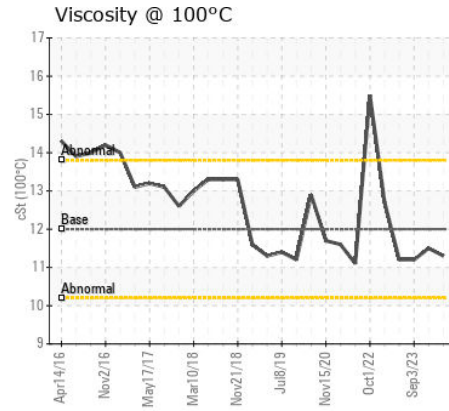
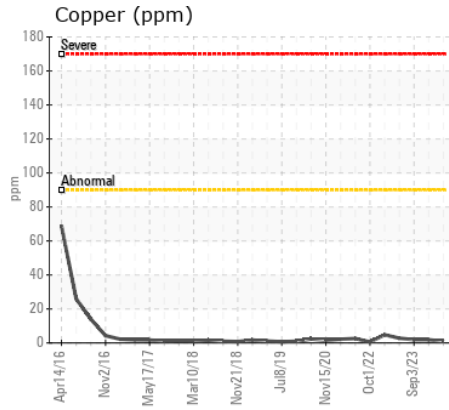
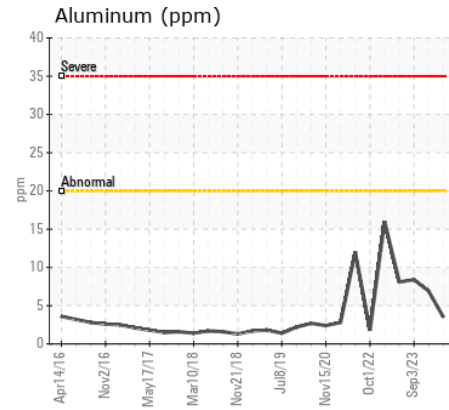
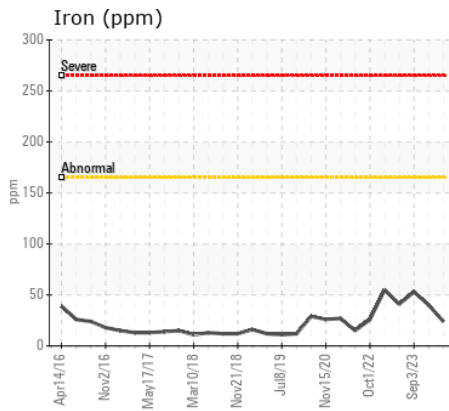
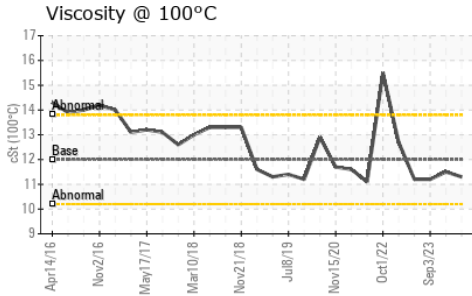
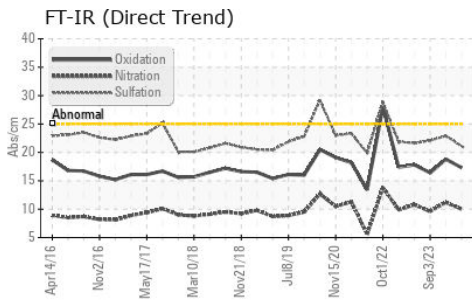
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	5	9	16
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	0.5	0.7	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.0	11.2	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	22.9	22.1
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	---
Appearance	scalar	Visual*	NORML	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)		2	3	4
Boron	ppm	ASTM D5185(m)	2	4	4	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	64	65	62
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1025	1024	1020
Calcium	ppm	ASTM D5185(m)	1050	1137	1156	1091
Phosphorus	ppm	ASTM D5185(m)	995	1056	1074	1064
Zinc	ppm	ASTM D5185(m)	1180	1268	1263	1244
Sulfur	ppm	ASTM D5185(m)	2600	2581	2656	2437
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	18.8	16.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.5	11.2



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915469 **Received** : 06 Jun 2024
Lab Number : 02640143 **Tested** : 06 Jun 2024
Unique Number : 5789305 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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.

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