



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
51939
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915514	WC0892032	WC0879092
Sample Date		Client Info		22 Mar 2024	08 Jan 2024	14 Nov 2023
Machine Age	kms	Client Info		337675	493365	272084
Oil Age	kms	Client Info		31815	0	27597
Filter Age	kms	Client Info		31815	0	27597
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)	>100	23	25	15
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	4	2
Lead	ppm	ASTM D5185(m)	>40	2	2	2
Copper	ppm	ASTM D5185(m)	>330	2	2	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

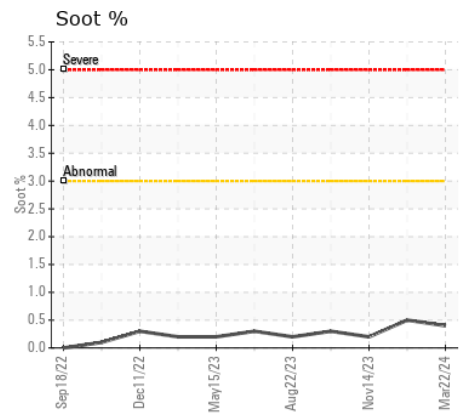
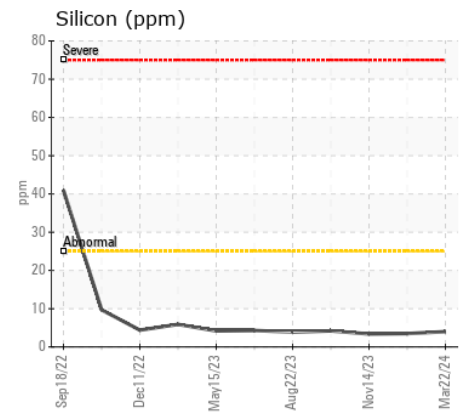
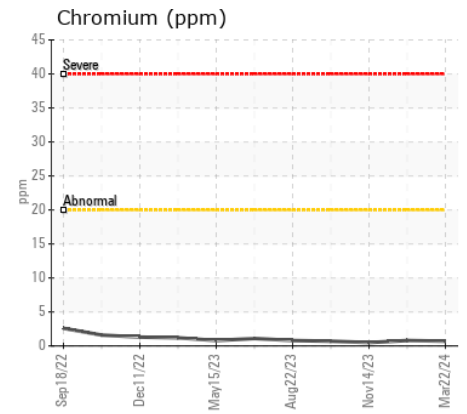
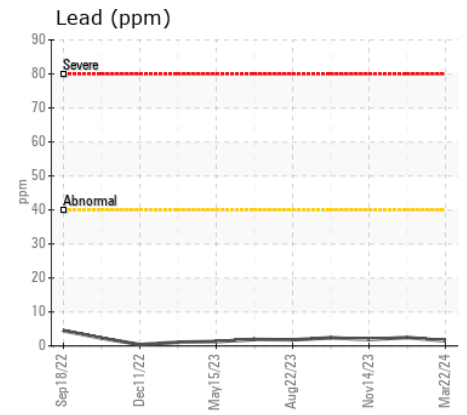
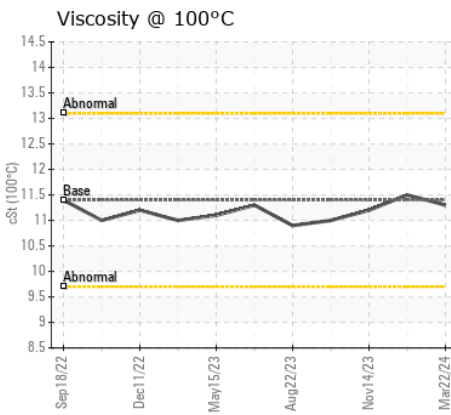
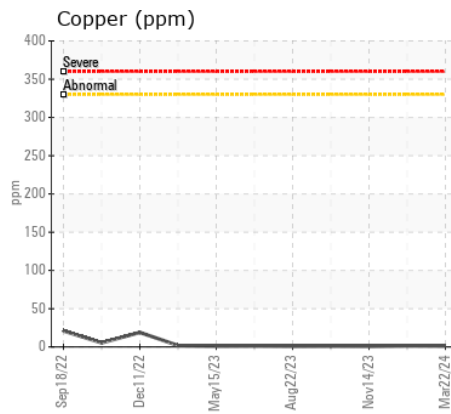
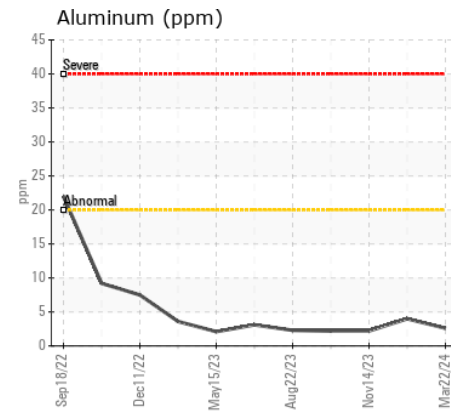
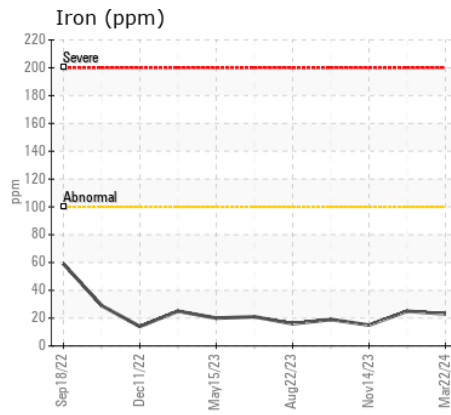
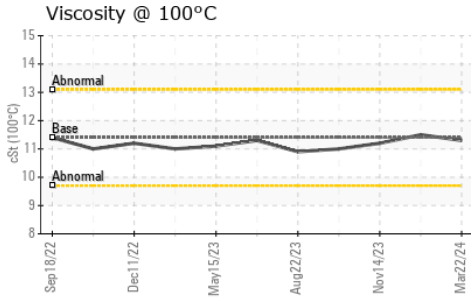
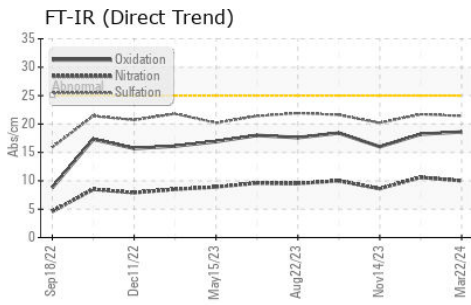
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	3
Potassium	ppm	ASTM D5185(m)	>20	2	5	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	0.5	0.2
Nitration	Abs/cm	ASTM D7624*	>20	10.0	10.6	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	21.7	20.2
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	1	2
Boron	ppm	ASTM D5185(m)	1	4	5	4
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	63	61	61
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	10	1022	989	982
Calcium	ppm	ASTM D5185(m)	2942	1091	1100	1094
Phosphorus	ppm	ASTM D5185(m)	1102	1013	1019	1018
Zinc	ppm	ASTM D5185(m)	1351	1279	1229	1218
Sulfur	ppm	ASTM D5185(m)	3903	2332	2498	2356
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.6	18.2	16.0
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.3	11.5	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915514 **Received** : 08 Apr 2024
Lab Number : 02627240 **Tested** : 08 Apr 2024
Unique Number : 5760372 **Diagnosed** : 08 Apr 2024 - Wes Davis
Test Package : MOB 1

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.