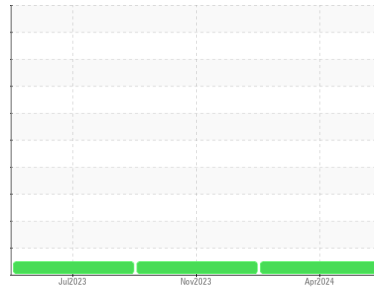




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

51964

Component

Diesel Engine

Fluid

PETRO CANADA DURON SAE 10W30 (--- LTR)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0915070	WC0837207	WC0828335
Sample Date	Client Info			08 Apr 2024	13 Nov 2023	31 Jul 2023
Machine Age	mls	Client Info		129453	67113	33745
Oil Age	mls	Client Info		31902	33368	31316
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	0.9
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	25	46	78
Chromium	ppm	ASTM D5185(m)	>20	<1	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	7	30	46
Lead	ppm	ASTM D5185(m)	>40	<1	3	4
Copper	ppm	ASTM D5185(m)	>330	1	5	18
Tin	ppm	ASTM D5185(m)	>15	<1	2	3
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

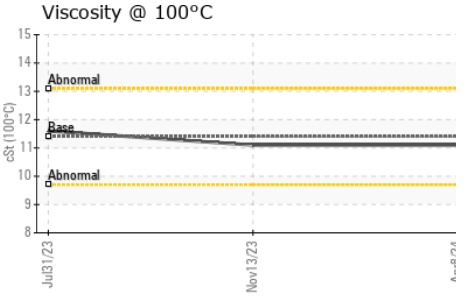
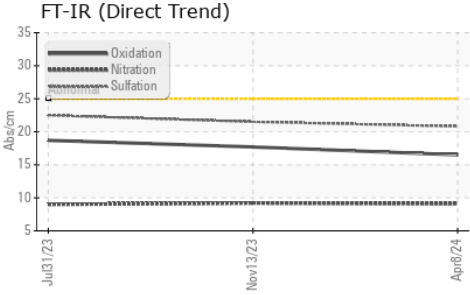
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	2	5	42
Barium	ppm	ASTM D5185(m)	1	0	<1	5
Molybdenum	ppm	ASTM D5185(m)	1	61	62	64
Manganese	ppm	ASTM D5185(m)	1	<1	<1	5
Magnesium	ppm	ASTM D5185(m)	10	1005	941	466
Calcium	ppm	ASTM D5185(m)	2942	1069	1154	1718
Phosphorus	ppm	ASTM D5185(m)	1102	1010	986	1012
Zinc	ppm	ASTM D5185(m)	1351	1223	1217	1167
Sulfur	ppm	ASTM D5185(m)	3903	2374	2268	2343
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	12	38
Sodium	ppm	ASTM D5185(m)		2	2	5
Potassium	ppm	ASTM D5185(m)	>20	10	71	129

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.5	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.1	9.2	9.0
Sulfation	Abs./1mm	ASTM D7415*	>30	20.8	21.5	22.5



OIL ANALYSIS REPORT

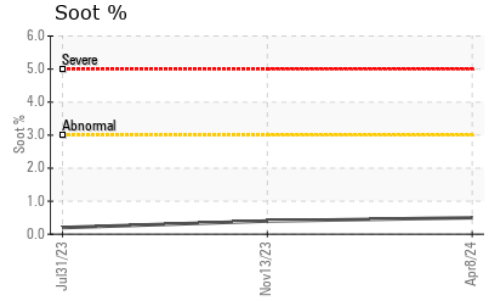
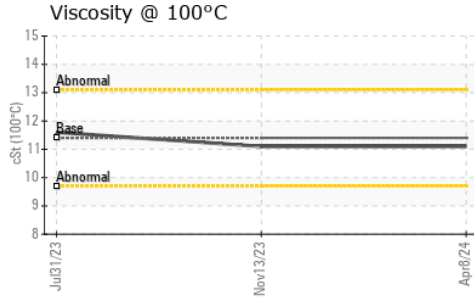
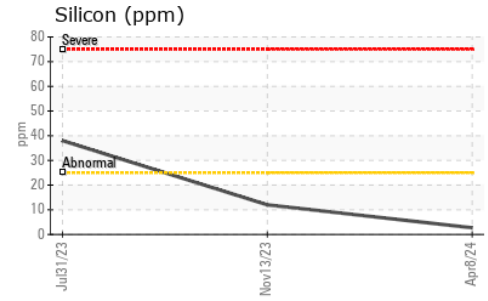
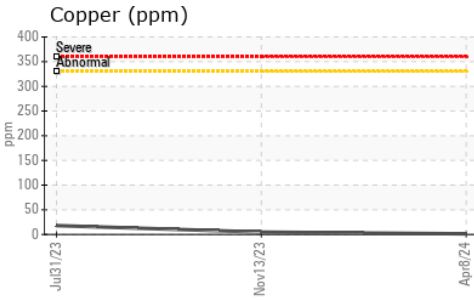
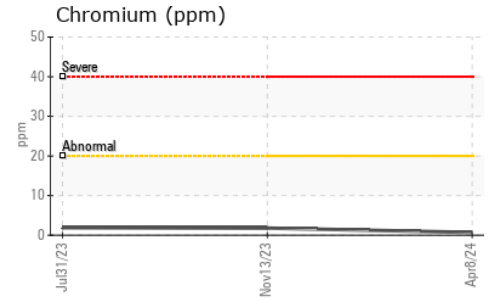
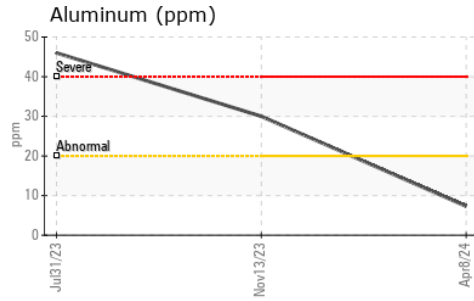
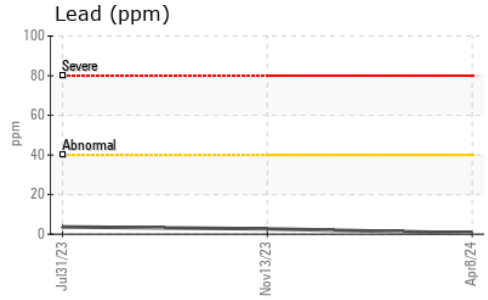
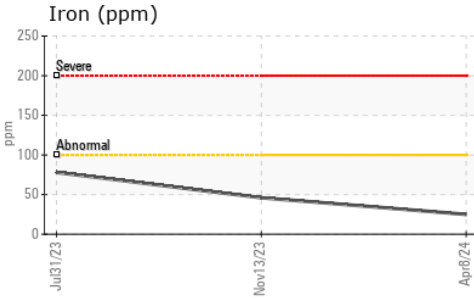


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	16.5	17.7	18.7

VISUAL	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.1	11.1	11.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **MANITOU LIN TRANSPORT (GARAGE)**
Sample No. : WC0915070 **Received** : 17 Apr 2024 1335 SHAWSON DRIVE
Lab Number : 02629545 **Tested** : 17 Apr 2024 MISSISSAUGA, ON
Unique Number : 5762677 **Diagnosed** : 17 Apr 2024 - Wes Davis CA L4W 1C4
Test Package : MOB 1 **Contact:** Travis Spence
 tspence@manitoulintransport.com

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.

T:
F: (905)564-6361