

Machine Id **52916** Component **Diesel Engine** Fluid **PETRO CANADA DURON SAE 10W30 (--- GAL)**

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

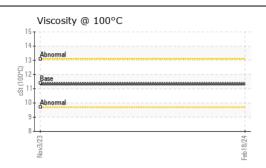
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

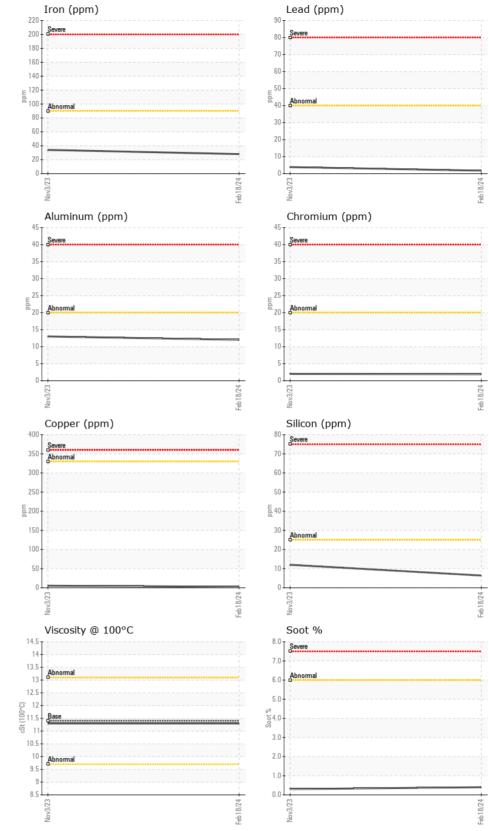
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
:	Sample Number		Client Info		WC0904901	WC0744887	
;	Sample Date		Client Info		18 Feb 2024	03 Nov 2023	
I	Machine Age	hrs	Client Info		161868	108556	
(Oil Age	hrs	Client Info		0	40000	
I	Filter Age	hrs	Client Info		0	40000	
(Oil Changed		Client Info		Changed	Changed	
I	Filter Changed		Client Info		Changed	Changed	
;	Sample Status				NORMAL	NORMAL	
	Iron	ppm	ASTM D5185(m)	>90	28	34	
	Chromium	ppm	ASTM D5185(m)	>20	2	2	
	Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
	Titanium	ppm	ASTM D5185(m)	>2	0	0	
	Silver	ppm	ASTM D5185(m)	>2	<1	<1	
1	Aluminum	ppm	ASTM D5185(m)	>20	12	13	
1	Lead	ppm	ASTM D5185(m)	>40	2	4	
(Copper	ppm	ASTM D5185(m)	>330	3	5	
	Tin	ppm	ASTM D5185(m)	>15	1	1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
5	Silicon	ppm	ASTM D5185(m)	>25	6	12	
	Potassium	ppm	ASTM D5185(m)	>20	27	40	
	Fuel	1-1-	WC Method	>3.0	<1.0	<1.0	
,	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>6	0.4	0.3	
ī	Nitration	Abs/cm	ASTM D7624*	>20	10.0	10.3	
1	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	24.9	
j	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
	Sodium	ppm	ASTM D5185(m)		2	4	
	Boron	ppm	ASTM D5185(m)	1	3	25	
	Barium	ppm	ASTM D5185(m)	1	0	<1	
	Molybdenum	ppm	ASTM D5185(m)	1	57	12	
	Manganese	ppm	ASTM D5185(m)	1	<1	<1	
	Magnesium	ppm	ASTM D5185(m)	10	976	723	
	Calcium	ppm	ASTM D5185(m)	2942	1104	1425	
	Phosphorus	ppm	ASTM D5185(m)	1102	1016	717	
	Zinc	ppm	ASTM D5185(m)	1351	1175	824	
1	Sulfur	ppm	ASTM D5185(m)	3903	2584	2412	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	20.9	
•	Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.3	11.3	

Contact/Location: Todd Smith - MANLIV





MANITOULIN TRANSPORT Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 21 Feb 2024 75 MUMFORD ROAD : WC0904901 Lab Number : 02616891 Tested : 21 Feb 2024 LIVELY, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5734001 : 21 Feb 2024 - Wes Davis CA P3Y 1L1 Diagnosed Test Package : MOB 1 Contact: Todd Smith To discuss this sample report, contact Customer Service at 1-800-268-2131. tosmith@manitoulintransport.com T: (705)562-3302 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. F: x:

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