

Machine Id INTERNATIONAL 51987 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION	

Resample at the next service interval to monitor.

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All component wear rates are normal.

CONTAMINATION

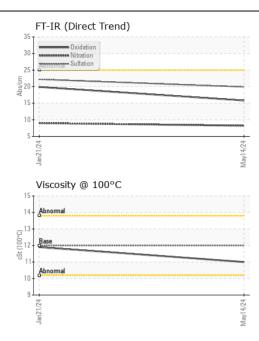
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

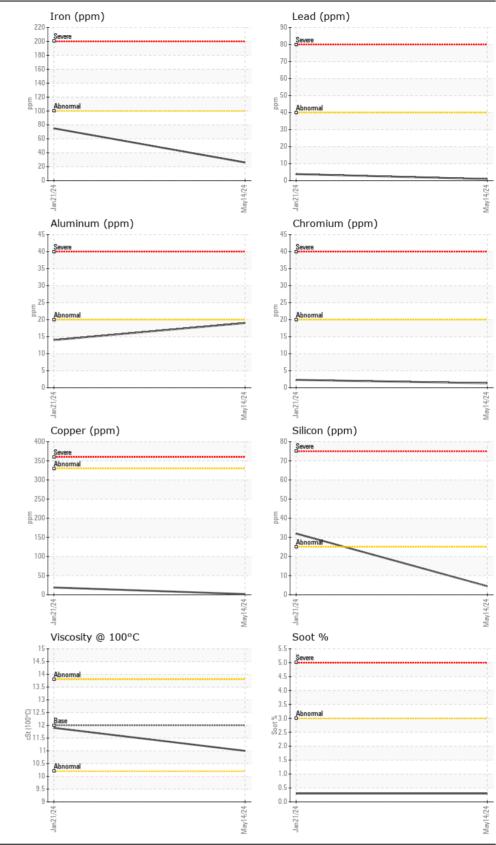
FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915457	WC0892052	
Sample Date		Client Info		14 May 2024	21 Jan 2024	
Machine Age	mls	Client Info		99245	56095	
Oil Age	mls	Client Info		31114	0	
Filter Age	mls	Client Info		31114	0	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
Iron	ppm	ASTM D5185(m)	>100	26	75	
Chromium	ppm	ASTM D5185(m)	>20	1	2	
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	
Titanium	ppm	ASTM D5185(m)	-	0	0	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	ASTM D5185(m)	>20	19	14	
Lead	ppm	ASTM D5185(m)	>40	<1	4	
Copper	ppm	ASTM D5185(m)	>330	2	19	
Tin	ppm	ASTM D5185(m)	>15	<1	2	
Vanadium	ppm	ASTM D5185(m)		0	0	
Silicon	ppm	ASTM D5185(m)	>25	4	32	
Potassium	ppm	ASTM D5185(m)	>20	44	52	
Fuel		WC Method	>2.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
Soot %	%	ASTM D7844*	>3	0.3	0.3	
Nitration	Abs/cm	ASTM D7624*	>20	8.2	9.0	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	22.2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
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Sodium	ppm	ASTM D5185(m)	0	2	4	
Boron	ppm	ASTM D5185(m)		7	40	
Barium	ppm	ASTM D5185(m)	0	0	3	
Molybdenum	ppm	ASTM D5185(m)	50	63	61	
Manganese	ppm	ASTM D5185(m)	0	<1	4	
Magnesium	ppm	ASTM D5185(m)	950	985	503	
Calcium	ppm	ASTM D5185(m)	1050	1112	1689	
Phosphorus	ppm	ASTM D5185(m)	995	994	949	
Zinc	ppm	ASTM D5185(m)	1180	1221	1164	
Sulfur	ppm	ASTM D5185(m)	2600	2421	2328	
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.8	19.9	
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.0	11.9	

Contact/Location: Todd Smith - MANLIV





MANITOULIN TRANSPORT Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 06 Jun 2024 : WC0915457 Lab Number : 02640154 Tested : 06 Jun 2024 ISO 17025:2017 Accredited Laboratory Diagnosed Unique Number : 5789316 : 06 Jun 2024 - Wes Davis Test Package : MOB 1 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.

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