

Machine Id 52962 Component Diesel Engine PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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WEAR

Metal levels are typical for a new component breaking in.

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.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0904893		
	Sample Date		Client Info		10 Feb 2024		
	Machine Age	mls	Client Info		29830		
	Oil Age	mls	Client Info		27441		
	Filter Age	mls	Client Info		27441		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
	Iron			. 100			
	Chromium	ppm	ACTM DE105(m)	>100	<i>11</i>		
	Chromium	ppm	AGTM DE105(m)	>20	- 2		
	Titonium	ppm	ACTM DE105(m)	>4	<1		
	Silver	ppm	ASTM D5100(III)	. 2	.1		
	Aluesieurs	ррп		>3	<1		
	Aluminum	ppm	ASTM D5185(m)	>20	39		
	Lead	ppm	AGTM D5185(m)	>40	5		
	Copper	ppm	ASTM D5185(m)	>330	20		
	l in	ppm	ASTM D5185(m)	>15	3		
	vanadium	ppm	ASTM D5185(m)				
	Silicon	ppm	ASTM D5185(m)	>25	35		
	Potassium	ppm	ASTM D5185(m)	>20	121		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	9.6		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Sodium	ppm	ASTM D5185(m)		5		
	Boron	ppm	ASTM D5185(m)	2	40		
	Barium	ppm	ASTM D5185(m)	0	4		
	Molybdenum	ppm	ASTM D5185(m)	50	62		
	Manganese	ppm	ASTM D5185(m)	0	5		
	Magnesium	ppm	ASTM D5185(m)	950	469		
	Calcium	ppm	ASTM D5185(m)	1050	1726		
	Phosphorus	ppm	ASTM D5185(m)	995	986		
	Zinc	ppm	ASTM D5185(m)	1180	1179		
	Sulfur	ppm	ASTM D5185(m)	2600	2561		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	19.0		
	Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.8		

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Contact/Location: Todd Smith - MANLIV





Feb10/24 Feb10/24 Feb10/24 MANITOULIN TRANSPORT Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 21 Feb 2024 75 MUMFORD ROAD : WC0904893 Lab Number : 02616920 Tested : 21 Feb 2024 LIVELY, ON ISO 17025:2017 Accredited Unique Number : 5734030 : 21 Feb 2024 - Wes Davis CA P3Y 1L1 Diagnosed Laboratory 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.

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