

Current

History1

History2

Limit/Abn

Machine Id **INTERNATIONAL 52990** Compone **Diesel Engine** DIESEL ENGINE OIL SAE 30 (--- GAL)

Metal levels are typical for a new component breaki

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this DIESEL ENGINE OIL SAE 30. Please confirm.

ne fluid was not fluid is (GENERIC)	Sample Number		Client Info		WC0935022	
	Sample Date		Client Info		01 Jun 2024	
	Machine Age	mls	Client Info		30000	
	Oil Age	mls	Client Info		0	
	Filter Age	mls	Client Info		0	
	Oil Changed		Client Info		Changed	
	Filter Changed		Client Info		Changed	
	Sample Status				NORMAL	
	Iron	ppm	ASTM D5185(m)	>90	42	
ing in.	Chromium	ppm	ASTM D5185(m)	>20	1	
	Nickel	ppm	ASTM D5185(m)	>2	<1	
	Titanium	ppm	ASTM D5185(m)	>2	<1	
	Silver	ppm	ASTM D5185(m)	>2	<1	 -
	Aluminum	ppm	ASTM D5185(m)	>20	18	
	Lead	ppm	ASTM D5185(m)	>40	6	
	Copper	ppm	ASTM D5185(m)	>330	29	
	Tin	ppm	ASTM D5185(m)	>15	4	 -
	Vanadium	ppm ASTM D5185(m) >330 29				
	Silicon	ppm	ASTM D5185(m)	>25	35	
sium (K) levels in	Potassium	ppm	ASTM D5185(m)	>20	56	
x release into the	Fuel	%	ASTM D7593*	>3.0	0.0	 -
nents. Tests e is no indication of	Water		WC Method	>0.2	NEG	
	Glycol		WC Method		NEG	
	Soot %	%	ASTM D7844*	>6	0.3	
	Nitration	Abs/cm	ASTM D7624*	>20	8.4	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	
	Emulsified Water	scalar	Visual*	>0.2	NEG	
	Sodium	nnm	ASTM D5185(m)	>75	Λ	

UOM

Method

Test

CONTAMINATION

WEAR

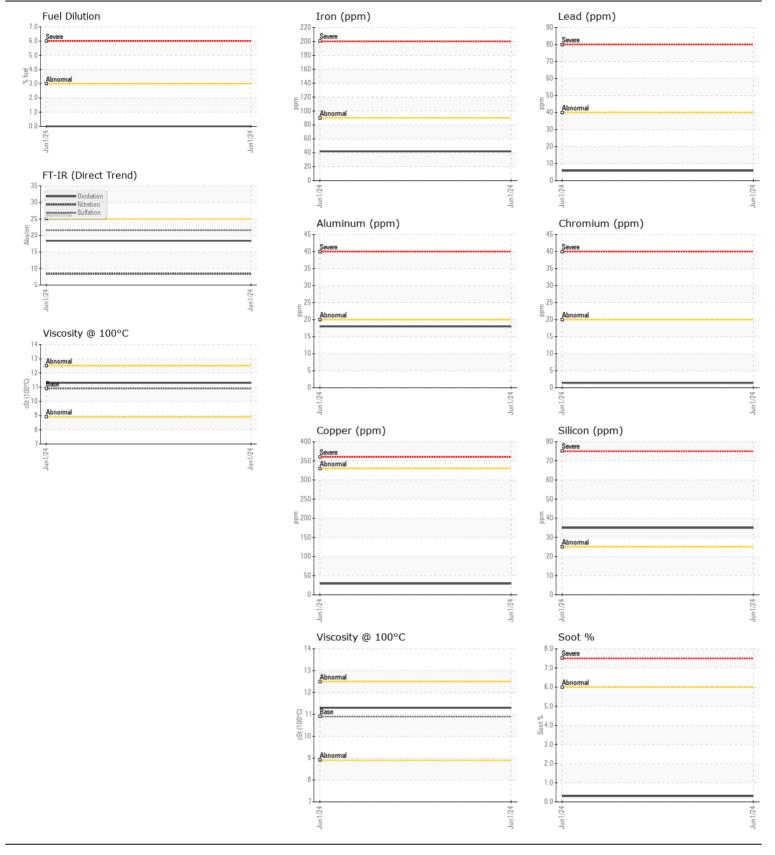
Elevated aluminum (AI) and/or lead (Pb) and potass your metals analysis are likely a result of solder flux lubricant and is common on new equipment/comport indicate that there is no fuel present in the oil. There any contamination in the oil.

FLUID CONDITION

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

0	pp		- =0		
Potassium	ppm	ASTM D5185(m)	>20	56	
Fuel	%	ASTM D7593*	>3.0	0.0	
Water		WC Method	>0.2	NEG	
Glycol		WC Method		NEG	
Soot %	%	ASTM D7844*	>6	0.3	
Nitration	Abs/cm	ASTM D7624*	>20	8.4	
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	
Emulsified Water	scalar	Visual*	>0.2	NEG	
Sodium	ppm	ASTM D5185(m)	>75	4	
Boron	ppm	ASTM D5185(m)	250	52	
Barium	ppm	ASTM D5185(m)	10	5	
Molybdenum	ppm	ASTM D5185(m)	100	65	
Manganese	ppm	ASTM D5185(m)		5	
Magnesium	ppm	ASTM D5185(m)	450	477	
Calcium	ppm	ASTM D5185(m)	3000	1828	
Phosphorus	ppm	ASTM D5185(m)	1150	945	
Zinc	ppm	ASTM D5185(m)	1350	1196	
Sulfur	ppm	ASTM D5185(m)	4250	2356	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.3	
			-		

Contact/Location: Todd Smith - MANLIV



MANITOULIN TRANSPORT Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : WC0935022 Received : 06 Jun 2024 75 MUMFORD ROAD Lab Number : 02640065 Tested : 07 Jun 2024 LIVELY, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5789227 Diagnosed : 07 Jun 2024 - Wes Davis CA P3Y 1L1 Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) 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. F: x: Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: Todd Smith - MANLIV Page 2 of 2