

## NORMAL WEAR CONTAMINATION NORMAL **FLUID CONDITION** NORMAL

## Machine Id 101018 Component **Diesel Engine** PETRO CANADA DURON SAE 10W30 (--- GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0118578	GFL0107896	
	Sample Date		Client Info		23 May 2024	12 Mar 2024	
	Machine Age	kms	Client Info		338008	330796	
	Oil Age	kms	Client Info		0	0	
	Filter Age	kms	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
	Iron	ppm	ASTM D5185(m)	>110	8	5	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>4	<1	0	
	Nickel	ppm	ASTM D5185(m)		0	0	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	0	
	Aluminum	ppm	ASTM D5185(m)	>25	1	1	
	Lead	ppm	ASTM D5185(m)		<1	0	
	Copper	ppm	ASTM D5185(m)		<1	<1	
	Tin	ppm	ASTM D5185(m)		0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)		2	1	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		3	<1	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0.2	0.1	
	Nitration	Abs/cm	ASTM D7624*	>20	7.9	6.5	
	Sulfation	Abs/.1mm		>30	19.3	18.4	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1	1	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	1	6	8	
	Barium	ppm	ASTM D5185(m)	1	0	<1	
	Molybdenum	ppm	ASTM D5185(m)	1	61	60	
	Manganese	ppm	ASTM D5185(m)	1	0	0	
	Magnesium	ppm	ASTM D5185(m)	10	1004	988	
	Calcium	ppm	ASTM D5185(m)	2942	1112	1065	
	Phosphorus	ppm	ASTM D5185(m)	1102	995	1003	
	Zinc	ppm	ASTM D5185(m)	1351	1201	1190	
	Sulfur	ppm	ASTM D5185(m)	3903	2511	2591	
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Oxidation

Visc @ 100°C cSt

Abs/.1mm ASTM D7414\* >25

ASTM D7279(m) 11.4

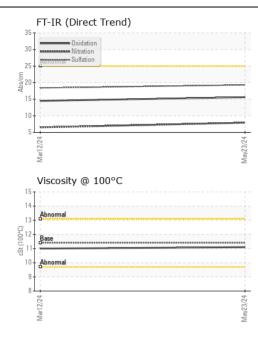
Contact/Location: Joshua Lourenco - GFL310

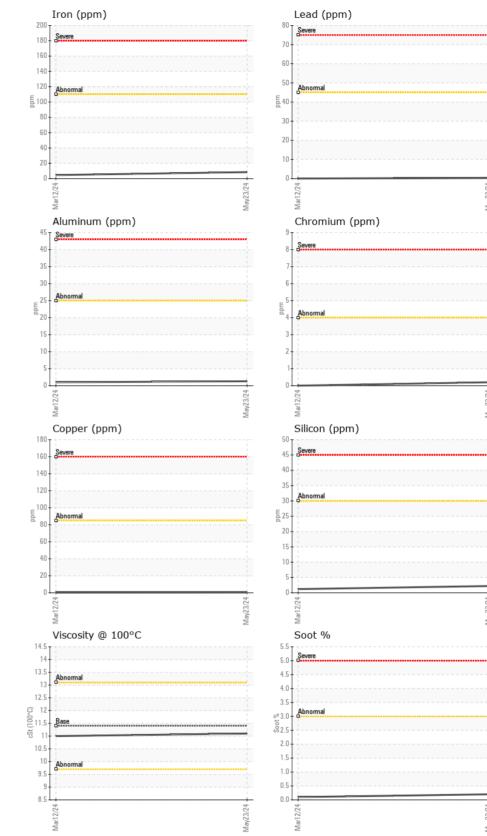
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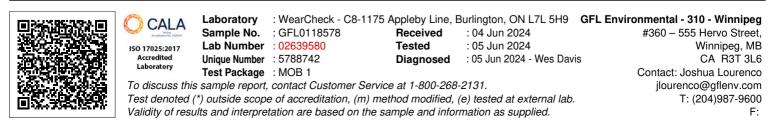
11.0

15.6

11.1







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