

Machine Id

4774 Component Diesel Engine

PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0117298	GFL0052599	
	Sample Date		Client Info		26 Apr 2024	25 May 2022	
	Machine Age	hrs	Client Info		191	21623	
	Oil Age	hrs	Client Info		191	0	
	Filter Age	hrs	Client Info		191	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>120	10	3	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0	0	
	Nickel	ppm	ASTM D5185(m)	>5	<1	<1	
	Titanium	ppm	ASTM D5185(m)	>2	0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	<1	1	
	Lead	ppm	ASTM D5185(m)	>40	0	<1	
	Copper	ppm	ASTM D5185(m)	>330	<1	2	
	Tin	ppm	ASTM D5185(m)	>15	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION Silicon ppm ASTM D5185(m) >25					3	6	
	Potassium	ppm	ASTM D5185(m)	>20	0	3	
There is no indication of any contamination in the oil.	Fuel	ppin	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>4	1	0	
	Nitration	Abs/cm	ASTM D7624*	>20	5.8	5.1	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	21.0	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1	2	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m)	1	2	4	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		61	56	
	Manganese	ppm	ASTM D5185(m)	1	0	<1	
	Magnesium	ppm	ASTM D5185(m)	1010	973	947	
	Calcium	ppm	ASTM D5185(m)	1070	1062	1126	
	Phosphorus	ppm	ASTM D5185(m)	1150	1006	1055	
	Zinc	ppm	ASTM D5185(m)	1270	1179	1195	
	Sulfur	ppm	ASTM D5185(m)	2060	2666	2745	

Oxidation

Visc @ 100°C cSt

Contact/Location: GFL Calgary - GFL550

13.7

9.64

13.0

12.9

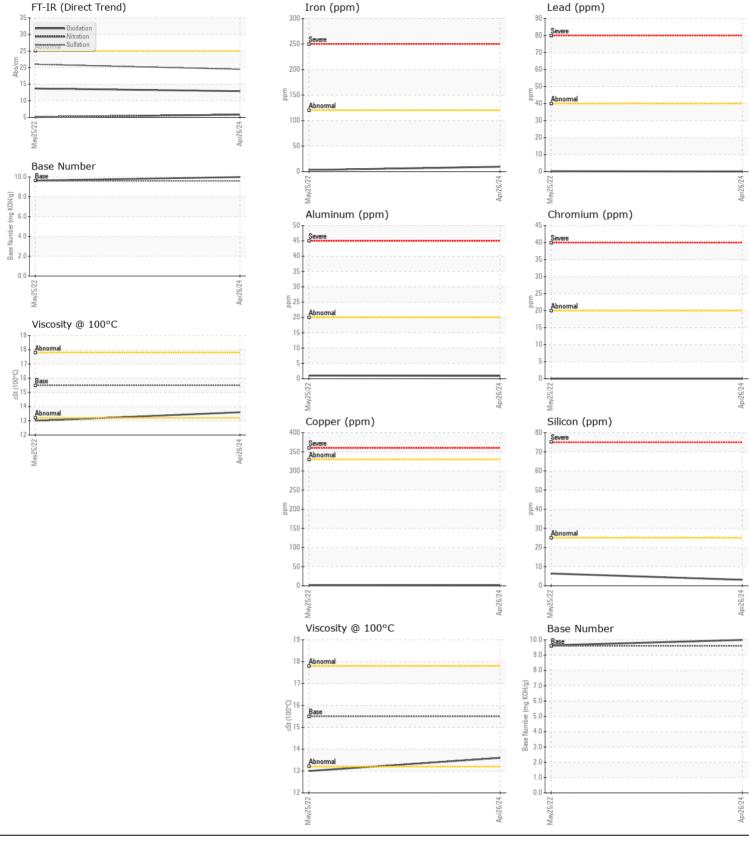
9.99

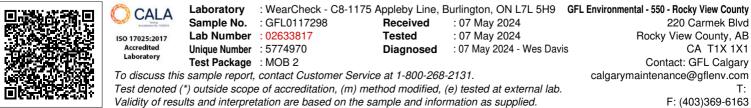
13.6

Abs/.1mm ASTM D7414* >25

ASTM D7279(m) 15.5

Base Number (BN) mg KOH/g ASTM D2896* 9.6





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