

## Machine Id INTERNATIONAL 220088 Component

## Diesel Engine

PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0122278		
	Sample Date		Client Info		14 May 2024		
	Machine Age	hrs	Client Info		3191		
	Oil Age	hrs	Client Info		126		
	Filter Age	hrs	Client Info		126		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	6		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	<1		
	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	2		
	Lead	ppm	ASTM D5185(m)	>40	0		
	Copper	ppm	ASTM D5185(m)	>330	<1		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	2		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	0		
	Fuel		WC Method	>2.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	5.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.1		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	9		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)	60	53		
	Manganese	ppm	ASTM D5185(m)	0	0		
	Magnesium	ppm	ASTM D5185(m)	1010	879		
	Calcium	ppm	ASTM D5185(m)	1070	1123		
	Phosphorus	ppm	ASTM D5185(m)	1150	971		
	Zinc	ppm	ASTM D5185(m)	1270	1144		

Sulfur

Oxidation

Visc @ 100°C cSt

ppm

Abs/.1mm

ASTM D5185(m) 2060

ASTM D7279(m) 15.6

>25

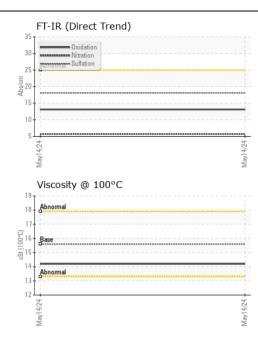
ASTM D7414\*

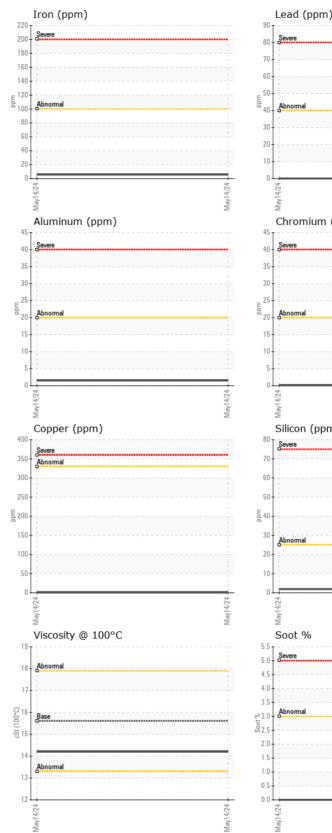
Contact/Location: Vicki Metcalfe - GFL987

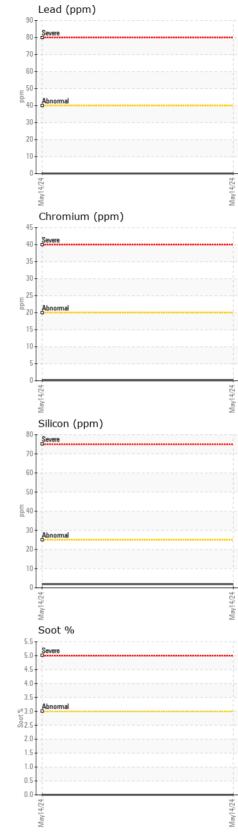
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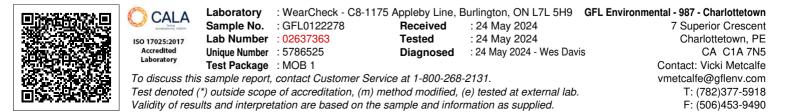
13.1

14.2









Contact/Location: Vicki Metcalfe - GFL987 Page 2 of 2