

NORMAL WEAR CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id 925063 oner **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		GFL0117336	GFL0049128	
	Sample Date		Client Info		29 Mar 2024	14 Apr 2022	
	Machine Age	kms	Client Info		292376	7628	
	Oil Age	kms	Client Info		0	0	
	Filter Age	kms	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR				100	44		
WEAN	Iron	ppm	ASTM D5185(m)		11	88	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0	1	
	Nickel	ppm	ASTM D5185(m)		0	2	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)		1	3	
	Lead	ppm	ASTM D5185(m)		1	4	
	Copper	ppm	ASTM D5185(m)		1	3	
	Tin	ppm	ASTM D5185(m)	>15	0	2	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)	>25	3	10	
	Potassium	ppm	ASTM D5185(m)	>20	<1	4	
	Fuel		WC Method	>3.0	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>4	0.2	1	
	Nitration	Abs/cm	ASTM D7624*	>20	8.8	14.0	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.9	34.4	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		5	4	
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)	0	5	8	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		61	44	
	Manganese	ppm	ASTM D5185(m)		0	1	
	Magnesium	ppm	ASTM D5185(m)		980	235	
	Calcium	ppm	ASTM D5185(m)		1081	1998	
	Phosphorus	ppm	ASTM D5185(m)		976	955	
	Zinc	ppm	ASTM D5185(m)		1192	1128	
	Sulfur	ppm	ASTM D5185(m)		2335	2461	
	Oxidation	Abs/.1mm	ASTM D7414*		19.2	29.9	
	Base Number (BN)	mg KOH/g	ASTM D2896*		7.40	▲ 3.60	
		- 01		45.0	10.0	445	

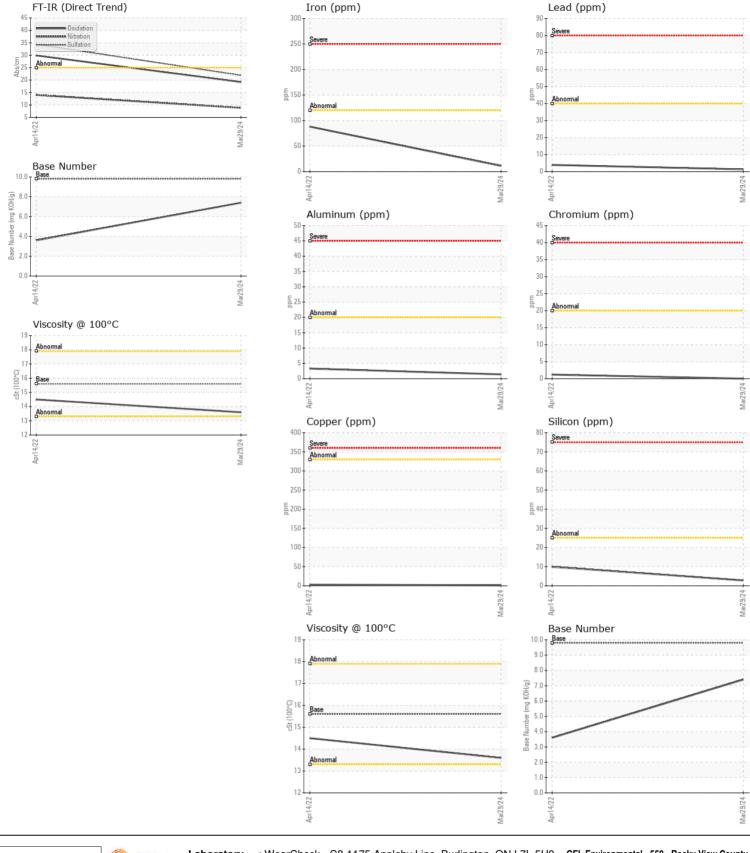
Visc @ 100°C cSt

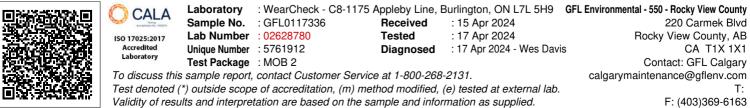
Contact/Location: GFL Calgary - GFL550

14.5

13.6

ASTM D7279(m) 15.6





Contact/Location: GFL Calgary - GFL550 Page 2 of 2