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## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

(YA163447) 020 Machine Id 921089 Component Diesel Engine

## PETRO CANADA DURON SHP 15W40 (--- GAL)

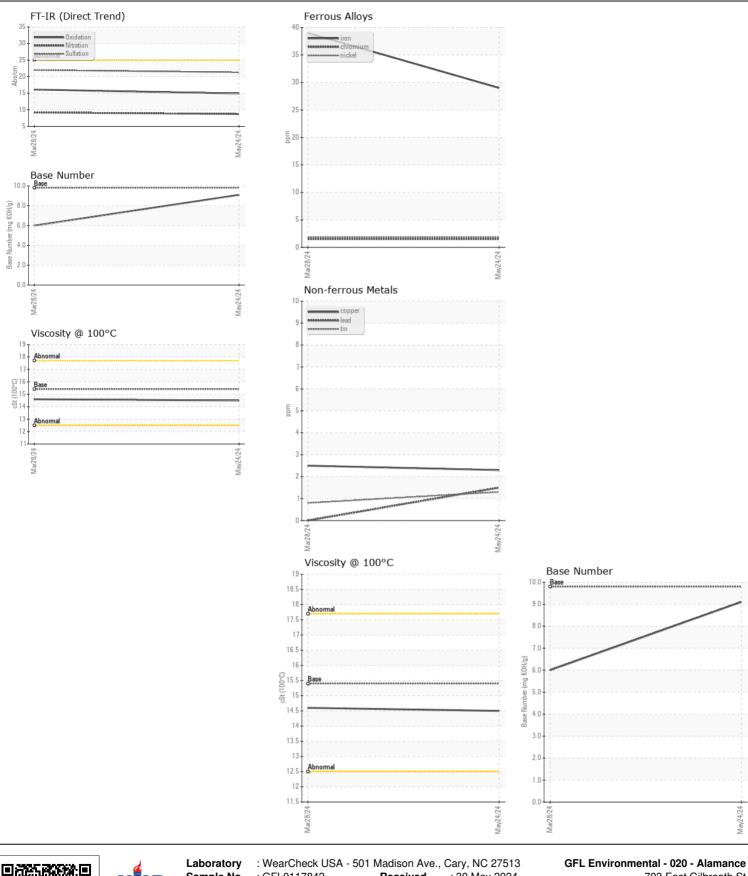
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0117842	GFL0103783	
	Sample Date		Client Info		24 May 2024	28 Mar 2024	
	Machine Age	hrs	Client Info		5528	5059	
	Oil Age	hrs	Client Info		650	650	
	Filter Age	hrs	Client Info		650	650	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	29	39	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2	2	
	Nickel	ppm	ASTM D5185m		2	2	
	Titanium	ppm	ASTM D5185m		- <1	<1	
	Silver	ppm	ASTM D5185m		<1	0	
	Aluminum	ppm	ASTM D5185m		13	▲ 28	
	Lead	ppm	ASTM D5185m		2	0	
	Copper	ppm	ASTM D5185m		2	2	
	Tin	ppm	ASTM D5185m		-	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	11	15	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	2	
	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	1.6	0.6	
	Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.2	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	22.0	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		5	8	
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 D5185m	0	2	16	
	Barium	ppm	ASTM D5185m	0	0	0	
	Molybdenum	ppm	ASTM D5185m	60	63	72	
	Manganese	ppm	ASTM D5185m	0	<1	1	
	Magnesium	ppm	ASTM D5185m	1010	919	369	
	Calcium	ppm	ASTM D5185m	1070	1293	1645	
	Phosphorus	ppm	ASTM D5185m	1150	1123	967	
	Zinc	ppm	ASTM D5185m	1270	1332	1138	
	Sulfur	ppm	ASTM D5185m	2060	3792	3479	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	16.1	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.1	6.0	
		oSt	ASTM D445	15.4	14.5	14.6	

Visc @ 100°C cSt

ASTM D445 15.4

14.6

14.5



GFL Environmental - 020 - Alamance Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : GFL0117842 Received 703 East Gilbreath St : 30 May 2024 Lab Number : 06195082 Tested : 31 May 2024 Graham, NC Unique Number : 11057205 Diagnosed : 31 May 2024 - Wes Davis US 27253 Test Package : FLEET Contact: Jorge Costa Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jorge.costa@gflenv.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)229-0526

Submitted By: JEREMY SHORES Page 2 of 2