WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE SEVERE

Machine Id **401130** 

## Component Diesel Engine

PETRO CANADA DURON SHP 15W40 ( GAL)	)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.	Sample Number		Client Info		GFL0096842		
	Sample Date		Client Info		17 Apr 2024		
	Machine Age	hrs	Client Info		30468		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		600		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	Iron	nnm	ASTM D5185(m)	> 100	30		
All component wear rates are normal.	Iron	ppm	, ,				
	Chromium Nickel	ppm	ASTM D5185(m) ASTM D5185(m)		<1 <1		
	Titanium	ppm	ASTM D5185(III) ASTM D5185(m)	>4	0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	3		
	Lead	ppm	ASTM D5185(m)	>40	5		
	Copper	ppm	ASTM D5185(m)		2		
	Tin	ppm		>15	- <1		
	Vanadium	ppm	ASTM D5185(m)	710	0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	5		
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel	%	ASTM D7593*	>5	<b>46.7</b>		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	8.0		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	24.4		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3		
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185(m)	0	1		
	Barium	ppm	ASTM D5185(m)	0	0		
	Molybdenum	ppm	ASTM D5185(m)	60	30		
	Manganese	ppm	ASTM D5185(m)	0	<1		
	Magnesium	ppm	ASTM D5185(m)	1010	497		
	Calcium	ppm	ASTM D5185(m)	1070	540		
	Phosphorus	ppm	ASTM D5185(m)	1150	519		
	Zinc	ppm	ASTM D5185(m)	1270	608		
	Sulfur	ppm	ASTM D5185(m)	2060	1257		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	30.9		
	Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>▲</b> 4.5		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet : GFL0096842 Lab Number : 02632205

Unique Number : 5773358

Received : 30 Apr 2024 **Tested** :01 May 2024 Diagnosed

: 01 May 2024 - Kevin Marson Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.