

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION ABNORMAL

Machine Id **401129** Component **Diesel Engine** Fluid **PETRO CANADA DURON SHP 15W40 (--- GAL)**

RECOMMENDATION

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.

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WEAR

All component wear rates are normal.

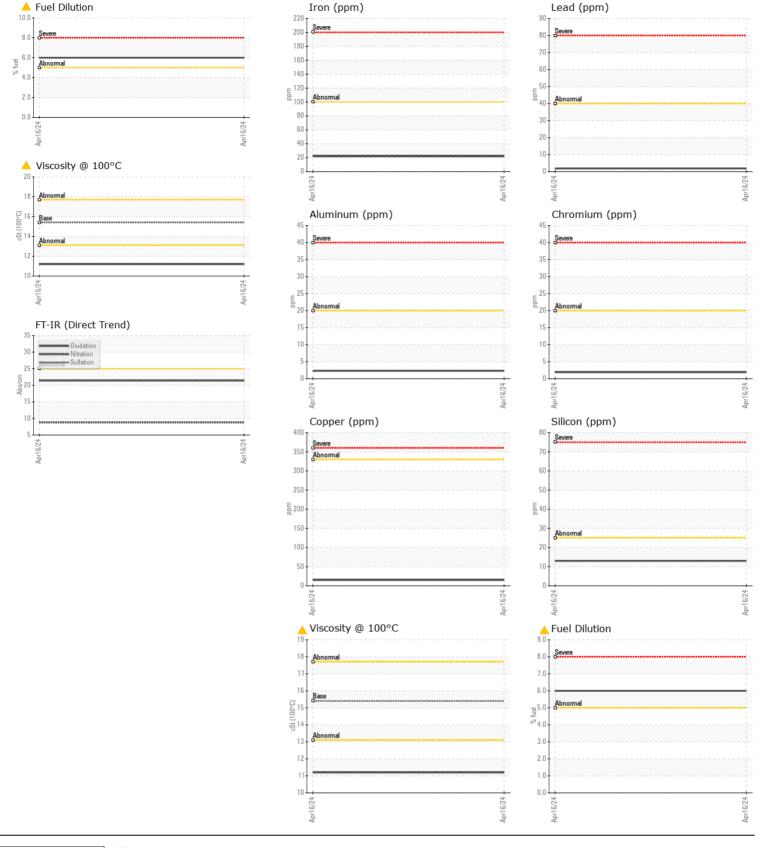
CONTAMINATION

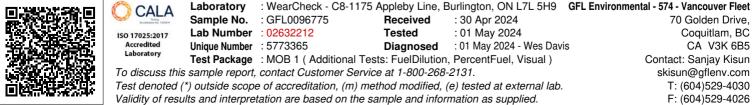
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096775		
Sample Date		Client Info		16 Apr 2024		
Machine Age	hrs	Client Info		4487		
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				ABNORMAL		
Iron	ppm	ASTM D5185(m)	>100	22		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)	0	0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	2		
Lead	ppm	ASTM D5185(m)	>40	2		
Copper	ppm	ASTM D5185(m)	>330	15		
Tin	ppm	ASTM D5185(m)	>15	<1		
Vanadium	ppm	ASTM D5185(m)	NONE	0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>25	13		
Potassium	ppm	ASTM D5185(m)	>20	4		
Fuel	%	ASTM D7593*	>5	<u> </u>		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	8.8		
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Cadiur				-		
Sodium	ppm	ASTM D5185(m)	0	7		
Boron	ppm	ASTM D5185(m)	0	3		
Barium	ppm	ASTM D5185(m)	0	<1		
Molybdenum	ppm	ASTM D5185(m)	60	59		
Manganese	ppm	ASTM D5185(m)	0	<1		
Magnesium Calcium	ppm	ASTM D5185(m)	1010	941		
	ppm	ASTM D5185(m)	1070	1080 975		
Phosphorus Zinc	ppm	ASTM D5185(m) ASTM D5185(m)	1150	975 1166		
Sulfur	ppm		1270	1166 2288		
Oxidation	ppm	ASTM D5185(m) ASTM D7414*	2060	2200		
Visc @ 100°C	Abs/.1mm	ASTM D7414 ASTM D7279(m)	>25			
visc @ 100°C	cSt	A2101D1213(m)	15.4	11.2		





Contact/Location: Sanjay Kisun - GFL574 Page 2 of 2