

## Machine Id **110** Component **Diesel Engine** Fluid **PETRO CANADA DURON HP 15W40 (--- GAL)**

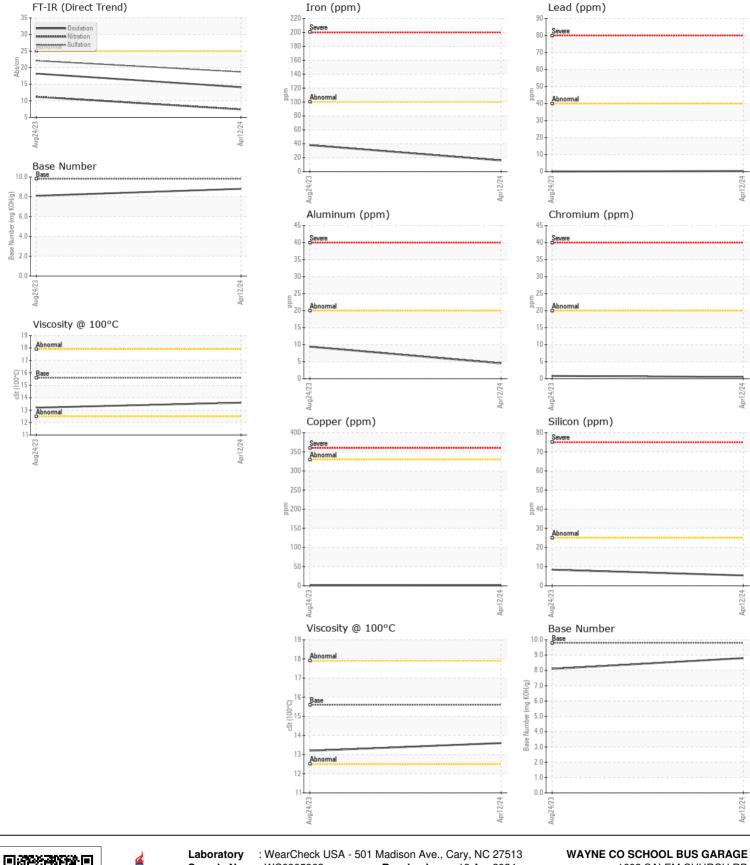
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0905962	WC0792707	
	Sample Date		Client Info		12 Apr 2024	24 Aug 2023	
	Machine Age	mls	Client Info		93398	84816	
	Oil Age	mls	Client Info		5000	0	
	Filter Age	mls	Client Info		5000	0	
	Oil Changed		Client Info		Not Changd	N/A	
	Filter Changed		Client Info		Not Changd	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	16	38	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m	>4	<1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	4	9	
	Lead	ppm	ASTM D5185m	>40	<1	0	
	Copper	ppm	ASTM D5185m		<1	1	
	Tin	ppm	ASTM D5185m		<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	8	
	Potassium	ppm	ASTM D5185m		9	20	
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	*ASTM D7844	. ?	0.7	1.4	
	Nitration	Abs/cm		>20	7.4	11.2	
	Sulfation	Abs/.1mm	*ASTM D7024		18.7	22.1	
	Silt				NONE	NONE	
	Debris	scalar	*Visual	NONE NONE	NONE	NONE	
		scalar	*Visual				
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor Emulsified Water	scalar scalar	*Visual *Visual	NORML >0.2	NORML NEG	NORML NEG	
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		0	2	
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		5	7	
	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m		62	64	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		886	818	
	Calcium	ppm	ASTM D5185m		1173	1133	
	Phosphorus	ppm	ASTM D5185m		1085	948	
	Zinc	ppm	ASTM D5185m		1229	1166	
	Sulfur	ppm	ASTM D5185m		3390	3045	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1	18.2	
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	8.1	
	Vier @ 10000	- C+		15.0	40.0	10.0	

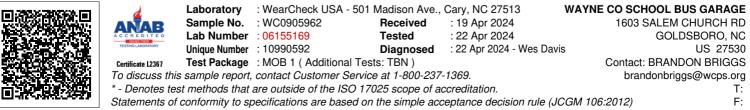
Visc @ 100°C cSt

ASTM D445 15.6

13.2

13.6





Contact/Location: BRANDON BRIGGS - WAYGOL Page 2 of 2