

FREIGHTLINER 222109

Diesel Engine

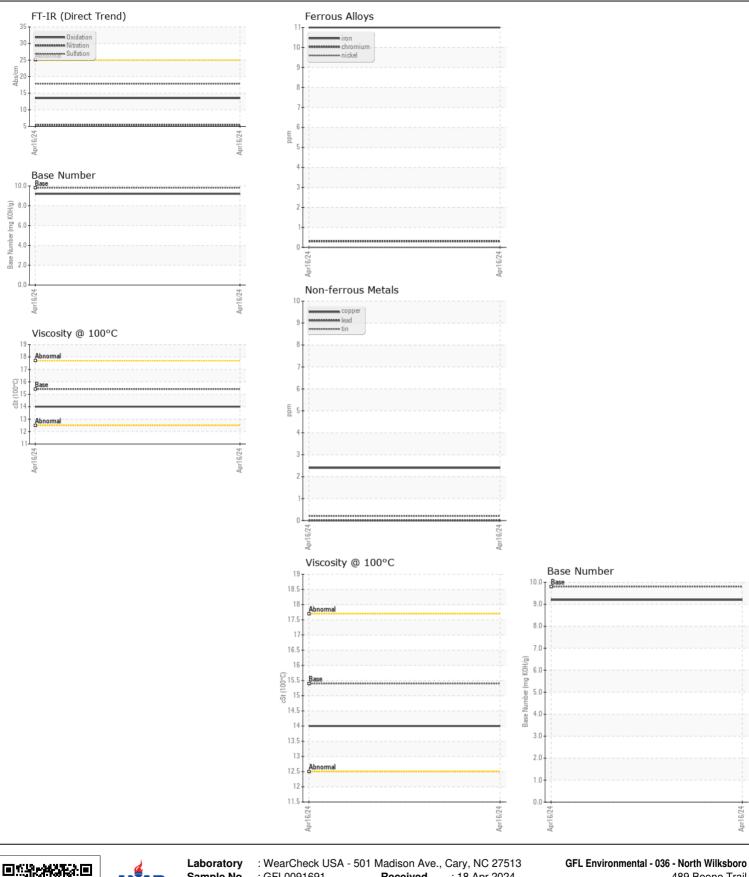
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0091691		
Resample at the next service interval to monitor.	Sample Date		Client Info		16 Apr 2024		
	Machine Age	hrs	Client Info		1435		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		11		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>2	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>5	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	5		
CONTAININATION	Potassium	ppm	ASTM D5185m		8		
There is no indication of any contamination in the oil.	Fuel	pp	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	5.4		
	Sulfation	Abs/.1mm	*ASTM D7415		17.8		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		4		
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		57		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		911		
	Calcium	ppm	ASTM D5185m		1030		
	Phosphorus	ppm	ASTM D5185m		1066		
	Zinc	ppm	ASTM D5185m		1219		
	Sulfur	ppm	ASTM D5185m	2060	3686		
	Oxidation	Abs/.1mm	*ASTM D7414		13.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.2		

Visc @ 100°C cSt

ASTM D445 15.4

14.0



Sample No. Received 489 Boone Trail : GFL0091691 : 18 Apr 2024 Lab Number : 06153593 Tested Wilkesboro, NC : 19 Apr 2024 Unique Number : 10983671 Diagnosed : 19 Apr 2024 - Wes Davis US 28659 Test Package : FLEET Contact: JAMES KRESGE Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jkresge@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: