

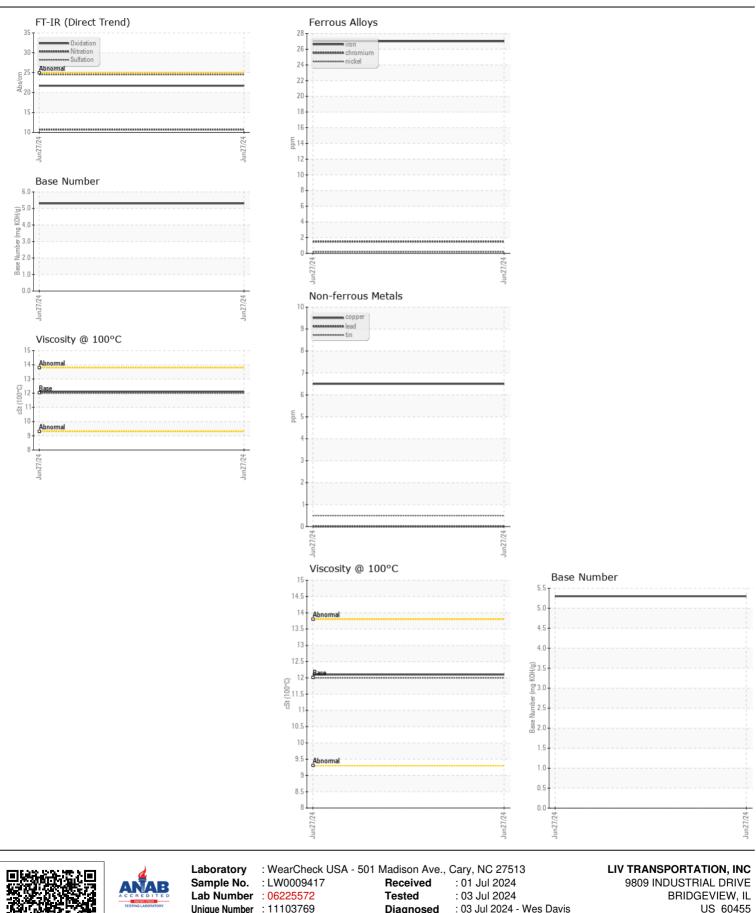
## Machine Id FREIGHTLINER 346 Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (10 GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LW0009417		
	Sample Date		Client Info		27 Jun 2024		
	Machine Age	mls	Client Info		689145		
	Oil Age	mls	Client Info		50000		
	Filter Age	mls	Client Info		25000		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		27		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>2	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>30	11		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		6		
	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	6		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.5		
	Nitration	Abs/cm	*ASTM D7624	>20	10.7		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5		
	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 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
	Sodium	ppm	ASTM D5185m		1		
	Boron	ppm	ASTM D5185m		9		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		54		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		850		
	Calcium	ppm			1365		
	Phosphorus	ppm	ASTM D5185m		1052		
	Zinc	ppm	ASTM D5185m	1180	1329		
	Sulfur	ppm	ASTM D5185m	2600	3001		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7		
	Base Number (BN)	mg KOH/g	ASTM D2896		5.3		

12.1

ASTM D445 12.00

Visc @ 100°C cSt



Unique Number : 11103769 Diagnosed : 03 Jul 2024 - Wes Davis Test Package : FLEET Contact: CHRIS BIELECKI Certificate L2367 CHRIS@LIVTRANSPORTATION.COM To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: GREG SMIALKOWSKI Page 2 of 2

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