

Machine Id FREIGHTLINER 1219 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

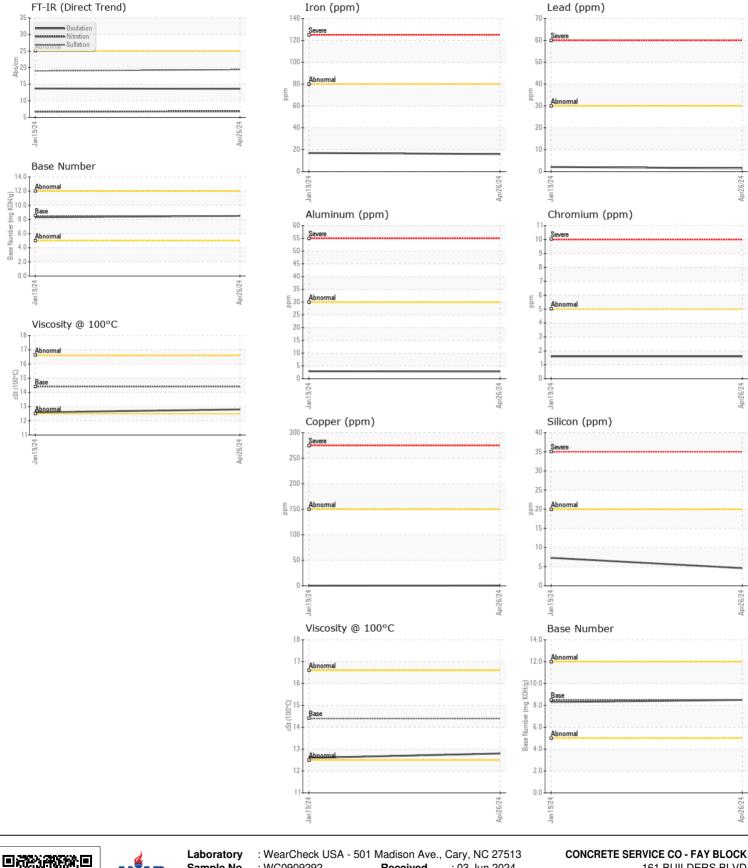
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0909292	WC0878776	
	Sample Date		Client Info		26 Apr 2024	19 Jan 2024	
	Machine Age	mls	Client Info		0	370265	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>80	16	17	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2	2	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		3	3	
	Lead	ppm	ASTM D5185m		2	2	
	Copper	ppm	ASTM D5185m		<1	<1	
	Tin	ppm	ASTM D5185m		0	<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	<u>_20</u>	5	7	
SONTAMINATION	Potassium	ppm	ASTM D5185m		<1	0	
There is no indication of any contamination in the oil.	Fuel	ррпп		>5	<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	, 0.1	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.9	0.7	
	Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.7	
	Sulfation	Abs/.1mm	*ASTM D7415		19.4	19.0	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2	1	
	Boron	ppm	ASTM D5185m		0	3	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		57	58	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	450	955	907	
	Calcium	ppm	ASTM D5185m		1079	1036	
	Phosphorus	ppm	ASTM D5185m		1046	1023	
	Zinc	ppm	ASTM D5185m		1233	1198	
	Sulfur	ppm	ASTM D5185m		3510	2861	
	Oxidation	Abs/.1mm	*ASTM D7414		13.6	13.7	
	Base Number (BN)		ASTM D2896		8.5	8.3	
			AOTA D 445	4.4.4	0.0	0.0	

Visc @ 100°C cSt

ASTM D445 14.4

12.8

12.6



Sample No. Received 161 BUILDERS BLVD : WC0909292 : 03 Jun 2024 Lab Number : 06197253 Tested : 03 Jun 2024 FAYETTEVILLE, NC Unique Number : 11059376 Diagnosed : 03 Jun 2024 - Wes Davis US 28301 Test Package : MOB 1 (Additional Tests: TBN) Contact: BRYAN VANNIMAN Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. bryanvanniman@fayblock.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (800)326-9198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: BRYAN VANNIMAN - CONFAY Page 2 of 2