

## Machine Id 115419 Component Diesel Engine SHELL ROTELLA T 15W40 (--- QTS)

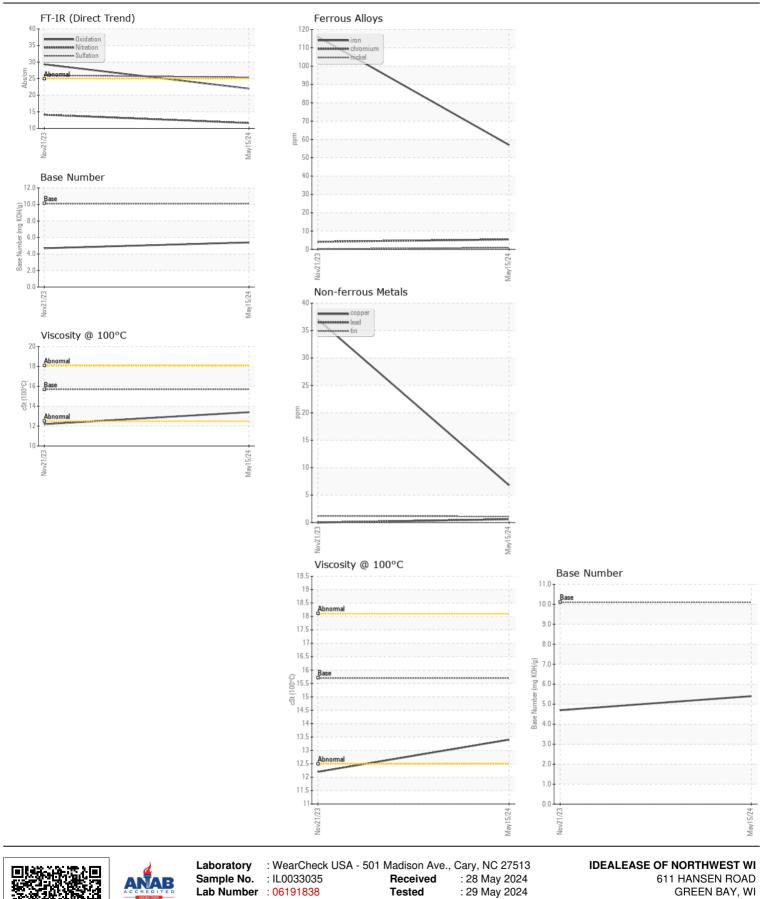
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		IL0033035	IL0032782	-
	Sample Date		Client Info		15 May 2024	21 Nov 2023	
	Machine Age	mls	Client Info		37941	19392	
	Oil Age	mls	Client Info		18549	19392	
	Filter Age	mls	Client Info		18549	19392	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>90	57	116	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	5	4	
	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m		1	0	
	Aluminum	ppm	ASTM D5185m		6	9	
	Lead	ppm	ASTM D5185m		<1	0	
	Copper	ppm	ASTM D5185m		7	37	
	Tin	ppm	ASTM D5185m		1	1	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	15	27	
	Potassium	ppm	ASTM D5185m		13	11	
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	1.7	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>6	0.7	0.8	
	Nitration	Abs/cm	*ASTM D7624	>20	11.6	14.1	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	26.0	
	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		3	9	
	Boron	ppm	ASTM D5185m	316	48	19	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		2	6	
	Molybdenum	ppm	ASTM D5185m		30	51	
	Manganese	ppm	ASTM D5185m		2	6	
	Magnesium	ppm	ASTM D5185m	24	295	866	
	Calcium	ppm	ASTM D5185m		1913	1310	
	Phosphorus	ppm	ASTM D5185m		899	814	
	Zinc	ppm	ASTM D5185m		1173	978	
	Sulfur	ppm	ASTM D5185m		3032	2207	
	Oxidation	Abs/.1mm	*ASTM D7414		22.0	29.3	
	Base Number (BN)				5.4	4.7	
		0 - 9				10.0	

Visc @ 100°C cSt

13.4

12.2

ASTM D445 15.7



Unique Number : 11048590 Diagnosed : 30 May 2024 - Sean Felton Test Package : FLEET Contact: GARY KOLTZ Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. gkoltz@pcitrucks.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (920)499-6200 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (920)499-5332

Contact/Location: GARY KOLTZ - IDEGREWI Page 2 of 2

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