

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Store 9 - Marietta KENWORTH 43

Component Diesel Engine

SHELL ROTELLA T4 15W40 (12 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number	UOIVI	Client Info	LIIIIUADII	LEC0027561	LEC0027563	LECP179743
Resample at the next service interval to monitor.	Sample Date		Client Info		31 Jul 2023	12 Jan 2023	05 Nov 2022
	Machine Age	mls	Client Info		836527	802184	783668
	Oil Age	mls	Client Info		17104	18516	19701
	Filter Age	mls	Client Info		17104	18516	19701
	Oil Changed	11115	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	25	30	28
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1	3	3
	Nickel	ppm	ASTM D5185m	>4	0	<1	<1
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	5	6	8
	Lead	ppm	ASTM D5185m		2	3	2
	Copper	ppm	ASTM D5185m	>330	<1	<1	1
	Tin	ppm	ASTM D5185m	>15	<1	2	1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon		ASTM D5185m	× 120	7	8	11
CONTAMINATION	Potassium	ppm	ASTM D5185m		13	20	24
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	0.5	0.6
	Nitration	Abs/cm		>20	11.0	10.5	11.4
	Sulfation	Abs/.1mm	*ASTM D7415		22.7	25.1	27.3
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		5	2	5
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		23	76	66
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		45	1	4
	Manganese	ppm	ASTM D5185m		<1	<1	1
	Magnesium	ppm	ASTM D5185m		492	22	37
	Calcium	ppm	ASTM D5185m		1692	2393	2225
	Phosphorus	ppm	ASTM D5185m		1016	1003	963
	Zinc	ppm	ASTM D5185m		1270	1339	1252
	Sulfur	ppm	ASTM D5185m		3480	4148	3868
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	18.9	20.3

6.6

14.3

5.2

14.5

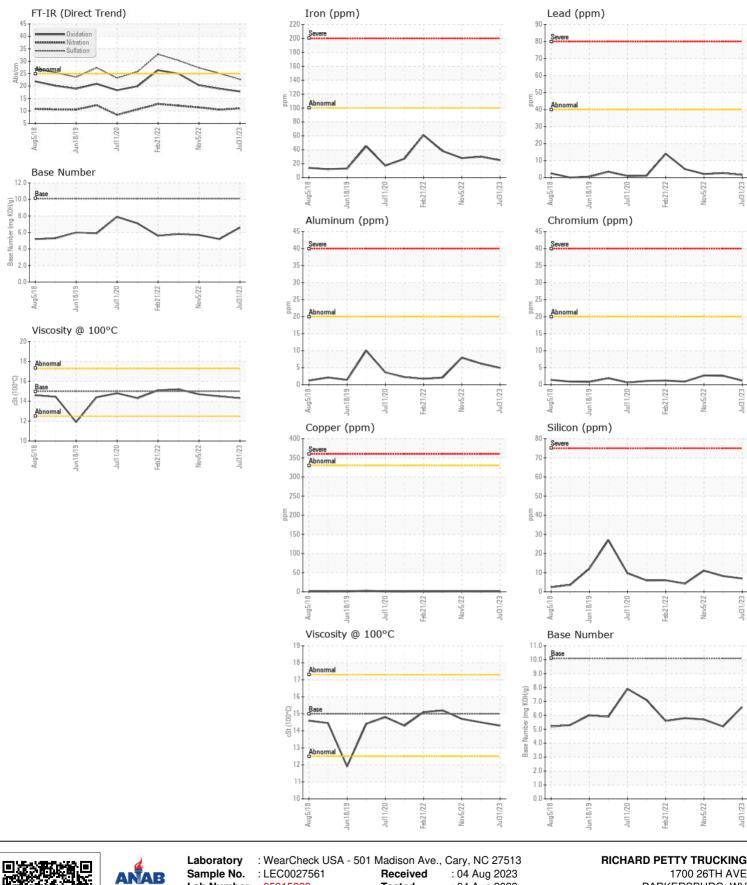
5.7

14.7

Base Number (BN) mg KOH/g ASTM D2896 10.1

ASTM D445 15

Visc @ 100°C cSt



RICHARD PETTY TRUCKING Sample No. Received 1700 26TH AVE : LEC0027561 : 04 Aug 2023 Lab Number : 05915893 Tested PARKERSBURG, WV : 04 Aug 2023 Unique Number : 10587807 Diagnosed : 04 Aug 2023 - Wes Davis US 26101 Test Package : MOBCE (Additional Tests: TBN) Contact: RICK PETTY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tamipetty48@yahoo.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: