

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

(RPL0004471) Machine Id PETERBILT 453732

Component Diesel Engine

CITGO CITGUARD 600 15W40 (26 QTS)

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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		RPL0012803	RPL0004590	RPL0004513
	Sample Date		Client Info		05 Jun 2024	26 Sep 2023	07 Mar 2023
	Machine Age	hrs	Client Info		2555	2113	1612
	Oil Age	hrs	Client Info		178	300	204
	Filter Age	hrs	Client Info		178	300	204
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	4	9	7
	Chromium	ppm	ASTM D5185m	>20	0	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0	<1	<1
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	2	8	3
	Lead	ppm	ASTM D5185m	>40	0	<1	0
	Copper	ppm	ASTM D5185m	>330	0	<1	<1
	Tin	ppm	ASTM D5185m	>15	0	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	3	3
	Potassium	ppm	ASTM D5185m	>20	4	20	7
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	6.3	7.8	7.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	20.3	19.7
	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	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	0	0
	Boron	ppm	ASTM D5185m	13	0	0	17
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	9	2
	Molybdenum	ppm	ASTM D5185m	57	58	64	59
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm	ASTM D5185m	825	385	388	774
	Calcium	ppm	ASTM D5185m		1906	1702	1163
	Phosphorus	ppm	ASTM D5185m	933	1073	1027	977
	Zinc	ppm	ASTM D5185m		1249	1211	1144
	Sulfur	ppm	ASTM D5185m		3819	3329	3082
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	17.4	15.4
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Base Number (BN) mg KOH/g ASTM D2896 11.0

Visc @ 100°C cSt

ASTM D445 15.4

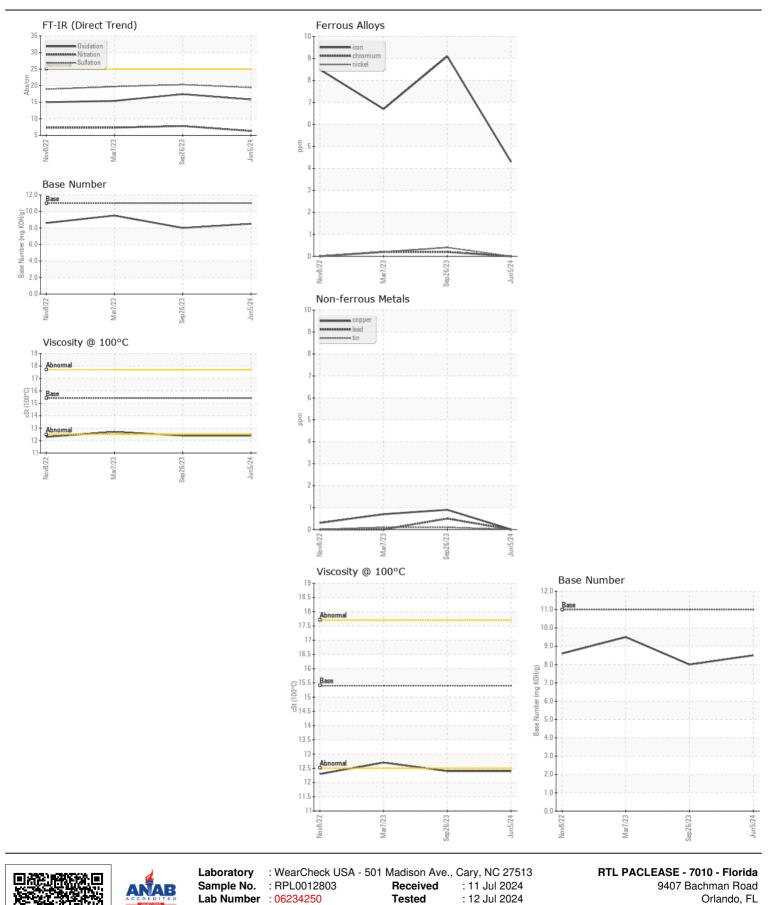
12.4

8.0 9.5

12.7

8.5

12.4



Diagnosed Unique Number : 11123084 : 12 Jul 2024 - Wes Davis Test Package : FLEET Contact: John Churchwell Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. ChurchwellJ@rushenterprises.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (407)240-7511 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: TECHNICIAN ACCOUNT Page 2 of 2

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