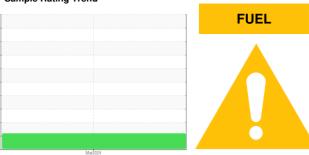


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KENWORTH 6578

Diesel Engine

CITGO CITGUARD 600 15W40 (44 QTS)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

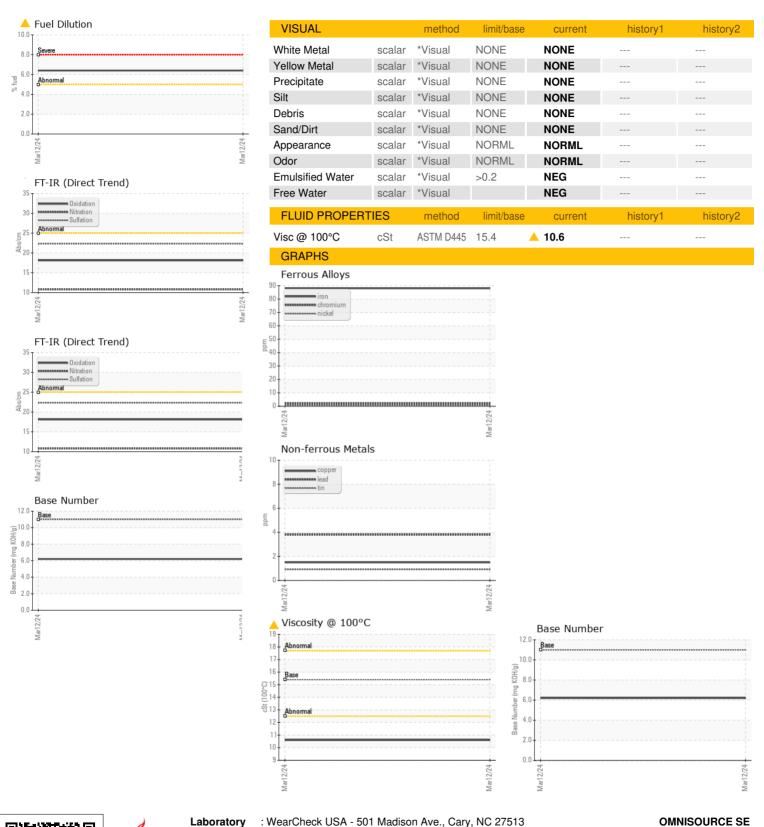
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

				Mar2024		
SAMPLE INFORM	AATION	method	limit/base	ourrent.	historyd	hiotom/0
	MATION		ilmit/base	current	history1	history2
Sample Number		Client Info		WC0901407		
Sample Date		Client Info		12 Mar 2024		
Machine Age	mls	Client Info		316944		
Oil Age	mls	Client Info		15272		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	88		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	4		
Copper	ppm	ASTM D5185m	>330	2		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	13	8		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	57	72		
Manganese	ppm	ASTM D5185m		1		
Magnesium	ppm	ASTM D5185m	825	417		
Calcium	ppm	ASTM D5185m	1100	1634		
Phosphorus	ppm	ASTM D5185m	933	972		
Zinc	ppm	ASTM D5185m	1089	1167		
Sulfur						
	ppm	ASTM D5185m	2769	3245		
CONTAMINANTS		ASTM D5185m method	2769 limit/base	3245 current	history1	history2
CONTAMINANTS Silicon						
		method	limit/base	current	history1	history2
Silicon	ppm	method ASTM D5185m	limit/base	current 8	history1	history2
Silicon Sodium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25	current 8 4	history1	history2
Silicon Sodium Potassium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	current 8 4 3	history1	history2
Silicon Sodium Potassium Fuel	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	limit/base	current 8 4 3 ▲ 6.4	history1	history2
Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method	limit/base >25 >20 >5 limit/base	current 8 4 3 ▲ 6.4 current 0.7	history1 history1	history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm %	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3	current 8 4 3 • 6.4 current	history1 history1	history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm % % Abs/cm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624	limit/base >25 >20 >5	current 8 4 3 ▲ 6.4 current 0.7 10.8	history1 history1	history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >25 >20 >5 limit/base >3 >20 >3 limit/base	current 8 4 3 ▲ 6.4 current 0.7 10.8 22.3 current	history1 history1 history1	history2 history2 history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % % Abs/cm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >25 >20 >5	current 8 4 3 ▲ 6.4 current 0.7 10.8 22.3	history1 history1	history2 history2



OIL ANALYSIS REPORT







Certificate 12367

Sample No.

: WC0901407 Lab Number : 06123485

Unique Number : 10937636

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 20 Mar 2024 **Tested**

: 22 Mar 2024 Diagnosed

: 22 Mar 2024 - Wes Davis Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

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) US 27284

T:

F:

1426 WEST MAIN SHOP

KERNERSVILLE, NC