



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area  
**[PAC7025]**  
 Machine Id  
**PETERBILT 496680**  
 Component  
**Diesel Engine**  
 Fluid  
**CITGO CITGUARD 600 15W40 (48 QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0004231	---	---
Sample Date		Client Info		24 Jun 2024	---	---
Machine Age	mls	Client Info		13360	---	---
Oil Age	mls	Client Info		13360	---	---
Filter Age	mls	Client Info		13360	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ATTENTION	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	64	---	---
Chromium	ppm	ASTM D5185m	>20	5	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	1	---	---
Aluminum	ppm	ASTM D5185m	>20	66	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	35	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	38	---	---
Potassium	ppm	ASTM D5185m	>20	204	---	---
Fuel	%	ASTM D3524	>3.0	0.3	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>6	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

## FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		6	---	---
Boron	ppm	ASTM D5185m	13	37	---	---
Barium	ppm	ASTM D5185m	0	2	---	---
Molybdenum	ppm	ASTM D5185m	57	17	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m	825	659	---	---
Calcium	ppm	ASTM D5185m	1100	1282	---	---
Phosphorus	ppm	ASTM D5185m	933	748	---	---
Zinc	ppm	ASTM D5185m	1089	855	---	---
Sulfur	ppm	ASTM D5185m	2769	3118	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	11.5	---	---

