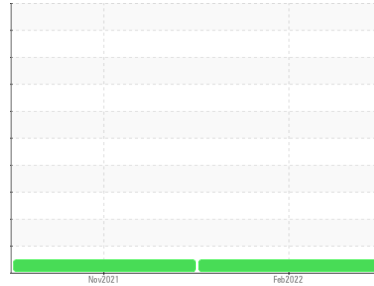




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**PETERBILT 22**  
 Component  
**Diesel Engine**  
 Fluid  
**FACTORY DELO (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KL0006364</b>	KL0006362	---
Sample Date	Client Info			<b>10 Feb 2022</b>	17 Nov 2021	---
Machine Age	mls	Client Info		<b>20192</b>	10543	---
Oil Age	mls	Client Info		<b>20192</b>	10543	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	<b>61</b>	26	---
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>25	<b>20</b>	11	---
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>85	<b>14</b>	10	---
Tin	ppm	ASTM D5185m	>4	<b>2</b>	<1	---
Antimony	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

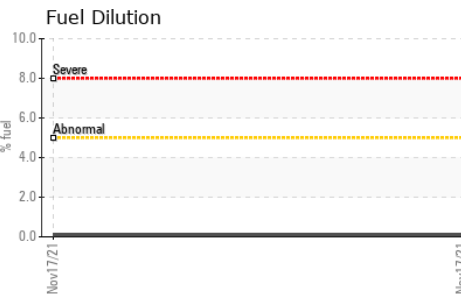
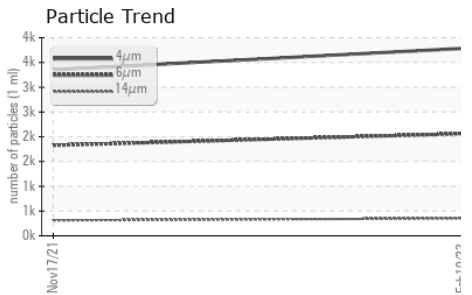
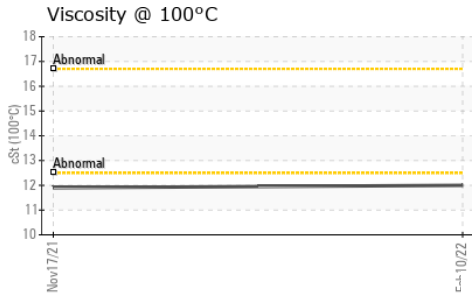
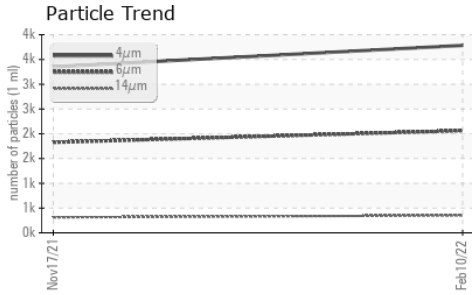
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>26</b>	45	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>9</b>	8	---
Manganese	ppm	ASTM D5185m		<b>2</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>810</b>	731	---
Calcium	ppm	ASTM D5185m		<b>1522</b>	1372	---
Phosphorus	ppm	ASTM D5185m		<b>870</b>	773	---
Zinc	ppm	ASTM D5185m		<b>1016</b>	795	---
Sulfur	ppm	ASTM D5185m		<b>2982</b>	2972	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>13</b>	11	---
Sodium	ppm	ASTM D5185m		<b>3</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>54</b>	19	---
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	0.1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.1</b>	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	19.8	---



# OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>3784</b>	3352	---
Particles >6µm	ASTM D7647	>5000	<b>2062</b>	1826	---
Particles >14µm	ASTM D7647	>640	<b>351</b>	311	---
Particles >21µm	ASTM D7647	>160	<b>118</b>	105	---
Particles >38µm	ASTM D7647	>40	<b>18</b>	16	---
Particles >71µm	ASTM D7647	>10	<b>2</b>	2	---
Oil Cleanliness	ISO 4406 (c)	>19/16	<b>18/16</b>	18/15	---

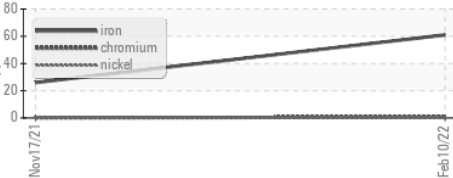
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>18.2</b>	15.9	---
Base Number (BN)	mg KOH/g ASTM D2896		<b>5.91</b>	7.53	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar *Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar *Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar *Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar *Visual	>0.2	<b>NEG</b>	NEG	---
Free Water	scalar *Visual		<b>NEG</b>	NEG	---

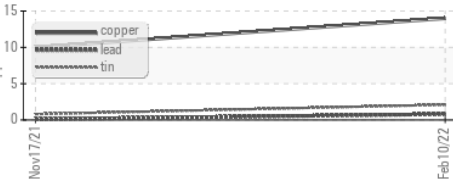
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445		<b>12.0</b>	11.9	---

## GRAPHS

### Ferrous Alloys



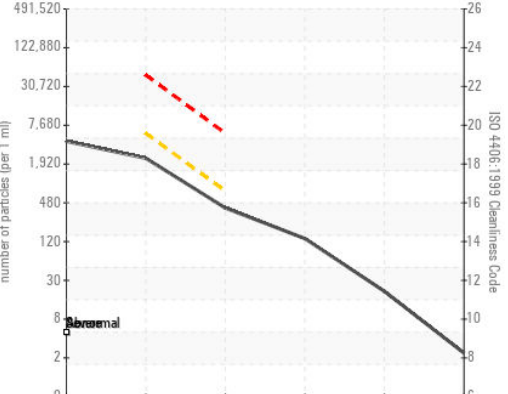
### Non-ferrous Metals



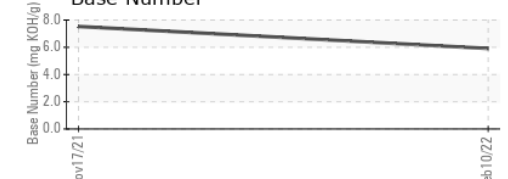
### Viscosity @ 100°C



### Particle Count



### Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0006364 **Received** : 03 Mar 2022  
**Lab Number** : **05483041** **Tested** : 05 Mar 2022  
**Unique Number** : 9877260 **Diagnosed** : 05 Mar 2022 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel, PrtCount )

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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)