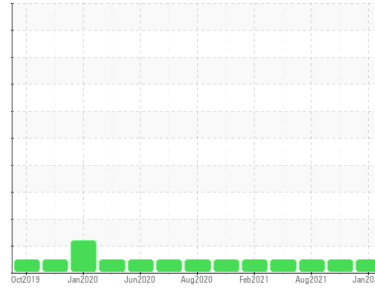




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**PETERBILT 20**

Component  
**Diesel Engine**

Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (48 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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>KL0006363</b>	KL0006370	KLM2339682
Sample Date	Client Info		<b>14 Jan 2022</b>	11 Nov 2021	05 Aug 2021
Machine Age	mls	Client Info	<b>171000</b>	161366	141000
Oil Age	mls	Client Info	<b>10000</b>	30000	20000
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>22</b>	39	20
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>19</b>	20	15
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	6	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>9</b>	71	197
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>63</b>	114	120
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>847</b>	602	536
Calcium	ppm	ASTM D5185m	<b>1175</b>	1513	1418
Phosphorus	ppm	ASTM D5185m	<b>924</b>	721	638
Zinc	ppm	ASTM D5185m	<b>1144</b>	808	810
Sulfur	ppm	ASTM D5185m	<b>3301</b>	2590	2726

## CONTAMINANTS

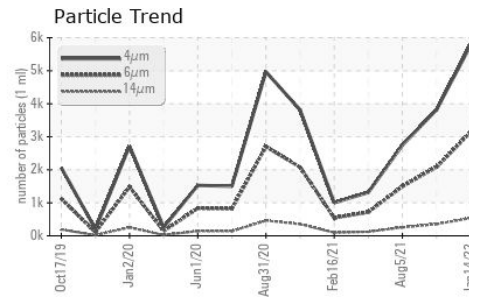
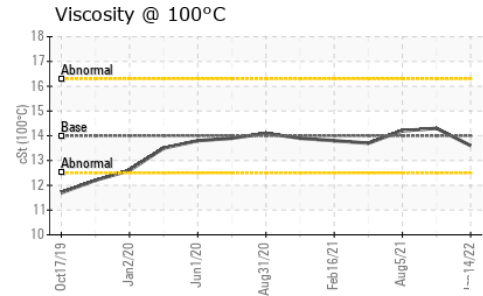
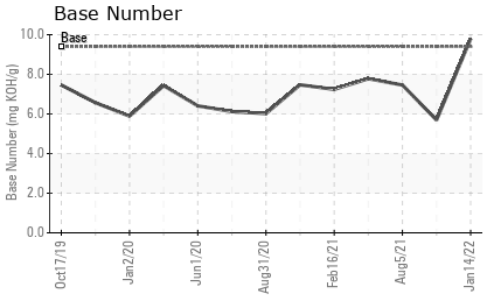
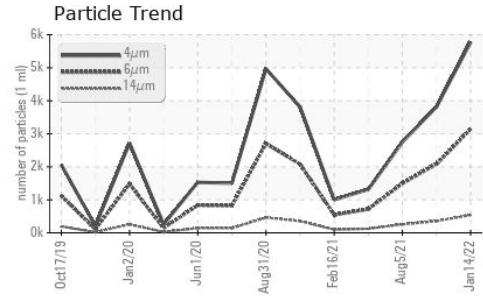
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	9	8
Sodium	ppm	ASTM D5185m	<b>1</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>31</b>	47	26

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	9.8	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.3</b>	24.1	22.4



# OIL ANALYSIS REPORT



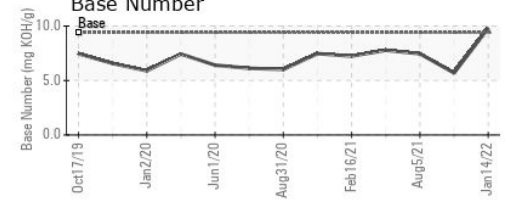
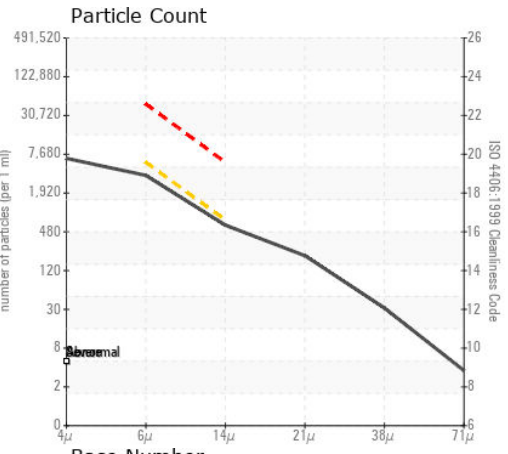
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>5772</b>	3819	2747
Particles >6µm	ASTM D7647	>5000	<b>3144</b>	2081	1496
Particles >14µm	ASTM D7647	>640	<b>535</b>	354	255
Particles >21µm	ASTM D7647	>160	<b>180</b>	119	86
Particles >38µm	ASTM D7647	>40	<b>28</b>	18	13
Particles >71µm	ASTM D7647	>10	<b>3</b>	2	1
Oil Cleanliness	ISO 4406 (c)	>19/16	<b>19/16</b>	18/16	18/15

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>17.2</b>	23.1	19.8
Base Number (BN)	mg KOH/g ASTM D2896	9.4	<b>9.79</b>	5.69	7.46

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445	14	<b>13.6</b>	14.3	14.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0006363 **Received** : 31 Jan 2022  
**Lab Number** : 05455837 **Tested** : 01 Feb 2022  
**Unique Number** : 9830032 **Diagnosed** : 01 Feb 2022 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

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 F:

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)