



# OIL ANALYSIS REPORT

Sample Rating Trend

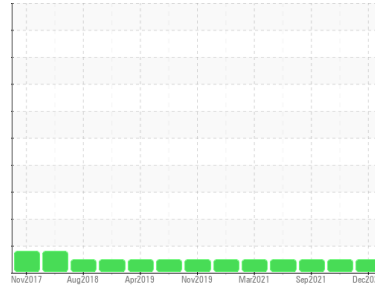
**NORMAL**



Machine Id  
**PETERBILT 6623**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### 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>WC0871021</b>	WC0694222	WC0558997
Sample Date	Client Info			<b>06 Dec 2023</b>	24 Oct 2022	21 Sep 2021
Machine Age	hrs	Client Info		<b>450</b>	173789	0
Oil Age	hrs	Client Info		<b>450</b>	450	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
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	>110	<b>10</b>	18	12
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>45	<b>0</b>	3	<1
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	2	6
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>0</b>	5	10
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	100	<b>59</b>	63	50
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>938</b>	926	709
Calcium	ppm	ASTM D5185m	3000	<b>1056</b>	1180	912
Phosphorus	ppm	ASTM D5185m	1150	<b>1057</b>	1007	744
Zinc	ppm	ASTM D5185m	1350	<b>1239</b>	1250	995
Sulfur	ppm	ASTM D5185m	4250	<b>3382</b>	3303	2269

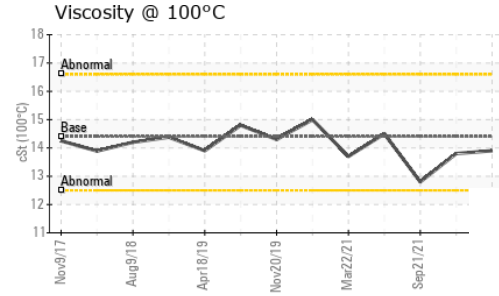
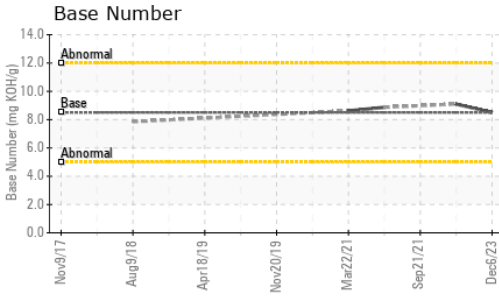
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>2</b>	6	5
Sodium	ppm	ASTM D5185m	>158	<b>0</b>	0	8
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	7	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	10.4	13
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.8</b>	23.1	30.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	18.9	29.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.5</b>	9.1	---



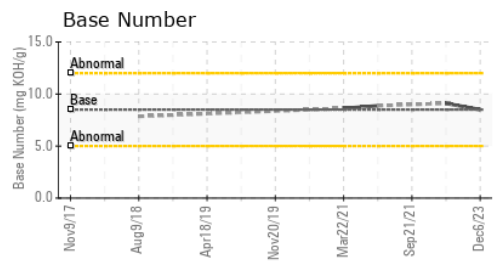
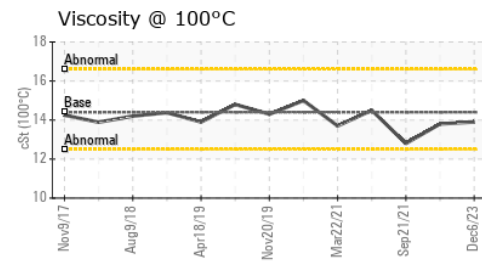
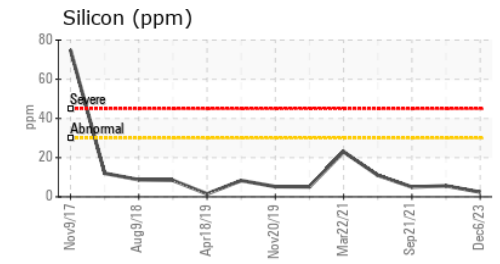
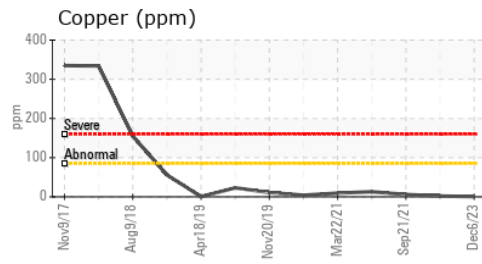
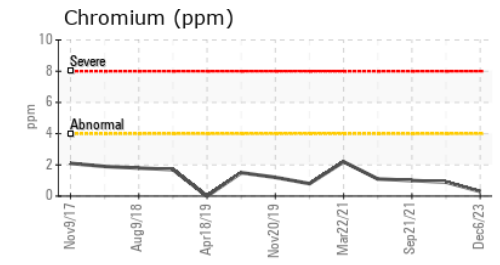
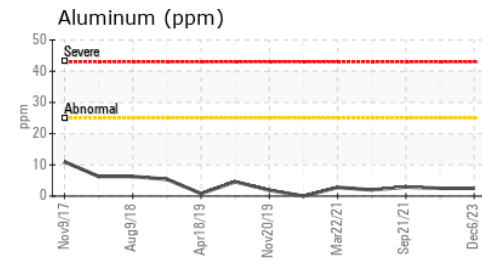
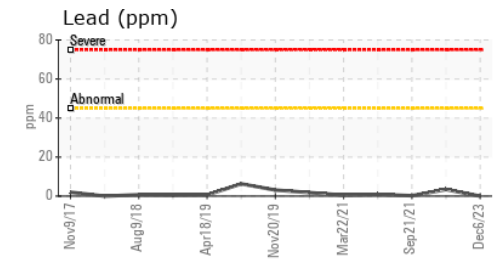
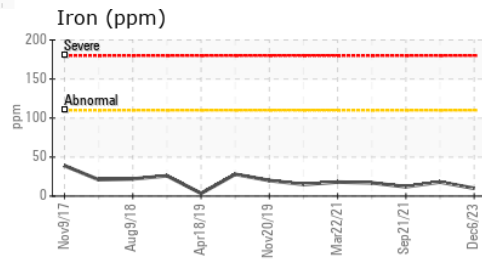
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.9</b>	13.8	12.8

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0871021 **Received** : 07 Dec 2023  
**Lab Number** : **06027291** **Diagnosed** : 08 Dec 2023  
**Unique Number** : 10777082 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**INTERSTATE WASTE-CHESTER**  
 89 BLACK MEADOW RD  
 CHESTER, NY  
 US 10918  
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 rclarke@interstatewaste.com  
 T:  
 F: (845)572-3301

Certificate L2367  
 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)