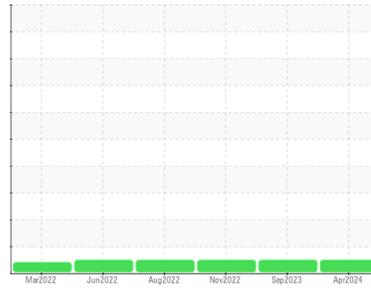


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**PETERBILT 435**  
 Component  
**Diesel Engine**  
 Fluid  
 **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### 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>PCA0115744</b>	PCA0082945	PCA0069497
Sample Date	Client Info			<b>06 Apr 2024</b>	28 Sep 2023	14 Nov 2022
Machine Age	mls	Client Info		<b>213953</b>	181394	126568
Oil Age	mls	Client Info		<b>0</b>	0	22019
Oil Changed	Client Info			<b>Changed</b>	N/A	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	>110	<b>24</b>	31	17
Chromium	ppm	ASTM D5185m	>4	<b>1</b>	2	1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	11	5
Lead	ppm	ASTM D5185m	>45	<b>1</b>	4	<1
Copper	ppm	ASTM D5185m	>85	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0

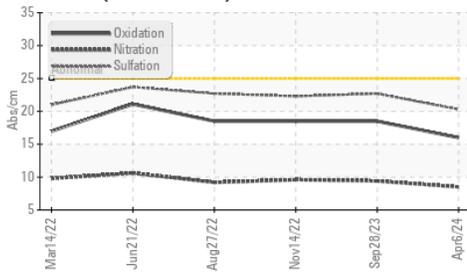
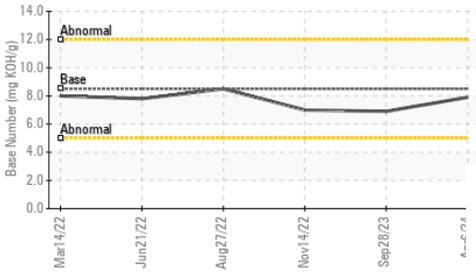
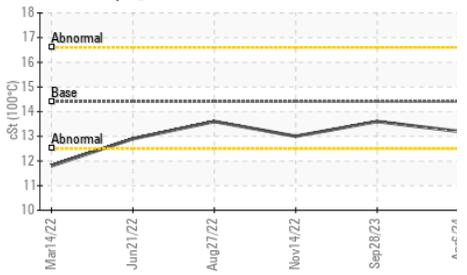
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>11</b>	19	3
Barium	ppm	ASTM D5185m	10	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	100	<b>62</b>	104	61
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	450	<b>910</b>	1454	962
Calcium	ppm	ASTM D5185m	3000	<b>1087</b>	1795	1097
Phosphorus	ppm	ASTM D5185m	1150	<b>1115</b>	1672	1024
Zinc	ppm	ASTM D5185m	1350	<b>1250</b>	1982	1258
Sulfur	ppm	ASTM D5185m	4250	<b>3342</b>	5128	3527

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>5</b>	9	7
Sodium	ppm	ASTM D5185m	>158	<b>0</b>	6	2
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	23	11

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	9.4	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	22.7	22.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	18.5	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.9</b>	6.9	7.0

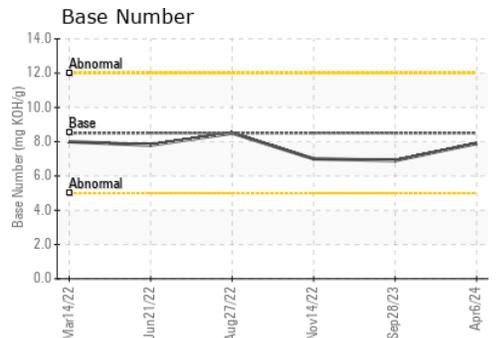
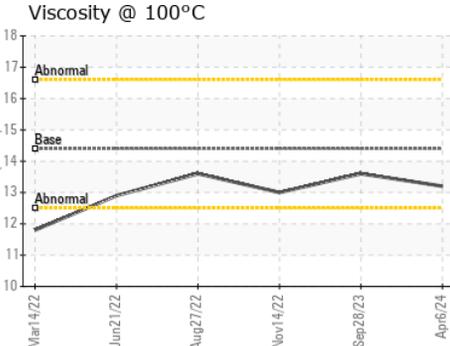
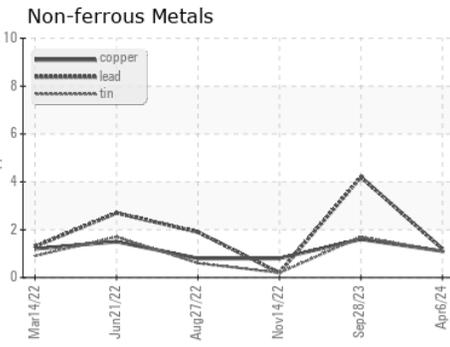
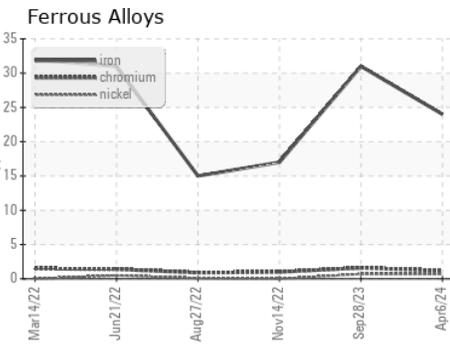
# OIL ANALYSIS REPORT

**FT-IR (Direct Trend)**

**Base Number**

**Viscosity @ 100°C**


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>13.2</b>	13.6	13.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115744      **Received** : 22 Apr 2024  
**Lab Number** : 06156699      **Tested** : 23 Apr 2024  
**Unique Number** : 10992122      **Diagnosed** : 23 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**LEFEBVRE AND SONS**  
 10895 171ST AVE NW  
 ELK RIVER, MN  
 US 55330  
 Contact: JAY LEFEBVRE  
 jay.lefebvre@lefruck.com

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)