

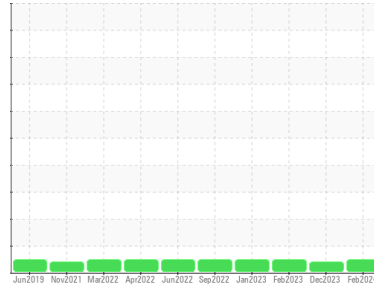


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**

Area  
**2H28**  
 Machine Id  
**PETERBILT 348 RTK6253 (S/N 2NP3XJ0X0KM622513)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- 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>ARI06099559</b>	ARI06033095	ARI0004237
Sample Date	Client Info			<b>25 Feb 2024</b>	12 Dec 2023	15 Feb 2023
Machine Age	mls Client Info			<b>0</b>	98407	89434
Oil Age	mls Client Info			<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	0.7	<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>1</b>	4	2
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	2	<1
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	1	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>338</b>	34	43
Barium	ppm	ASTM D5185m	10	<b>0</b>	11	<1
Molybdenum	ppm	ASTM D5185m	100	<b>109</b>	26	67
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	450	<b>535</b>	93	827
Calcium	ppm	ASTM D5185m	3000	<b>1599</b>	2059	1158
Phosphorus	ppm	ASTM D5185m	1150	<b>738</b>	840	949
Zinc	ppm	ASTM D5185m	1350	<b>835</b>	1025	1131
Sulfur	ppm	ASTM D5185m	4250	<b>2530</b>	3532	2906

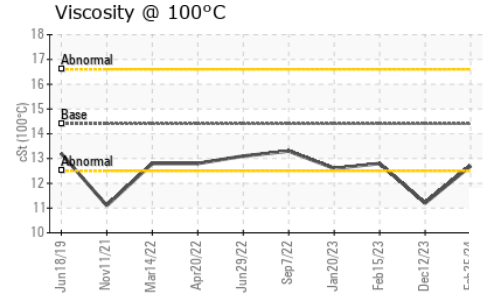
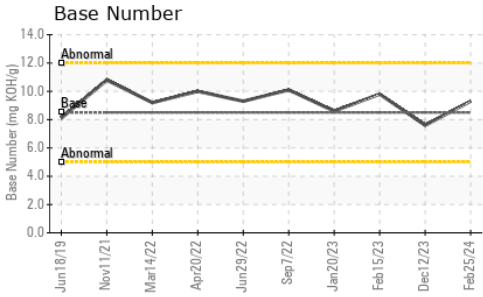
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>5</b>	4	1
Sodium	ppm	ASTM D5185m	>216	<b>2</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.2</b>	4.2	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.4</b>	14.8	18.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.5</b>	7.3	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.3</b>	7.6	9.8



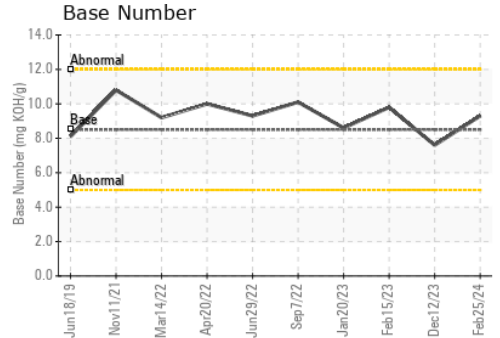
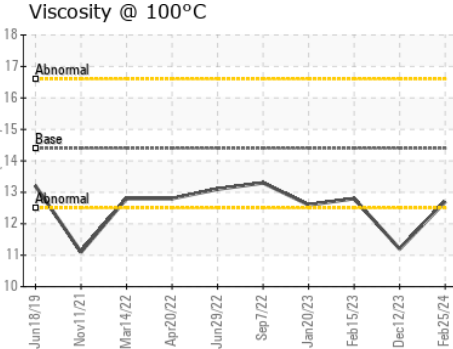
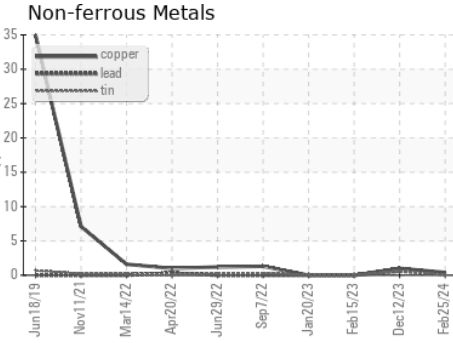
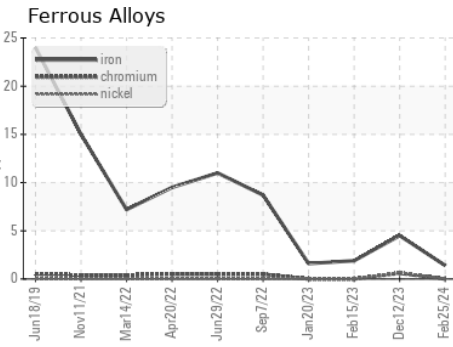
# OIL ANALYSIS REPORT



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	12.7	▲ 11.2	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ARI06099559      **Received** : 26 Feb 2024  
**Lab Number** : 06099559      **Tested** : 27 Feb 2024  
**Unique Number** : 10897789      **Diagnosed** : 27 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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)