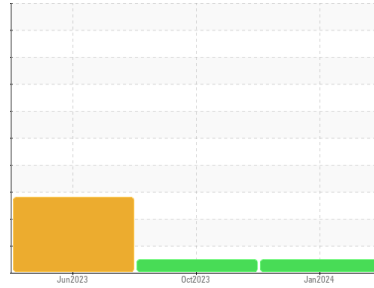




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**116125**

Component  
**Diesel Engine**

Fluid  
**SHELL ROTELLA T 15W40 (--- 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.

### 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>IL0033067</b>	IL0032741	IL0027518
Sample Date	Client Info			<b>24 Jan 2024</b>	06 Oct 2023	07 Jun 2023
Machine Age	mls	Client Info		<b>109701</b>	75405	39945
Oil Age	mls	Client Info		<b>34296</b>	35460	39945
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<b>&lt;1.0</b>	<1.0	0.9
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	>90	<b>12</b>	21	37
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	17	▲ 26
Lead	ppm	ASTM D5185m	>40	<b>2</b>	3	4
Copper	ppm	ASTM D5185m	>330	<b>2</b>	6	26
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	3
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	<b>39</b>	28	46
Barium	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>34</b>	29	66
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	5
Magnesium	ppm	ASTM D5185m	24	<b>306</b>	255	429
Calcium	ppm	ASTM D5185m	2292	<b>1690</b>	1691	1781
Phosphorus	ppm	ASTM D5185m	1064	<b>939</b>	898	946
Zinc	ppm	ASTM D5185m	1160	<b>1132</b>	1087	1216
Sulfur	ppm	ASTM D5185m	4996	<b>3059</b>	2735	2788

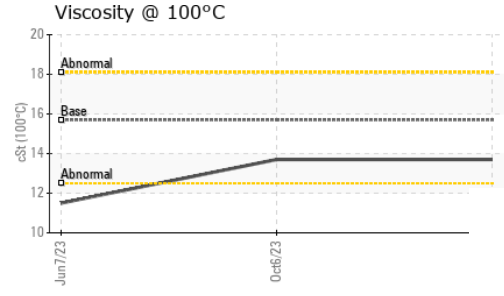
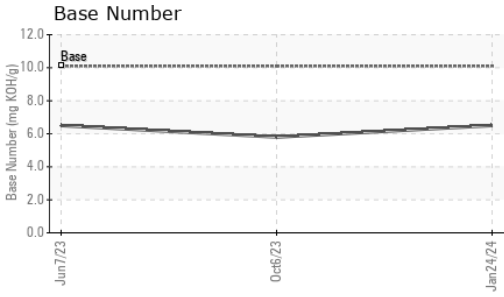
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	13	▲ 40
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>30</b>	55	71

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.0	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.5</b>	22.5	22.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.1</b>	19.3	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.5</b>	5.8	6.5



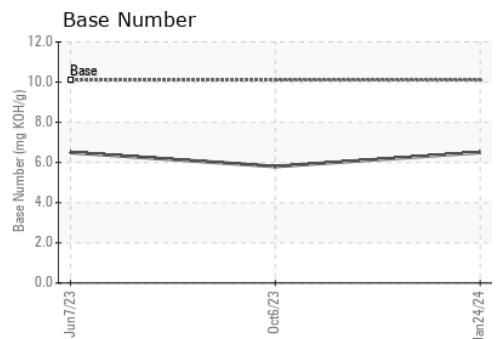
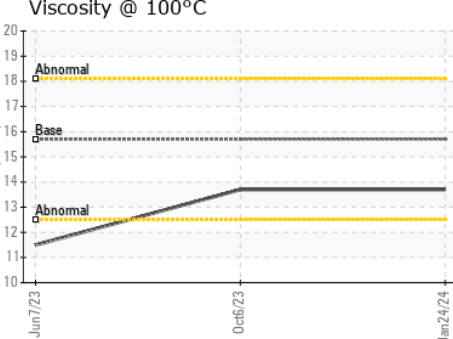
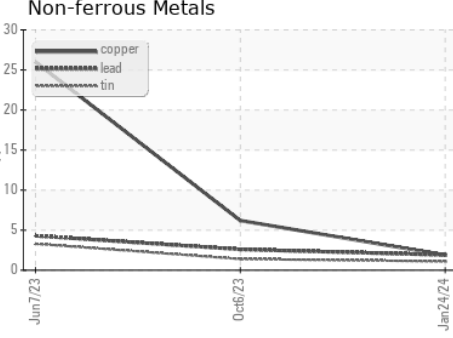
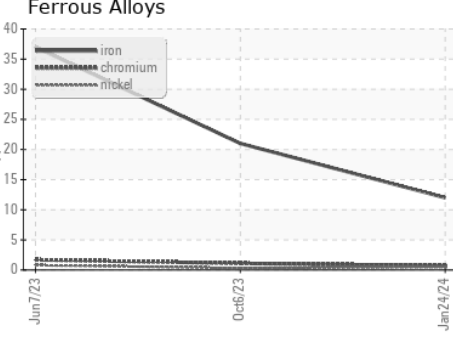
# OIL ANALYSIS REPORT



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	15.7	<b>13.7</b>	13.7 ▲ 11.5

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0033067 **Received** : 01 Feb 2024  
**Lab Number** : **06076699** **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858790 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**IDEALISE OF NORTHWEST WI**  
 611 HANSEN ROAD  
 GREEN BAY, WI  
 US 54304  
 Contact: GARY KOLTZ  
 gkoltz@pcitrucks.com  
 T: (920)499-6200  
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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)