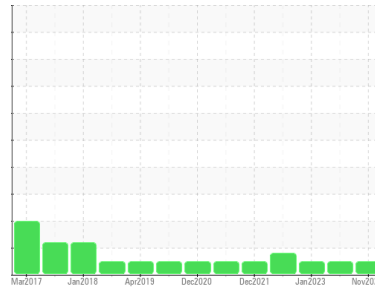




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**INTERNATIONAL 104501**

Component  
**Diesel Engine**

Fluid  
**SHELL ROTELLA T 10W30 (--- 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>IL0032776</b>	IL0027525	IL0027403
Sample Date	Client Info			<b>08 Nov 2023</b>	23 May 2023	27 Jan 2023
Machine Age	mls	Client Info		<b>257539</b>	243679	232395
Oil Age	mls	Client Info		<b>13860</b>	11284	13882
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>2.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>27</b>	22	29
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	13	18
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
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	269	<b>56</b>	37	37
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>42</b>	86	87
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	20	<b>236</b>	37	58
Calcium	ppm	ASTM D5185m	1521	<b>2010</b>	2222	2205
Phosphorus	ppm	ASTM D5185m	948	<b>1029</b>	994	1015
Zinc	ppm	ASTM D5185m	893	<b>1298</b>	1222	1247
Sulfur	ppm	ASTM D5185m		<b>3361</b>	4306	4007

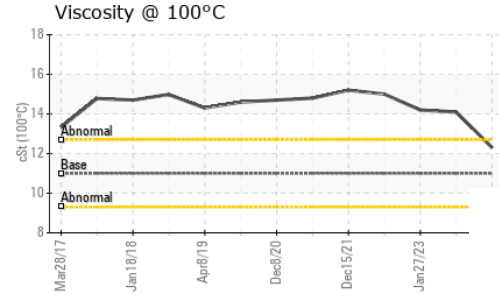
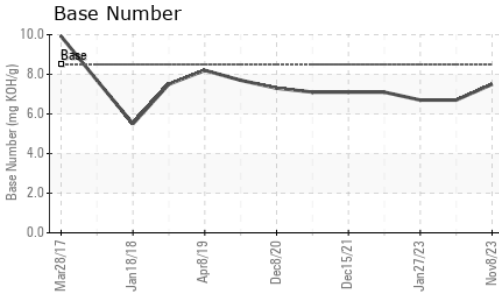
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	7
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	2	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	10.6	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	20.5	21.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	14.5	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.5</b>	6.7	6.7



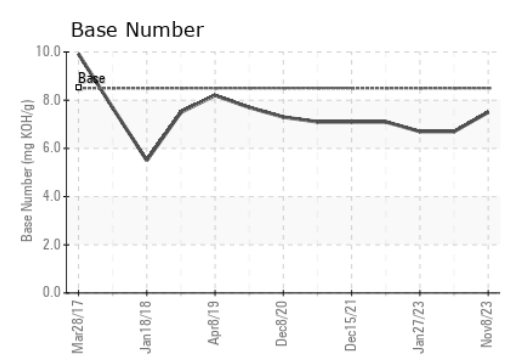
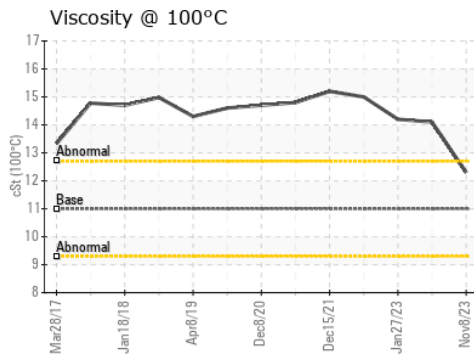
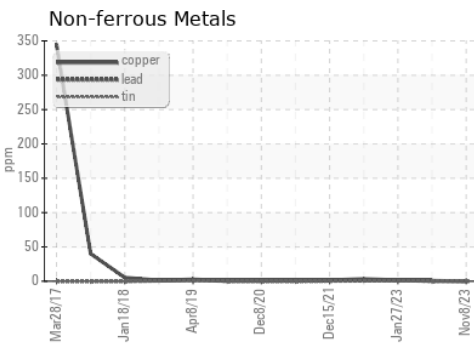
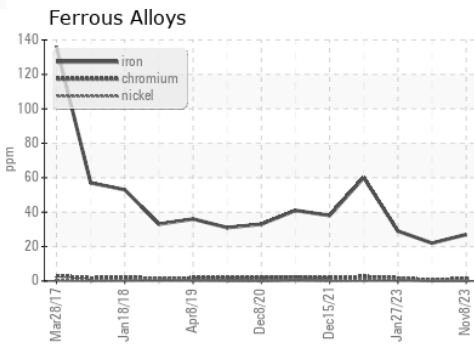
# OIL ANALYSIS REPORT



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	11.0	12.3	14.1

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0032776 **Received** : 14 Nov 2023  
**Lab Number** : 06006777 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 10740539 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**IDEALISE OF NORTHWEST WI**  
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 GREEN BAY, WI  
 US 54304  
 Contact: GARY KOLTZ  
 gkoltz@pcitrucks.com  
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 F: (920)499-5332

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)