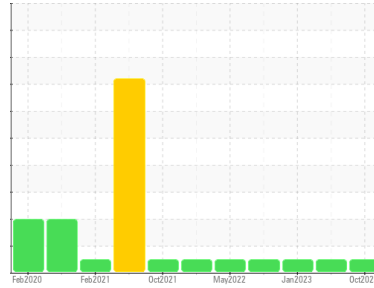




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4481L**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 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>IL0032500</b>	IL0028930	IL0028974
Sample Date	Client Info		<b>05 Oct 2023</b>	24 Apr 2023	19 Jan 2023
Machine Age	mls	Client Info	<b>226492</b>	213011	195421
Oil Age	mls	Client Info	<b>15000</b>	10000	15000
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	>5	<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>41</b>	41	33
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	6	4
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
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>	3	4
Barium	ppm	ASTM D5185m 10	<b>4</b>	0	4
Molybdenum	ppm	ASTM D5185m 100	<b>66</b>	66	63
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 450	<b>946</b>	1056	952
Calcium	ppm	ASTM D5185m 3000	<b>1113</b>	1130	1111
Phosphorus	ppm	ASTM D5185m 1150	<b>904</b>	1040	907
Zinc	ppm	ASTM D5185m 1350	<b>1256</b>	1375	1280
Sulfur	ppm	ASTM D5185m 4250	<b>3275</b>	3724	3255

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	4	5
Sodium	ppm	ASTM D5185m >158	<b>0</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>5</b>	6	3

## INFRA-RED

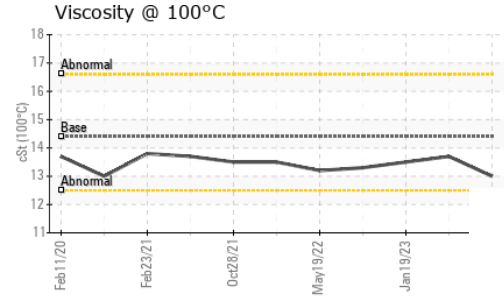
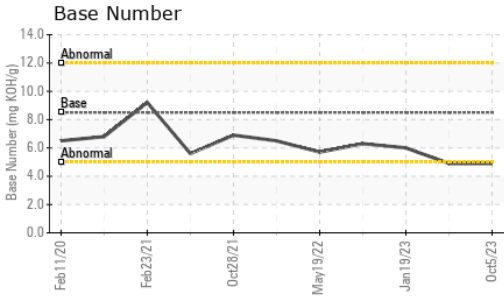
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.6	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.8</b>	12.2	12.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.7</b>	23.8	25.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>32.5</b>	25.0	25.5
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>4.9</b>	4.9	6.0



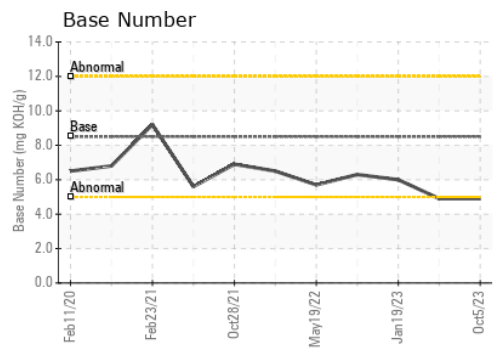
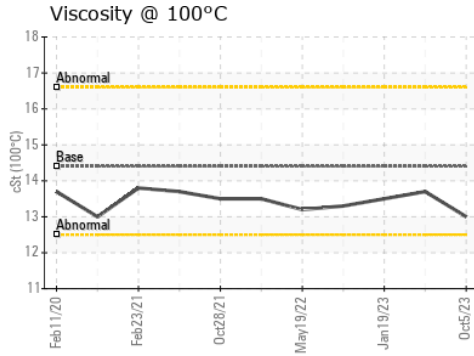
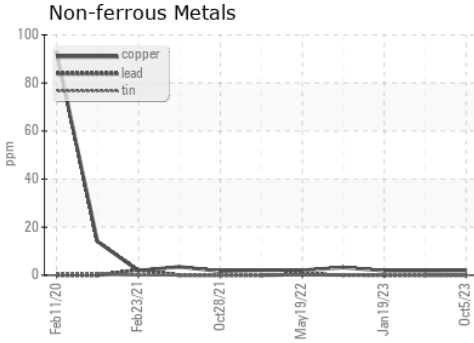
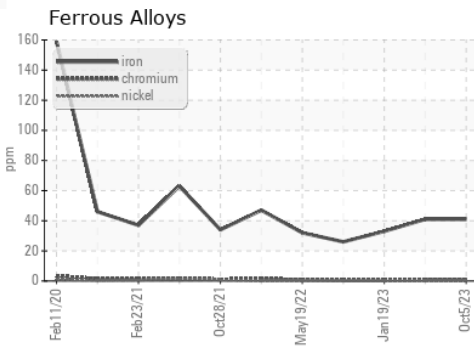
# OIL ANALYSIS REPORT



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>13.0</b>	13.7	13.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0032500      **Received** : 03 Nov 2023  
**Lab Number** : 05997680      **Diagnosed** : 06 Nov 2023  
**Unique Number** : 10726040      **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**  
 4655 SOUTH CENTRAL AVENUE  
 CHICAGO, IL  
 US 60638  
 Contact: MIKE LINLEY  
 linleym@rushtruckcenters.com  
 T: (708)496-7500  
 F: (708)496-8818

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)