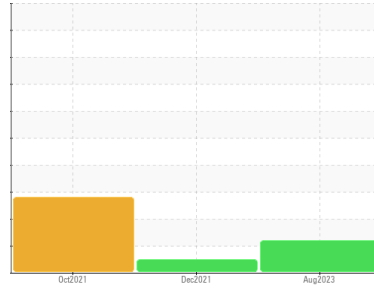




# PROBLEM SUMMARY

Sample Rating Trend



## DEGRADATION



Machine Id  
**7605L**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- GAL)**

### COMPONENT CONDITION SUMMARY

No relevant graphs to display


### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	NORMAL	ABNORMAL
Base Number (BN)	mg KOH/g ASTM D2896	▲ 2.7	10.2	3.4

**Customer Id:** IDECHILL  
**Sample No.:** IL0032455  
**Lab Number:** 05933178  
**Test Package:** FLEET



*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

*To change component or sample information:*  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 31 Dec 2021 Diag: Wes Davis

#### NORMAL



Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



### 20 Oct 2021 Diag: Don Baldrige

#### DIRT



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Elemental level of silicon (Si) above normal indicating ingress of seal material. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

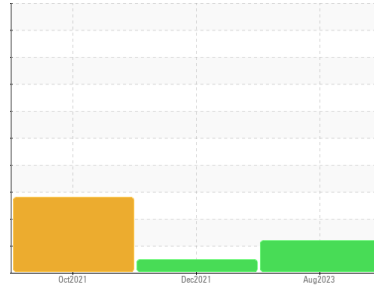
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**7605L**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. 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 level is low. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>IL0032455</b>	IL0022264	IL0019483
Sample Date	Client Info		<b>16 Aug 2023</b>	31 Dec 2021	20 Oct 2021
Machine Age	mls	Client Info	<b>85380</b>	39916	34731
Oil Age	mls	Client Info	<b>40000</b>	0	40000
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.5
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>59</b>	14	105
Chromium	ppm	ASTM D5185m >20	<b>3</b>	<1	3
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>16</b>	3	12
Lead	ppm	ASTM D5185m >40	<b>12</b>	2	9
Copper	ppm	ASTM D5185m >330	<b>3</b>	4	34
Tin	ppm	ASTM D5185m >15	<b>3</b>	1	2
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	2
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	<b>21</b>	49	30
Barium	ppm	ASTM D5185m	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	<b>41</b>	42	63
Manganese	ppm	ASTM D5185m	<b>1</b>	<1	6
Magnesium	ppm	ASTM D5185m	<b>603</b>	502	489
Calcium	ppm	ASTM D5185m	<b>1632</b>	1652	1998
Phosphorus	ppm	ASTM D5185m	<b>789</b>	758	1042
Zinc	ppm	ASTM D5185m	<b>999</b>	860	1278
Sulfur	ppm	ASTM D5185m	<b>2906</b>	2298	3752

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>10</b>	10	▲ 40
Sodium	ppm	ASTM D5185m >118	<b>2</b>	3	7
Potassium	ppm	ASTM D5185m >20	<b>31</b>	8	46

## INFRA-RED

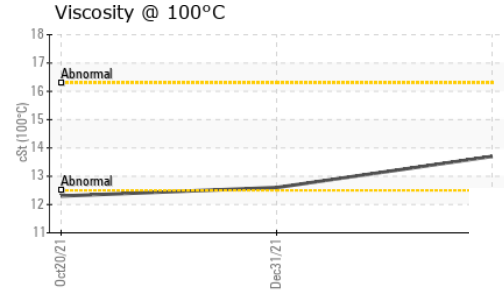
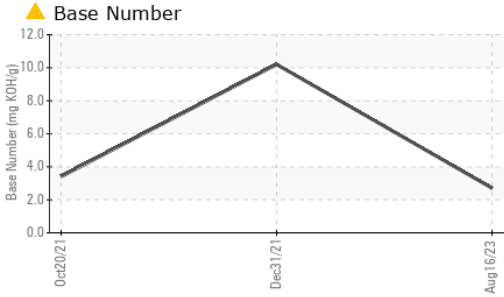
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.2	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>15.8</b>	7.5	13.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>32.7</b>	24.1	31.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>44.0</b>	23.3	34
Base Number (BN)	mg KOH/g	ASTM D2896	▲ <b>2.7</b>	10.2	3.4



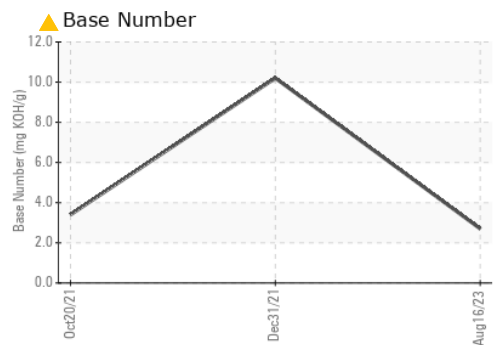
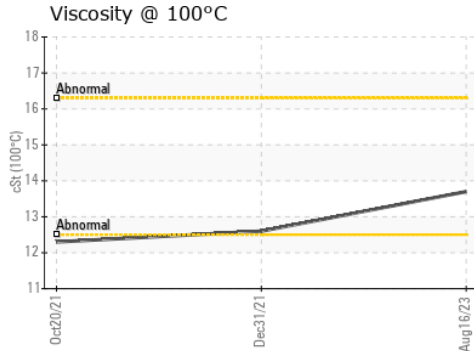
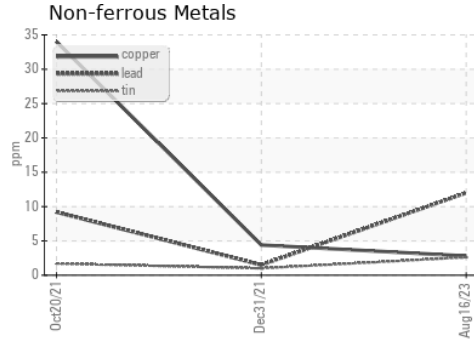
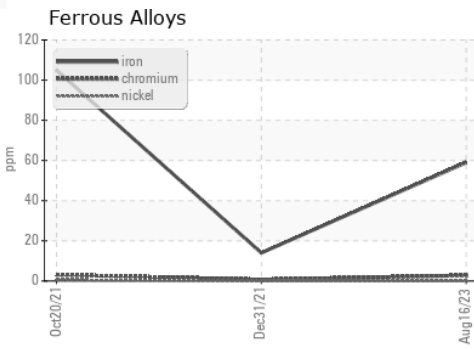
# OIL ANALYSIS REPORT



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	13.7	12.6	▲ 12.3

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0032455 **Received** : 24 Aug 2023  
**Lab Number** : 05933178 **Diagnosed** : 25 Aug 2023  
**Unique Number** : 10618449 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

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