



# PROBLEM SUMMARY

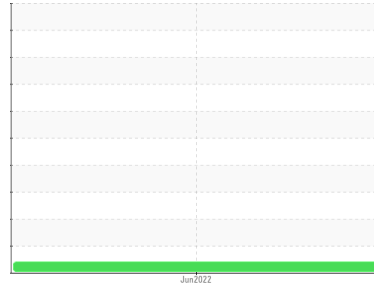
Area  
**Store 9 - Marietta**

Machine Id  
**5028**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

Sample Rating Trend



**VISCOSITY**



## COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



## 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		---	---		
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.9	---	---

Customer Id: LARBELOH  
Sample No.: LEC0028013  
Lab Number: 05577342  
Test Package: MOBCE



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

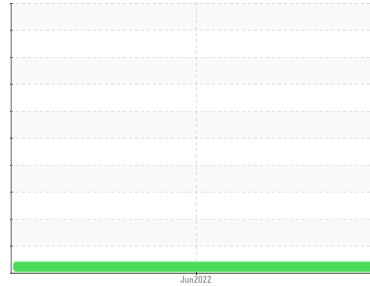
Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area  
**Store 9 - Marietta**

Machine Id  
**5028**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 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

Fuel content negligible. There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>LEC0028013</b>	---	---
Sample Date	Client Info	<b>21 Jun 2022</b>	---	---
Machine Age	hrs Client Info	<b>261</b>	---	---
Oil Age	hrs Client Info	<b>261</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >100	<b>30</b>	---	---
Chromium ppm	ASTM D5185m >20	<b>1</b>	---	---
Nickel ppm	ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver ppm	ASTM D5185m >3	<b>&lt;1</b>	---	---
Aluminum ppm	ASTM D5185m >20	<b>3</b>	---	---
Lead ppm	ASTM D5185m >40	<b>1</b>	---	---
Copper ppm	ASTM D5185m >330	<b>134</b>	---	---
Tin ppm	ASTM D5185m >15	<b>1</b>	---	---
Vanadium ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 250	<b>136</b>	---	---
Barium ppm	ASTM D5185m 10	<b>5</b>	---	---
Molybdenum ppm	ASTM D5185m 100	<b>10</b>	---	---
Manganese ppm	ASTM D5185m	<b>4</b>	---	---
Magnesium ppm	ASTM D5185m 450	<b>149</b>	---	---
Calcium ppm	ASTM D5185m 3000	<b>1856</b>	---	---
Phosphorus ppm	ASTM D5185m 1150	<b>802</b>	---	---
Zinc ppm	ASTM D5185m 1350	<b>1014</b>	---	---
Sulfur ppm	ASTM D5185m 4250	<b>2819</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >120	<b>17</b>	---	---
Sodium ppm	ASTM D5185m >158	<b>5</b>	---	---
Potassium ppm	ASTM D5185m >20	<b>5</b>	---	---
Fuel %	ASTM D3524 >5	<b>1.7</b>	---	---

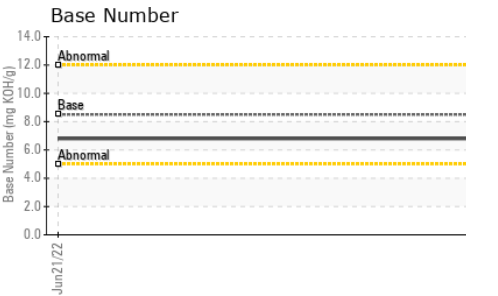
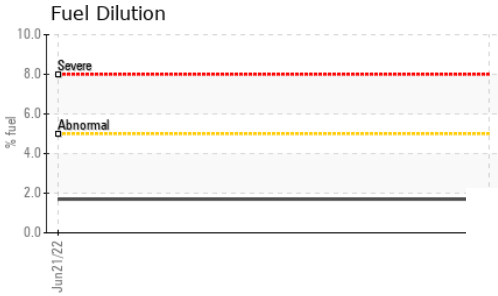
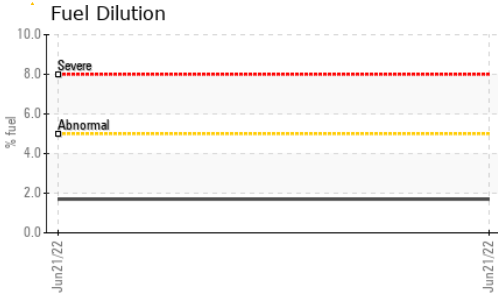
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	*ASTM D7844 >3	<b>0.3</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>9.6</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.1</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>18.9</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>6.8</b>	---	---

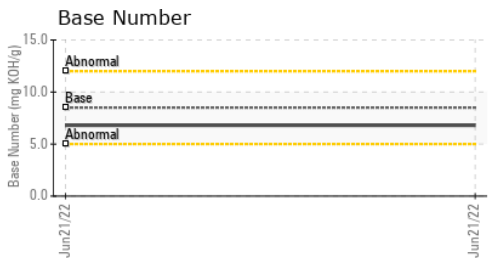
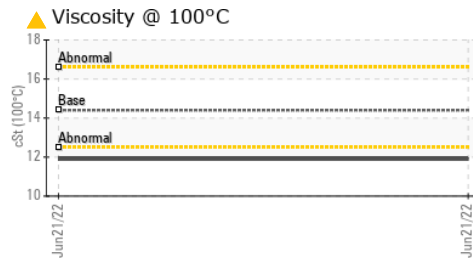
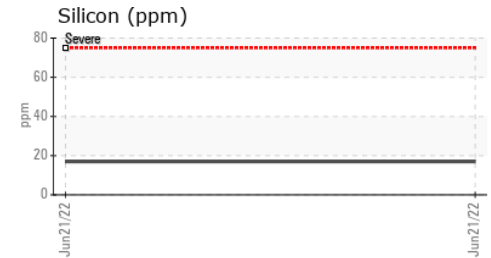
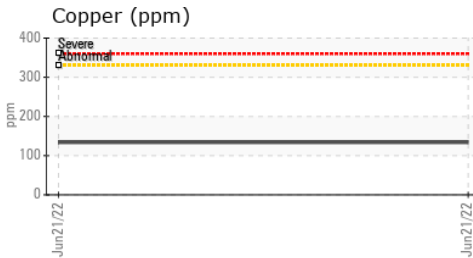
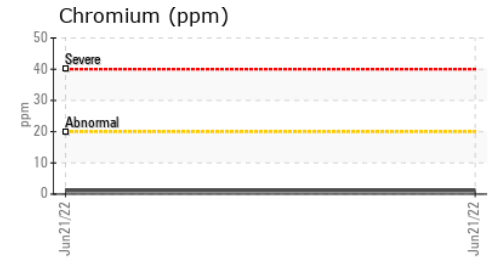
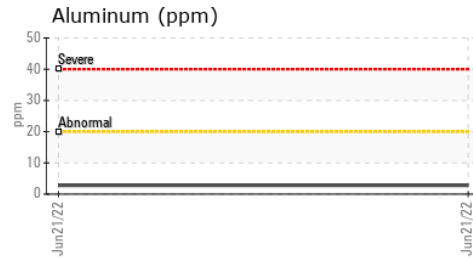
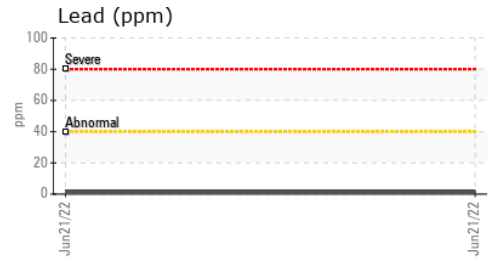
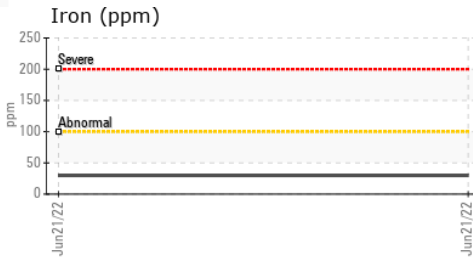
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.9	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0028013 **Received** : 27 Jun 2022  
**Lab Number** : 05577342 **Diagnosed** : 30 Jun 2022  
**Unique Number** : 10026759 **Diagnostician** : Don Baldrige  
**Test Package** : MOBCE ( Additional Tests: FuelDilution, PercentFuel, TBN )

**LAROCHE TREE SERVICE**  
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 BELLAIRE, OH  
 US 43906  
 Contact: COTY BURGHY  
 coty.burghy@larochetree.com

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)

T:  
F: