



# PROBLEM SUMMARY

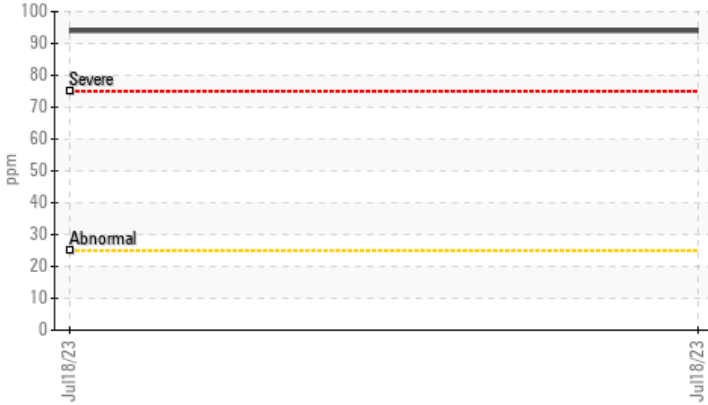
Sample Rating Trend



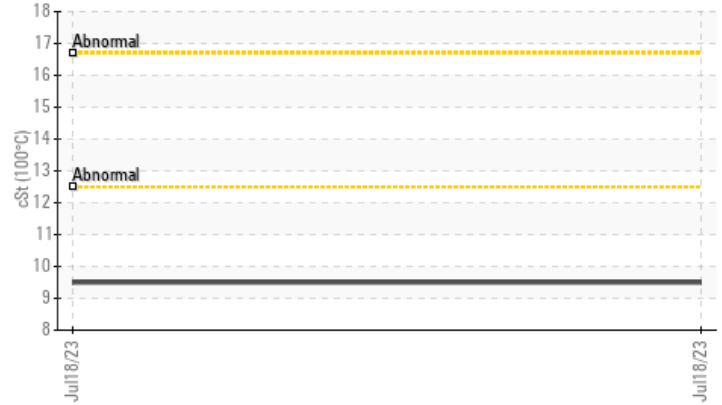
Area  
**ARIZONA**  
 Machine Id  
**2323**  
 Component  
**Diesel Engine**  
 Fluid  
**NAPA 15W40 (--- QTS)**

## COMPONENT CONDITION SUMMARY

### ▲ Silicon (ppm)



### ▲ Viscosity @ 100°C



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL		---	---
Silicon	ppm	ASTM D5185m >25	▲ 94	---
Visc @ 100°C	cSt	ASTM D445	▲ 9.5	---

Customer Id: SEAOKL  
 Sample No.: WC0820344  
 Lab Number: 05904792  
 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

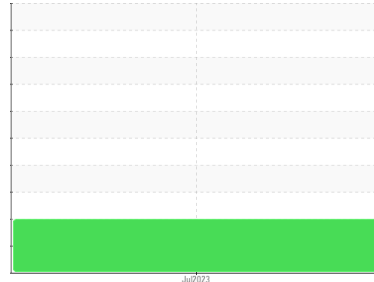
*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area  
**ARIZONA**  
 Machine Id  
**2323**  
 Component  
**Diesel Engine**  
 Fluid  
**NAPA 15W40 (--- QTS)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

### ▲ 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>WC0820344</b>	---	---
Sample Date	Client Info		<b>18 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>65</b>	---	---
Oil Age	hrs	Client Info	<b>65</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</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>14</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>21</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>2</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	<b>432</b>	---	---
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>118</b>	---	---
Manganese	ppm	ASTM D5185m	<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>728</b>	---	---
Calcium	ppm	ASTM D5185m	<b>1491</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>710</b>	---	---
Zinc	ppm	ASTM D5185m	<b>840</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>2943</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>▲ 94</b>	---	---
Sodium	ppm	ASTM D5185m	<b>5</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	---	---
Fuel	%	ASTM D3524 >5	<b>0.5</b>	---	---

## INFRA-RED

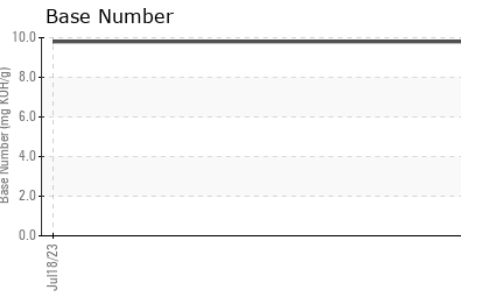
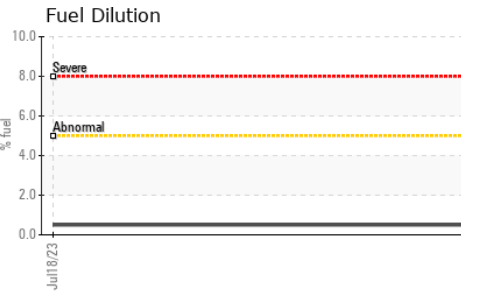
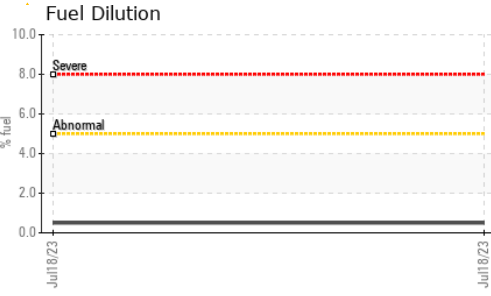
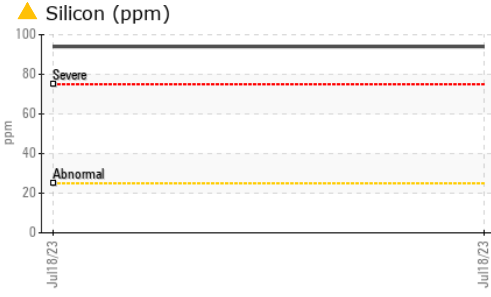
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.1</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.6</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>9.8</b>	---	---



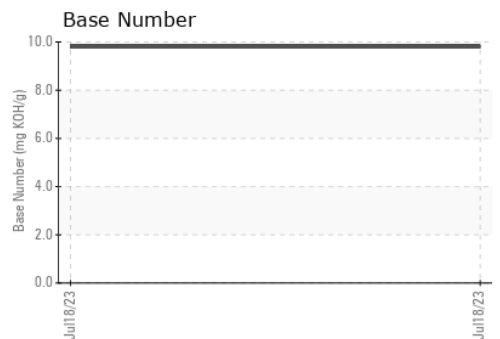
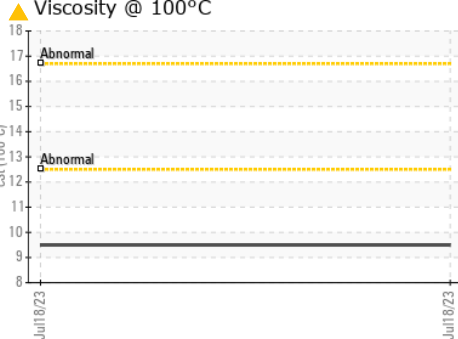
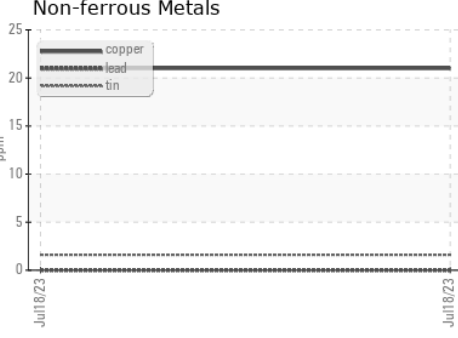
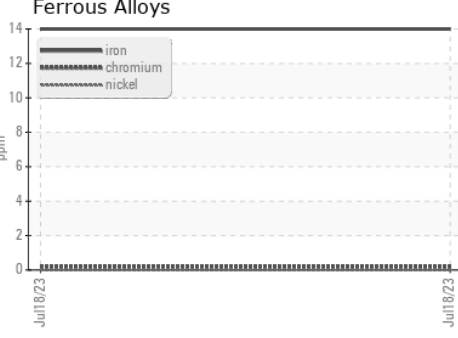
# OIL ANALYSIS REPORT



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	▲ 9.5	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0820344      **Received** : 21 Jul 2023  
**Lab Number** : 05904792      **Diagnosed** : 25 Jul 2023  
**Unique Number** : 10566148      **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**LIBERTY DISPOSAL**  
 6401 S EASTERN AVE  
 OKLAHOMA CITY, OK  
 US 73149  
 Contact: CATHY ROSA  
 c.rosa@ldi89.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)