

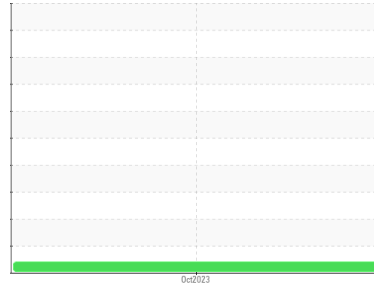


# PROBLEM SUMMARY



Area  
**COLORADO/443/SKIDSTEER**  
 Machine Id  
**53.183L [COLORADO^443^SKIDSTEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

Sample Rating Trend



VISCOSITY



## COMPONENT CONDITION SUMMARY

### ▲ 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				<b>ATTENTION</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.0	---	---

Customer Id: SHEWIC  
 Sample No.: WC0862637  
 Lab Number: 05994194  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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



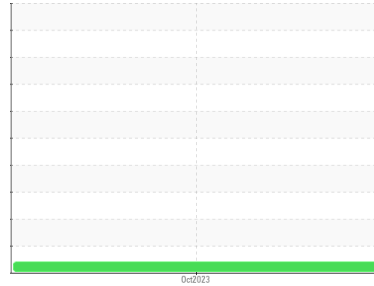
# OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Area  
**COLORADO/443/SKIDSTEER**  
 Machine Id  
**53.183L [COLORADO^443^SKIDSTEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

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

### Wear

Metal levels are typical for a new component breaking in.

### 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>WC0862637</b>	---	---
Sample Date	Client Info	<b>23 Oct 2023</b>	---	---
Machine Age	hrs	Client Info	<b>4</b>	---
Oil Age	hrs	Client Info	<b>4</b>	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ATTENTION</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>3</b>	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185m >2	<b>0</b>	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	---
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	---
Copper	ppm	ASTM D5185m >330	<b>8</b>	---
Tin	ppm	ASTM D5185m >15	<b>0</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>59</b>	---
Barium	ppm	ASTM D5185m 10	<b>2</b>	---
Molybdenum	ppm	ASTM D5185m 100	<b>32</b>	---
Manganese	ppm	ASTM D5185m	<b>2</b>	---
Magnesium	ppm	ASTM D5185m 450	<b>452</b>	---
Calcium	ppm	ASTM D5185m 3000	<b>1793</b>	---
Phosphorus	ppm	ASTM D5185m 1150	<b>892</b>	---
Zinc	ppm	ASTM D5185m 1350	<b>1078</b>	---
Sulfur	ppm	ASTM D5185m 4250	<b>3746</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>15</b>	---
Sodium	ppm	ASTM D5185m >158	<b>5</b>	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---
Fuel	%	ASTM D3524 >5	<b>0.2</b>	---

## INFRA-RED

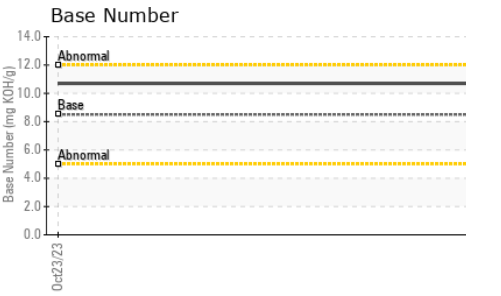
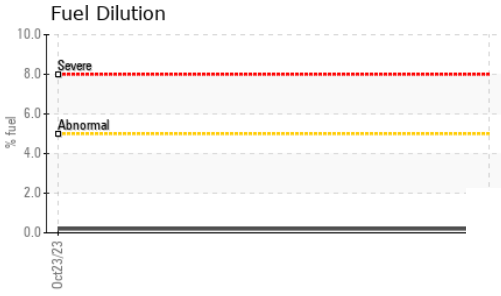
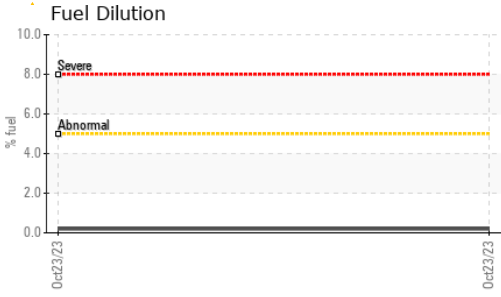
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0</b>	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>4.5</b>	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.1</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.0</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>10.7</b>	---



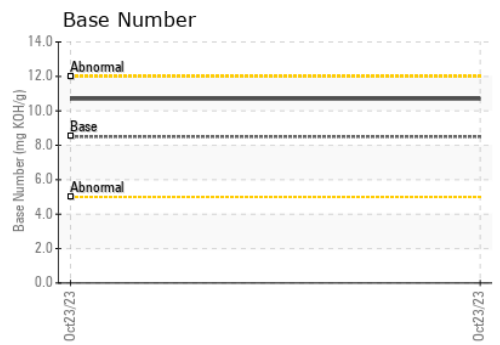
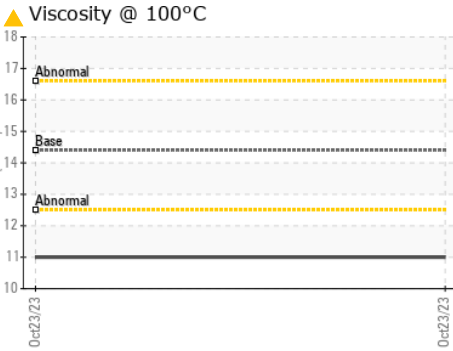
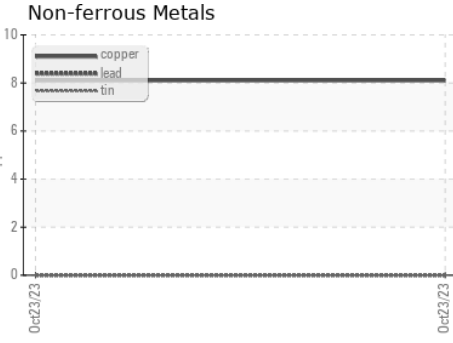
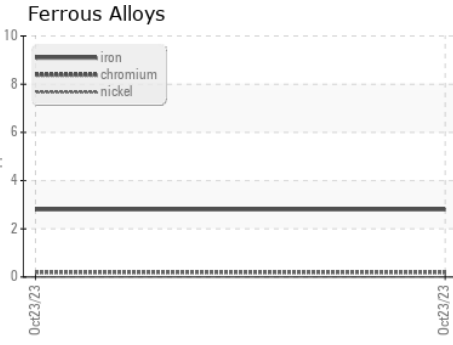
# OIL ANALYSIS REPORT



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	▲ 11.0	---	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0862637 **Received** : 31 Oct 2023  
**Lab Number** : 05994194 **Diagnosed** : 03 Nov 2023  
**Unique Number** : 10722554 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: BILL ORCUTT  
 william.orcutt@wildcat.net

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)