

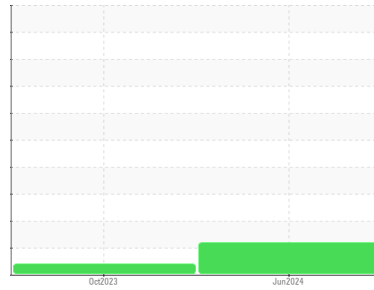


# OIL ANALYSIS REPORT



Area  
**COLORADO/443/SKIDSTEER**  
 Machine Id  
**53.182L [COLORADO^443^SKIDSTEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## Sample Rating Trend



FUEL



### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

Light fuel dilution occurring.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0928711</b>	WC0862632	---
Sample Date	Client Info		<b>04 Jun 2024</b>	23 Oct 2023	---
Machine Age	hrs	Client Info	<b>244</b>	4	---
Oil Age	hrs	Client Info	<b>244</b>	4	---
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	---
Sample Status			<b>ABNORMAL</b>	ATTENTION	---

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>15</b>	4	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	2	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>14</b>	11	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>53</b>	56	---
Barium	ppm	ASTM D5185m 10	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m 100	<b>35</b>	29	---
Manganese	ppm	ASTM D5185m	<b>2</b>	2	---
Magnesium	ppm	ASTM D5185m 450	<b>428</b>	450	---
Calcium	ppm	ASTM D5185m 3000	<b>1804</b>	1799	---
Phosphorus	ppm	ASTM D5185m 1150	<b>798</b>	881	---
Zinc	ppm	ASTM D5185m 1350	<b>973</b>	1065	---
Sulfur	ppm	ASTM D5185m 4250	<b>3283</b>	3898	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>14</b>	16	---
Sodium	ppm	ASTM D5185m >158	<b>3</b>	5	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	---
Fuel	%	ASTM D3524 >5	<b>▲ 4.0</b>	0.2	---

### INFRA-RED

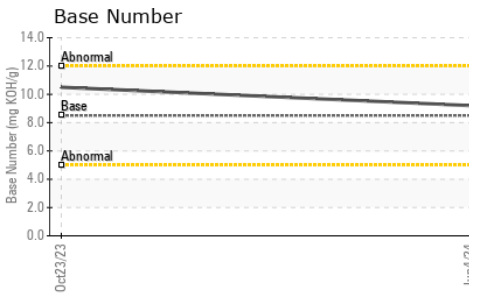
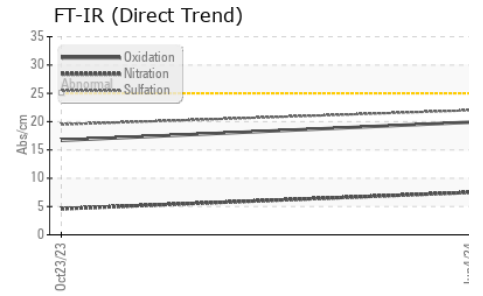
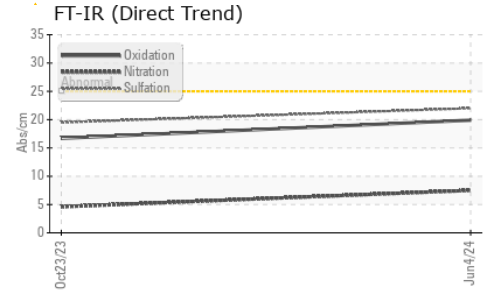
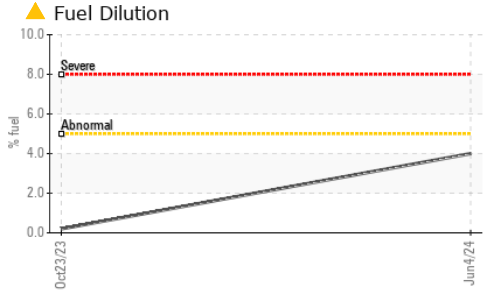
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.5</b>	4.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.0</b>	19.5	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.9</b>	16.7	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>9.2</b>	10.5	---



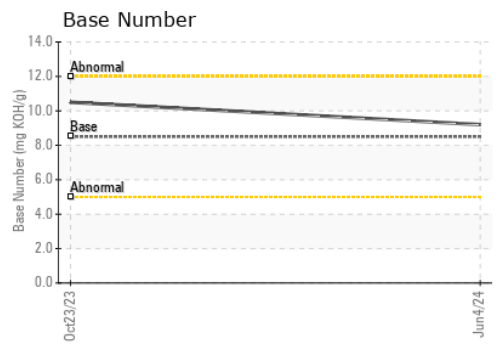
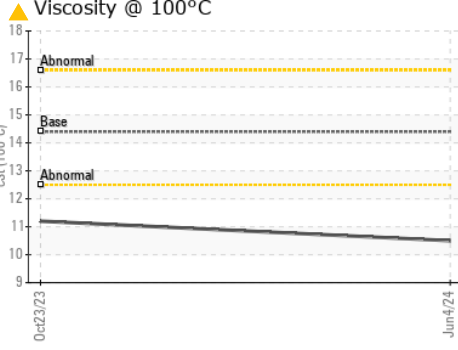
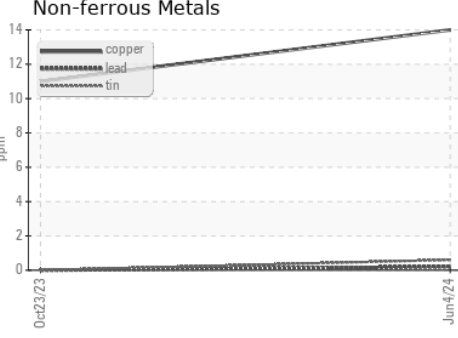
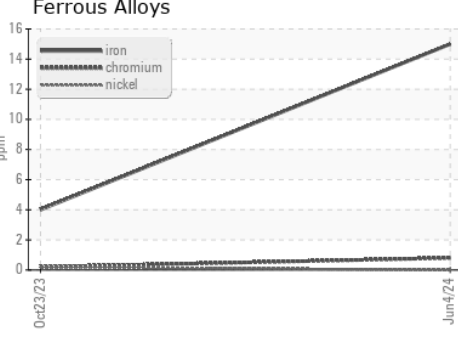
# OIL ANALYSIS REPORT



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	▲ 10.5	● 11.2

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0928711 **Received** : 12 Jun 2024  
**Lab Number** : 06207640 **Tested** : 19 Jun 2024  
**Unique Number** : 11075101 **Diagnosed** : 19 Jun 2024 - Wes Davis  
**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)