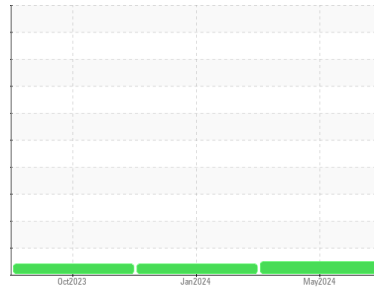




# OIL ANALYSIS REPORT

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

Sample Rating Trend



**NORMAL**



## 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

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0928721</b>	WC0884083	WC0862637
Sample Date	Client Info		<b>23 May 2024</b>	31 Jan 2024	23 Oct 2023
Machine Age	hrs	Client Info	<b>548</b>	265	4
Oil Age	hrs	Client Info	<b>0</b>	0	4
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status			<b>NORMAL</b>	ATTENTION	ATTENTION

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	0.2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>17</b>	13	3
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	4	2
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>5</b>	13	8
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>61</b>	50	59
Barium	ppm	ASTM D5185m 10	<b>0</b>	1	2
Molybdenum	ppm	ASTM D5185m 100	<b>48</b>	38	32
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	3	2
Magnesium	ppm	ASTM D5185m 450	<b>571</b>	471	452
Calcium	ppm	ASTM D5185m 3000	<b>1977</b>	1908	1793
Phosphorus	ppm	ASTM D5185m 1150	<b>839</b>	838	892
Zinc	ppm	ASTM D5185m 1350	<b>1064</b>	1056	1078
Sulfur	ppm	ASTM D5185m 4250	<b>2707</b>	3177	3746

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	13	15
Sodium	ppm	ASTM D5185m >158	<b>3</b>	5	5
Potassium	ppm	ASTM D5185m >20	<b>2</b>	4	2

## INFRA-RED

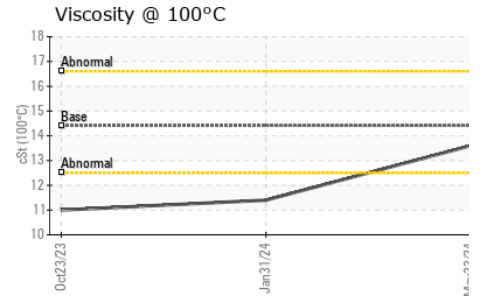
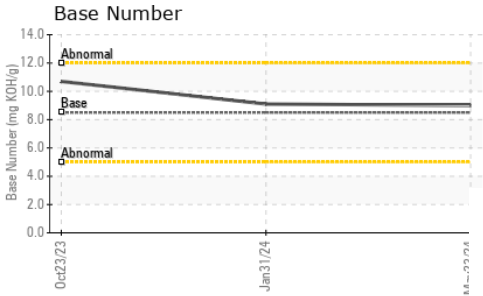
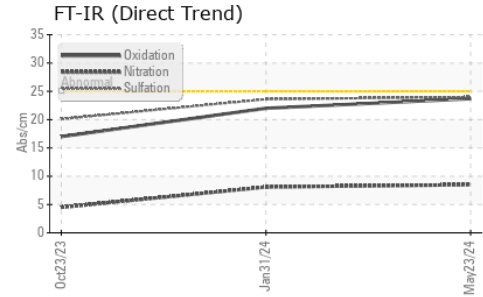
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.5</b>	8.1	4.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.0</b>	23.6	20.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.7</b>	22.0	17.0
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>9.0</b>	9.1	10.7



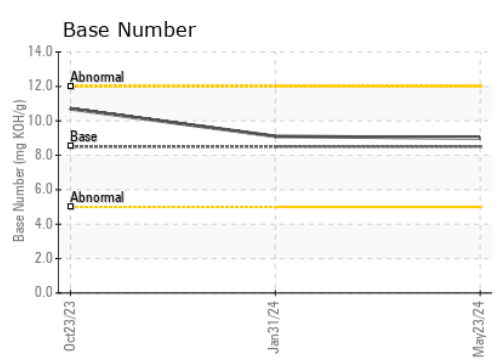
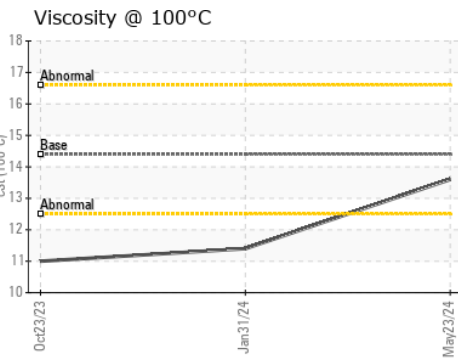
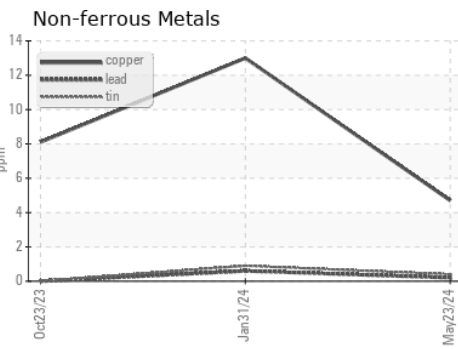
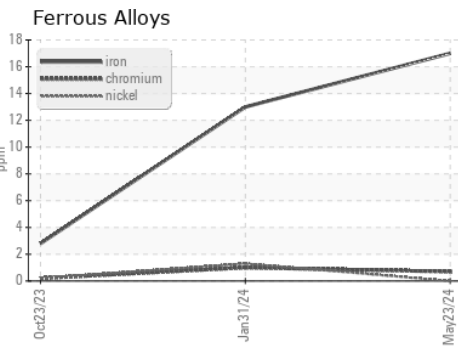
# OIL ANALYSIS REPORT



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	14.4	13.6	11.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0928721      **Received** : 12 Jun 2024  
**Lab Number** : **06207631**      **Tested** : 13 Jun 2024  
**Unique Number** : 11075092      **Diagnosed** : 13 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: 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)