



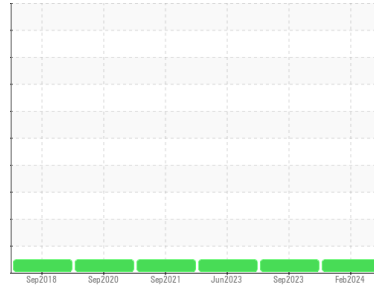
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**OKLAHOMA/109/DE - OTHER SERVICE**  
 Machine Id  
**87.36 [OKLAHOMA^109^DE - OTHER SERVICE]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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>WC0886886</b>	WC0819811	WC0808063
Sample Date	Client Info		<b>02 Feb 2024</b>	27 Sep 2023	02 Jun 2023
Machine Age	hrs	Client Info	<b>933</b>	2085	610
Oil Age	hrs	Client Info	<b>500</b>	610	231
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
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>27</b>	12	27
Chromium	ppm	ASTM D5185m >20	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>6</b>	2	8
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>29</b>	34	43
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>41</b>	40	32
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>519</b>	524	601
Calcium	ppm	ASTM D5185m	<b>1665</b>	1817	1748
Phosphorus	ppm	ASTM D5185m	<b>771</b>	772	798
Zinc	ppm	ASTM D5185m	<b>921</b>	969	962
Sulfur	ppm	ASTM D5185m	<b>2338</b>	2406	3123

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	5	8
Sodium	ppm	ASTM D5185m	<b>5</b>	4	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0

## INFRA-RED

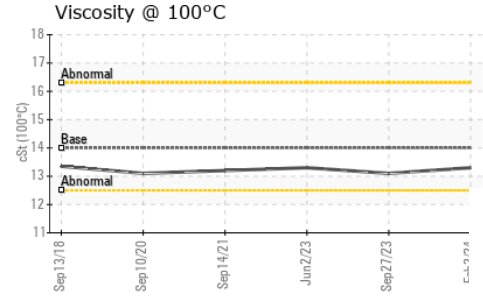
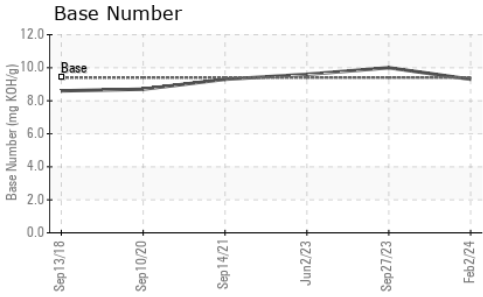
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.1</b>	8.6	10.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.9</b>	23.1	22.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.9</b>	21.9	21.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	<b>9.3</b>	10.0	9.6



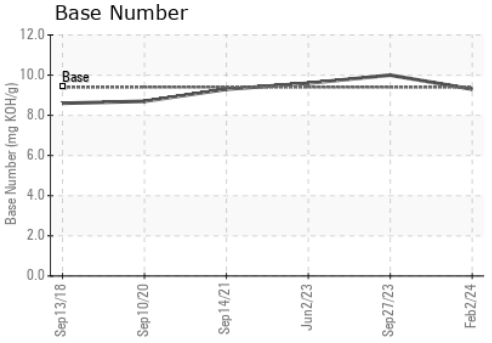
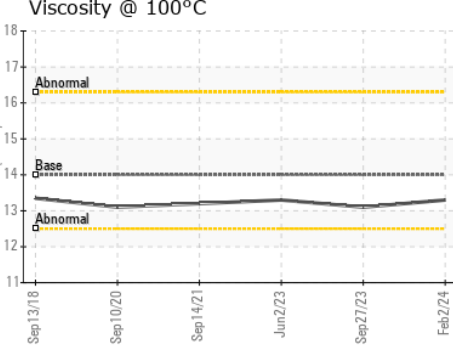
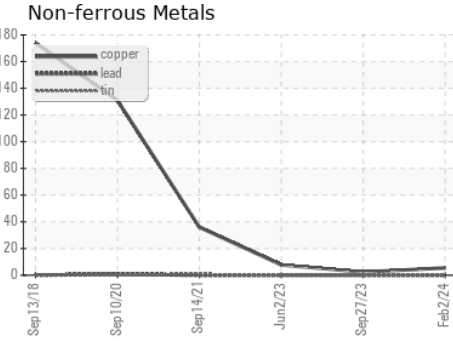
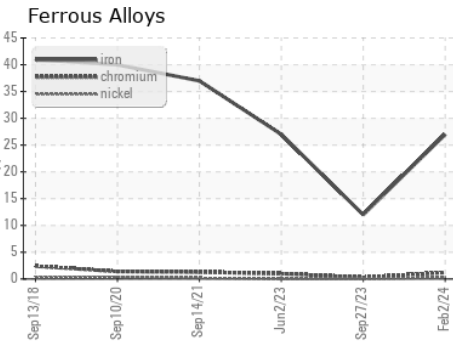
# OIL ANALYSIS REPORT



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	<b>13.3</b>	13.1	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0886886 **Received** : 23 Feb 2024  
**Lab Number** : **06098107** **Tested** : 25 Feb 2024  
**Unique Number** : 10896337 **Diagnosed** : 25 Feb 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**SHERWOOD CONSTRUCTION CO INC**  
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 WICHITA, KS  
 US 67213  
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 doug.king@sherwood.net  
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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)