

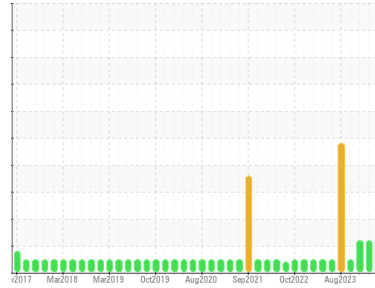


# OIL ANALYSIS REPORT



Area  
**OKLAHOMA/3/EG - LOADER**  
 Machine Id  
**50.01L [OKLAHOMA^3^EG - LOADER]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

Sample Rating Trend



GLYCOL



## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels remain high. Test for glycol is negative.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0873972</b>	WC0857502	WC0857227
Sample Date	Client Info		<b>24 Jan 2024</b>	27 Oct 2023	29 Sep 2023
Machine Age	hrs	Client Info	<b>15649</b>	15127	14938
Oil Age	hrs	Client Info	<b>15127</b>	14938	14500
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	ATTENTION	ABNORMAL

## 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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>75	<b>15</b>	8	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>54	<b>3</b>	1	10
Lead	ppm	ASTM D5185m	>20	<b>1</b>	0	1
Copper	ppm	ASTM D5185m	>240	<b>3</b>	2	9
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>13</b>	22	16
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m	0	<b>72</b>	52	65
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>491</b>	485	482
Calcium	ppm	ASTM D5185m		<b>1622</b>	1626	1583
Phosphorus	ppm	ASTM D5185m		<b>722</b>	687	730
Zinc	ppm	ASTM D5185m		<b>874</b>	872	905
Sulfur	ppm	ASTM D5185m		<b>2360</b>	2420	2747

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>35	<b>11</b>	8	8
Sodium	ppm	ASTM D5185m		<b>▲ 197</b>	▲ 87	▲ 135
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG

## INFRA-RED

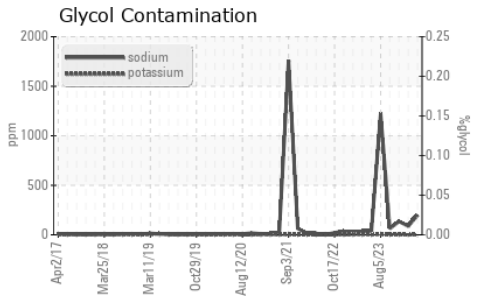
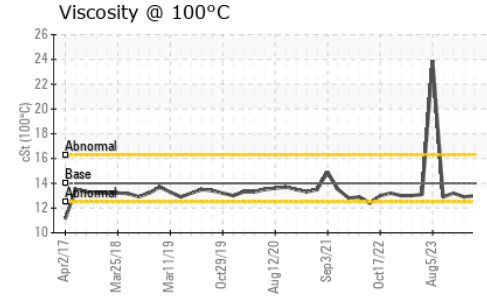
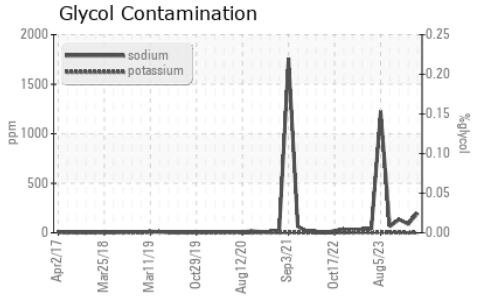
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	6.4	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.5</b>	22.1	22.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.6</b>	19.8	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>9.8</b>	10.6	9.3



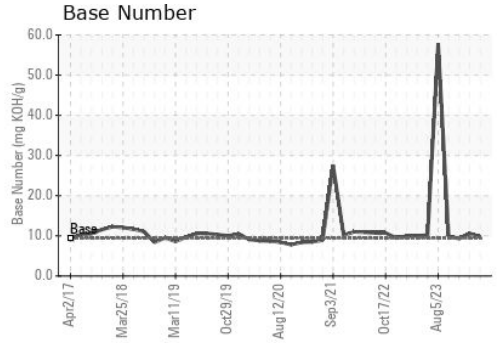
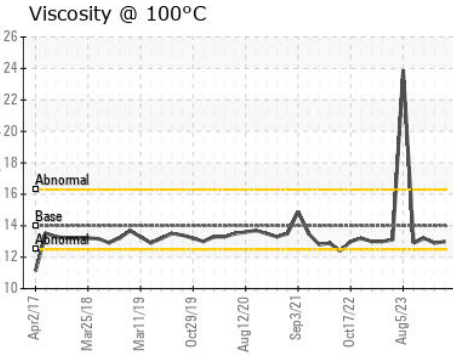
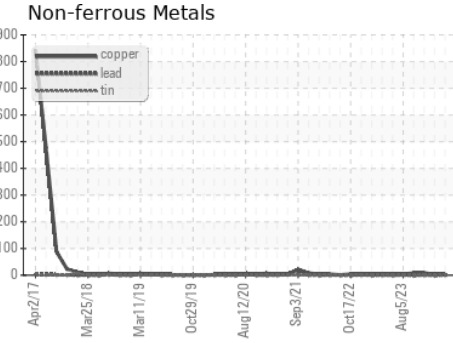
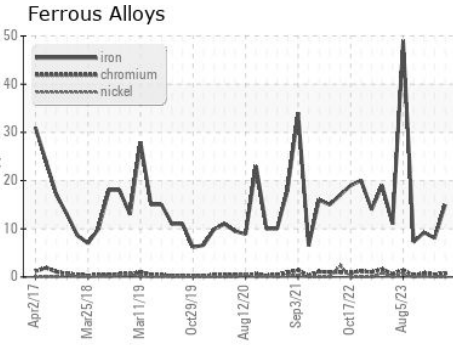
# OIL ANALYSIS REPORT



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>13.0</b>	12.9	13.2

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0873972      **Received** : 01 Feb 2024  
**Lab Number** : **06076645**      **Tested** : 02 Feb 2024  
**Unique Number** : 10858736      **Diagnosed** : 02 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: Glycol, TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
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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)