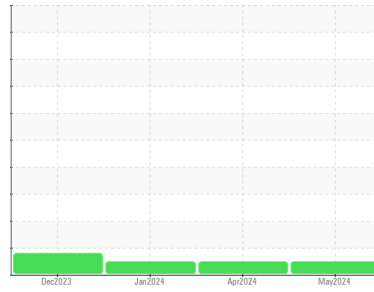




# OIL ANALYSIS REPORT

Area  
**OKLAHOMA/3/EG - TRUCK-OFF-HWY-HEAVY HAUL**  
 Machine Id  
**69.03 [OKLAHOMA^3^EG - TRUCK-OFF-HWY-HEAVY HAUL]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>WC0908874</b>	WC0914454	WC0874010
Sample Date	Client Info		<b>29 May 2024</b>	17 Apr 2024	31 Jan 2024
Machine Age	hrs	Client Info	<b>2269</b>	1943	1448
Oil Age	hrs	Client Info	<b>326</b>	1448	1050
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	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>7</b>	11	8
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
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>1</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>58</b>	49	49
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>38</b>	42	36
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>478</b>	537	467
Calcium	ppm	ASTM D5185m	<b>1782</b>	1847	1539
Phosphorus	ppm	ASTM D5185m	<b>765</b>	801	711
Zinc	ppm	ASTM D5185m	<b>934</b>	959	839
Sulfur	ppm	ASTM D5185m	<b>2942</b>	3209	2315

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	4	6
Sodium	ppm	ASTM D5185m >118	<b>2</b>	3	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.2</b>	6.6	6.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.6</b>	21.4	21.5

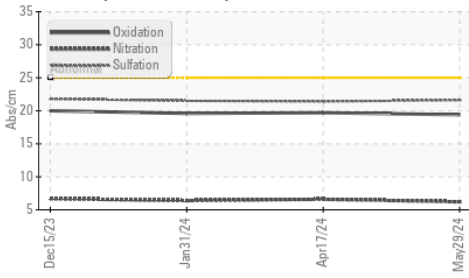
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.4</b>	19.7	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	<b>10.0</b>	9.4	10.1

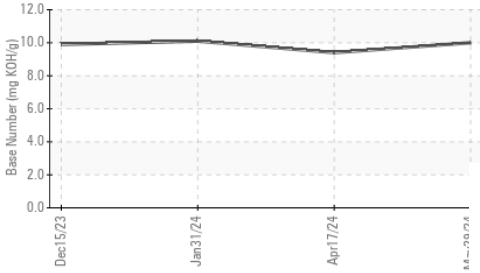


# OIL ANALYSIS REPORT

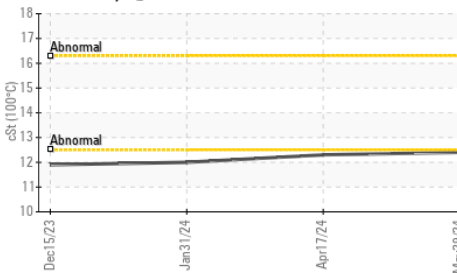
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

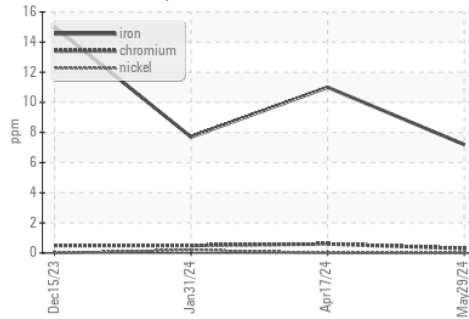


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

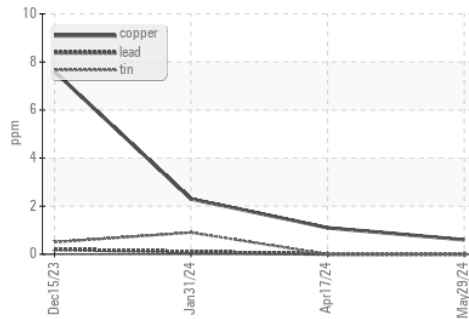
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.4	12.3	12.0

## GRAPHS

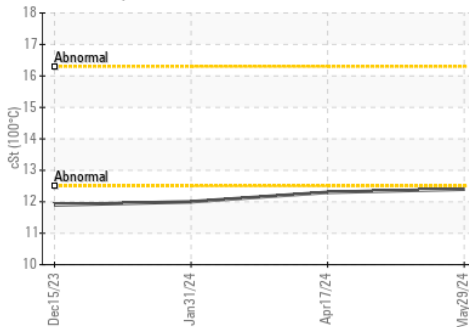
Ferrous Alloys



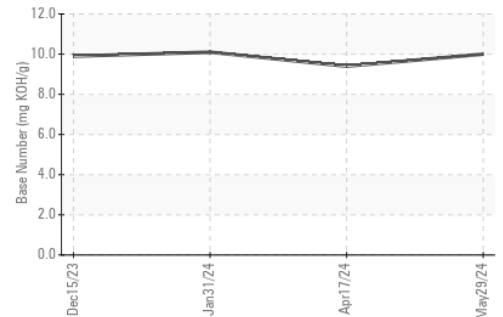
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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)

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0908874

Lab Number : 06199940

Unique Number : 11062063

Test Package : CONST ( Additional Tests : TBN )

Received : 05 Jun 2024

Tested : 06 Jun 2024

Diagnosed : 06 Jun 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC

3219 WEST MAY ST

WICHITA, KS

US 67213

Contact: SHAWN SOUTH

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