



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



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)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0914454</b>	WC0874010	WC0874028
Sample Date		Client Info		<b>17 Apr 2024</b>	31 Jan 2024	15 Dec 2023
Machine Age	hrs	Client Info		<b>1943</b>	1448	1050
Oil Age	hrs	Client Info		<b>1448</b>	1050	1050
Filter Age	hrs	Client Info		<b>1448</b>	1050	1050
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	8	15
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	8
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

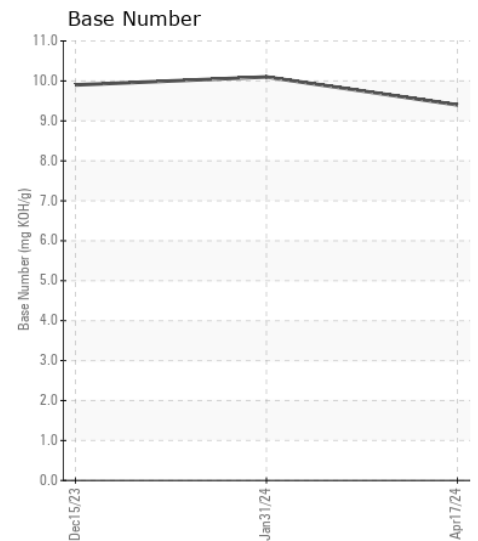
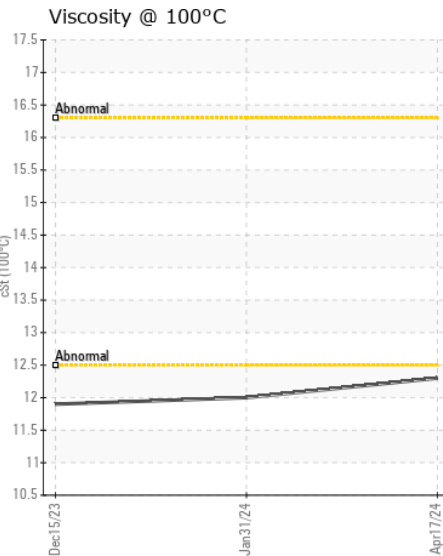
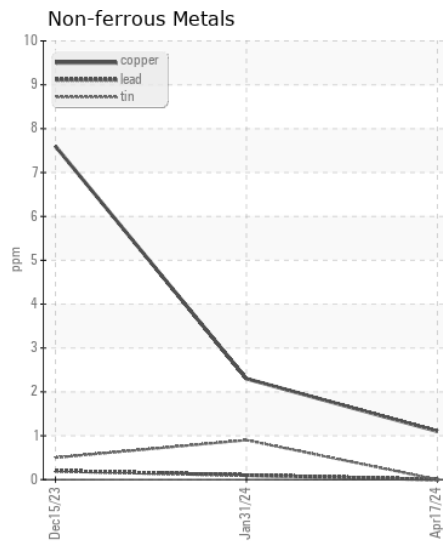
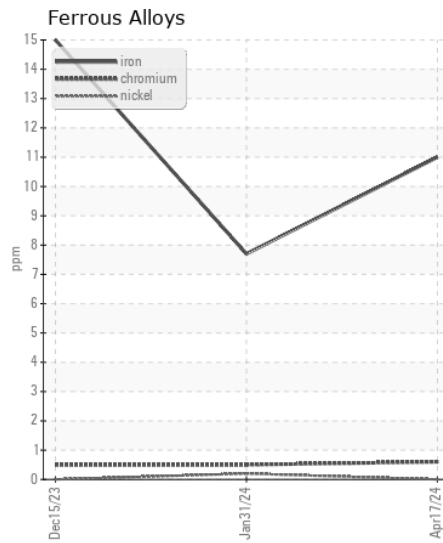
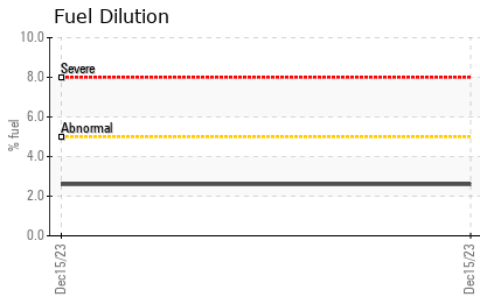
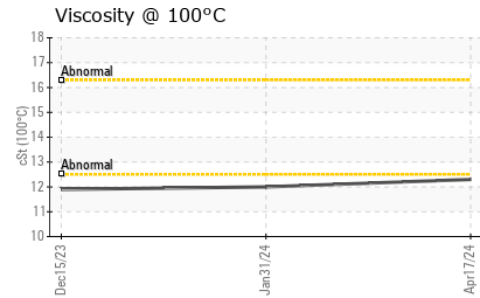
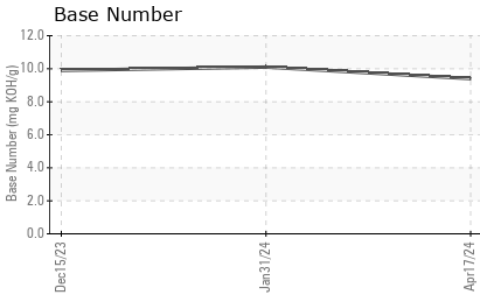
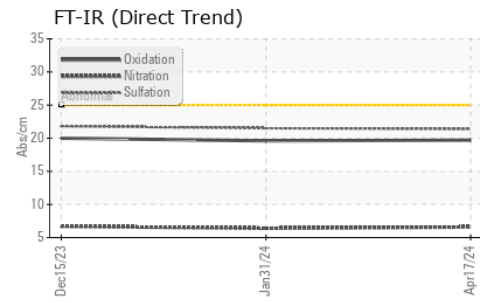
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	13
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	<1.0	▲ 2.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.6</b>	6.4	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.4</b>	21.5	21.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m	>118	<b>3</b>	4	0
Boron	ppm	ASTM D5185m		<b>49</b>	49	50
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>42</b>	36	41
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>537</b>	467	500
Calcium	ppm	ASTM D5185m		<b>1847</b>	1539	1648
Phosphorus	ppm	ASTM D5185m		<b>801</b>	711	731
Zinc	ppm	ASTM D5185m		<b>959</b>	839	910
Sulfur	ppm	ASTM D5185m		<b>3209</b>	2315	2708
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.7</b>	19.6	20.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.4</b>	10.1	9.9
Visc @ 100°C	cSt	ASTM D445		<b>12.3</b>	12.0	11.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0914454 **Received** : 25 Apr 2024  
**Lab Number** : 06160087 **Tested** : 26 Apr 2024  
**Unique Number** : 10995510 **Diagnosed** : 26 Apr 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: SHAWN SOUTH  
 shawn.south@sherwood.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)

T: x:

F: x: