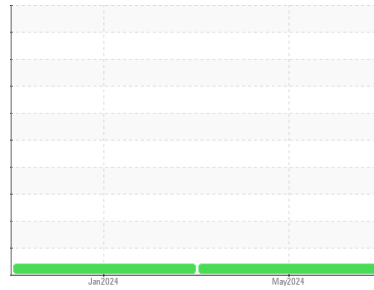




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area

(242557) KANSAS/88/DR - TRUCK-ON-HWY-HEAVY DUTY

Machine Id

09.19 [KANSAS^88^DR - TRUCK-ON-HWY-HEAVY DUTY]

Component

Diesel Engine

Fluid

DISEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0901143	WC0821563	---
Sample Date	Client Info		30 May 2024	10 Jan 2024	---
Machine Age	hrs	Client Info	26293	229	---
Oil Age	hrs	Client Info	26293	229	---
Oil Changed	Client Info		Changed	Not Changd	---
Sample Status			ATTENTION	ATTENTION	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	0.7	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	40	8	---
Chromium	ppm	ASTM D5185m >20	2	<1	---
Nickel	ppm	ASTM D5185m >2	<1	0	---
Titanium	ppm	ASTM D5185m >2	<1	0	---
Silver	ppm	ASTM D5185m >2	<1	0	---
Aluminum	ppm	ASTM D5185m >20	12	2	---
Lead	ppm	ASTM D5185m >40	2	<1	---
Copper	ppm	ASTM D5185m >330	24	6	---
Tin	ppm	ASTM D5185m >15	2	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	34	85	---
Barium	ppm	ASTM D5185m 10	4	2	---
Molybdenum	ppm	ASTM D5185m 100	11	11	---
Manganese	ppm	ASTM D5185m	5	4	---
Magnesium	ppm	ASTM D5185m 450	699	762	---
Calcium	ppm	ASTM D5185m 3000	1289	1315	---
Phosphorus	ppm	ASTM D5185m 1150	733	646	---
Zinc	ppm	ASTM D5185m 1350	848	782	---
Sulfur	ppm	ASTM D5185m 4250	3034	2921	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	37	27	---
Sodium	ppm	ASTM D5185m >158	4	5	---
Potassium	ppm	ASTM D5185m >20	39	10	---

INFRA-RED

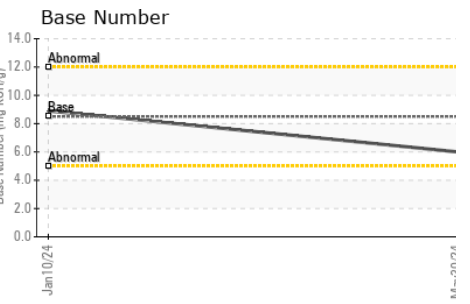
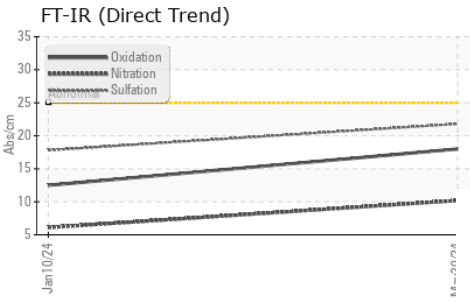
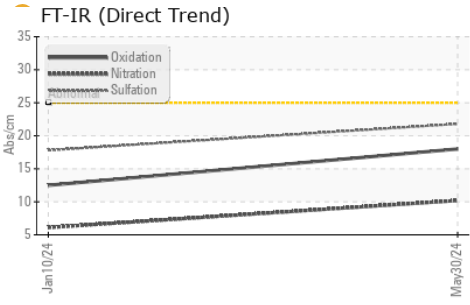
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	0.4	0	---
Nitration	Abs/cm	*ASTM D7624 >20	10.2	6.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.8	17.8	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	12.5	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	6.0	8.9	---



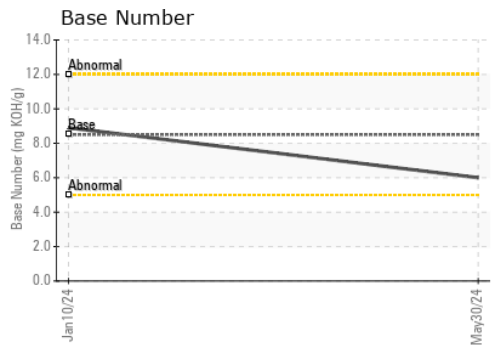
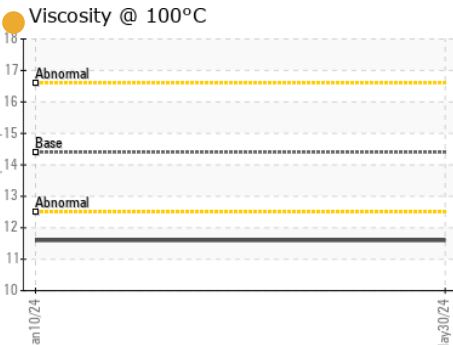
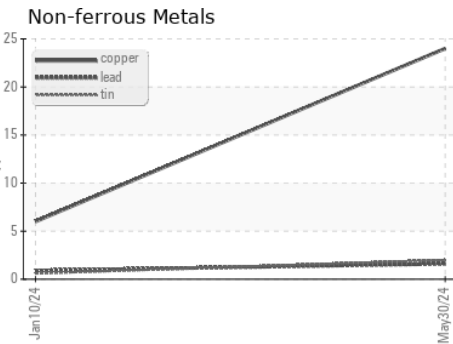
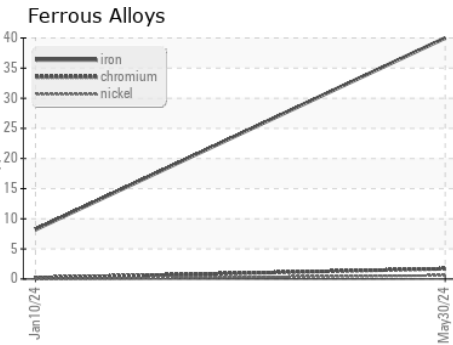
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.6	● 11.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0901143 **Received** : 10 Jun 2024
Lab Number : 06204384 **Tested** : 11 Jun 2024
Unique Number : 11071845 **Diagnosed** : 12 Jun 2024 - Sean Felton
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)