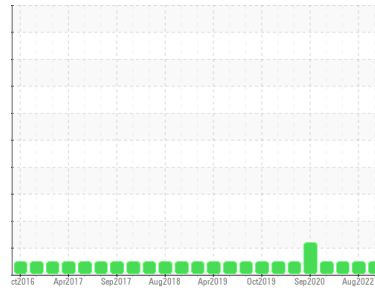




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
OKLAHOMA/105/TR - TRUCK-ON-HWY-HEAVY DUTY
 Machine Id
08.98 [OKLAHOMA^105^TR - TRUCK-ON-HWY-HEAVY DUTY]
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (44 QTS)

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	WC0726228	WC05626614	WC0541439	
Sample Date	Client Info	08 Aug 2023	24 Aug 2022	23 Feb 2021	
Machine Age	hrs	Client Info	11157	10646	9836
Oil Age	hrs	Client Info	500	0	252
Oil Changed	Client Info	Changed	N/A	Changed	
Sample Status		NORMAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >110	15	23	11
Chromium	ppm	ASTM D5185m >4	0	1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >2	<1	<1	<1
Aluminum	ppm	ASTM D5185m >25	3	9	7
Lead	ppm	ASTM D5185m >45	<1	1	<1
Copper	ppm	ASTM D5185m >85	1	2	<1
Tin	ppm	ASTM D5185m >4	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	47	42	83
Barium	ppm	ASTM D5185m	2	0	0
Molybdenum	ppm	ASTM D5185m	43	26	3
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	527	600	725
Calcium	ppm	ASTM D5185m	1833	1617	1334
Phosphorus	ppm	ASTM D5185m	802	791	744
Zinc	ppm	ASTM D5185m	970	973	837
Sulfur	ppm	ASTM D5185m	2788	2780	2431

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >30	6	6	6
Sodium	ppm	ASTM D5185m >118	0	2	2
Potassium	ppm	ASTM D5185m >20	8	21	18

INFRA-RED

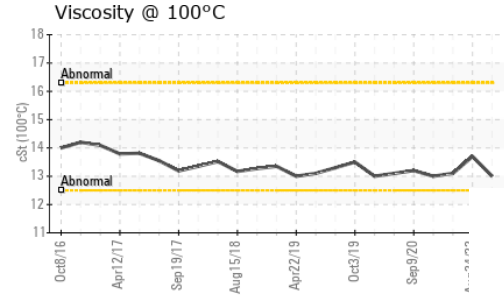
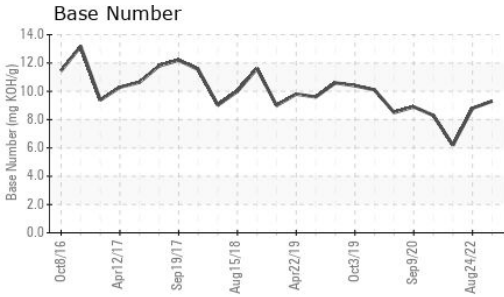
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.4	0.6	0.3
Nitration	Abs/cm	*ASTM D7624 >20	8.9	11.7	8.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.8	24.2	18.8

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.8	20.9	12.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.3	8.8	6.2



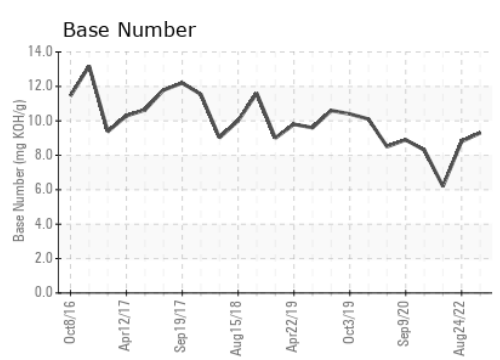
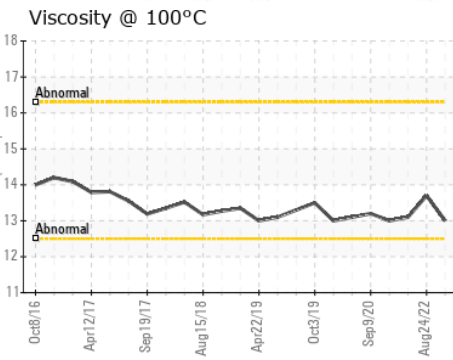
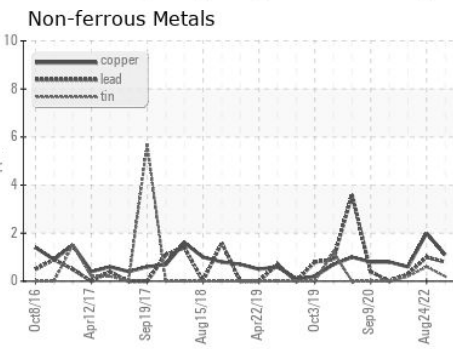
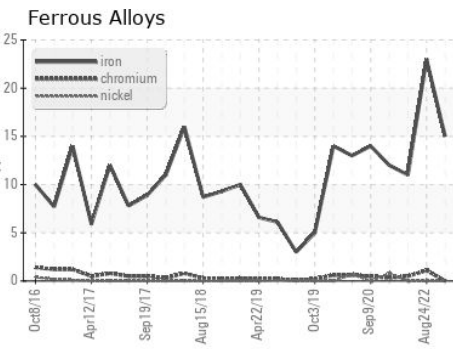
OIL ANALYSIS REPORT



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	13.0	13.7	13.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0726228 **Received** : 14 Aug 2023
Lab Number : **05923185** **Diagnosed** : 14 Aug 2023
Unique Number : 10603132 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

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

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)