

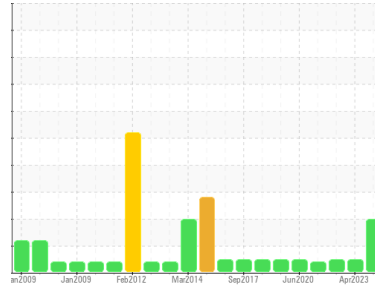


PROBLEM SUMMARY



Area
OKLAHOMA/102/EG - TRUCK-OFF-HWY-HEAVY HAUL
 Machine Id
69.78L [OKLAHOMA^102^EG - TRUCK-OFF-HWY-HEAVY HAUL]
 Component
Hydraulic System
 Fluid
MOBIL 10W (--- GAL)

Sample Rating Trend

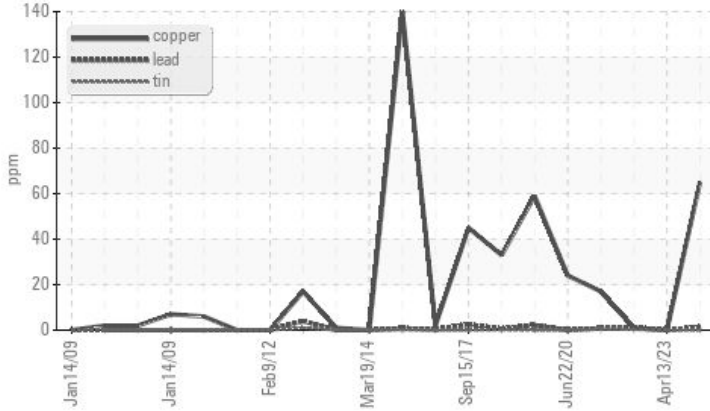


VISUAL METAL



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Copper	ppm	ASTM D5185m	>75	▲ 65	0	<1
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	VLITE

Customer Id: SHEWIC
 Sample No.: WC0857252
 Lab Number: 06000440
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
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jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

HISTORICAL DIAGNOSIS

13 Apr 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



17 Jun 2021 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



03 Jun 2021 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

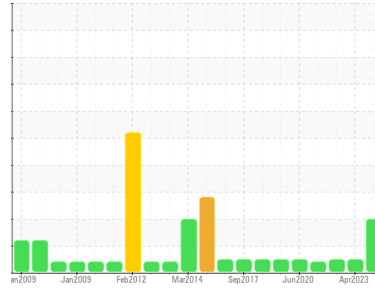
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
OKLAHOMA/102/EG - TRUCK-OFF-HWY-HEAVY HAUL
 Machine Id
69.78L [OKLAHOMA^102^EG - TRUCK-OFF-HWY-HEAVY HAUL]
 Component
Hydraulic System
 Fluid
MOBIL 10W (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

Wear

The copper level is abnormal. Moderate concentration of visible metal present. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0857252	WC0746761	WC0590140
Sample Date	Client Info		27 Oct 2023	13 Apr 2023	17 Jun 2021
Machine Age	hrs	Client Info	14900	14182	13323
Oil Age	hrs	Client Info	1300	614	100
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	1	2	3
Chromium	ppm	ASTM D5185m >10	0	0	<1
Nickel	ppm	ASTM D5185m >10	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	1	2	2
Lead	ppm	ASTM D5185m >10	1	0	1
Copper	ppm	ASTM D5185m >75	▲ 65	0	<1
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	40	35	41
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	18	2	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	252	21	17
Calcium	ppm	ASTM D5185m	2144	3140	3128
Phosphorus	ppm	ASTM D5185m	871	1039	1017
Zinc	ppm	ASTM D5185m	1030	1328	1223
Sulfur	ppm	ASTM D5185m	3760	5543	4982

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	6	8	6
Sodium	ppm	ASTM D5185m	3	2	3
Potassium	ppm	ASTM D5185m >20	<1	0	1

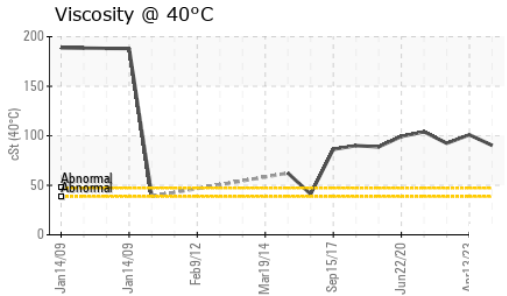
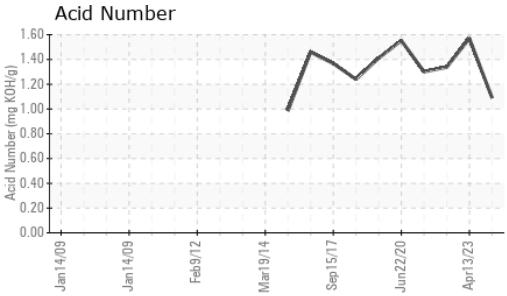
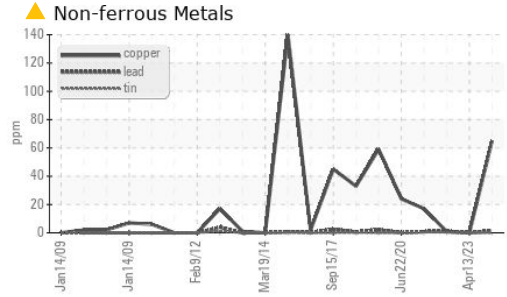
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	3395	3602
Particles >6µm	ASTM D7647	>2500	---	416	883
Particles >14µm	ASTM D7647	>640	---	16	47
Particles >21µm	ASTM D7647	>160	---	4	9
Particles >38µm	ASTM D7647	>40	---	0	0
Particles >71µm	ASTM D7647	>10	---	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	---	19/16/11	19/17/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.09	1.57	1.338

OIL ANALYSIS REPORT

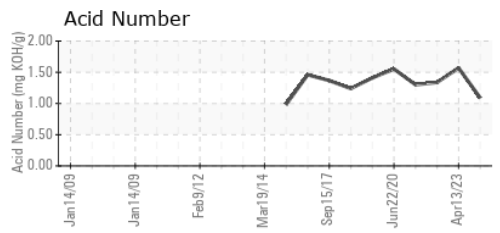
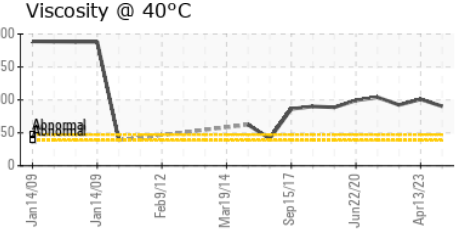
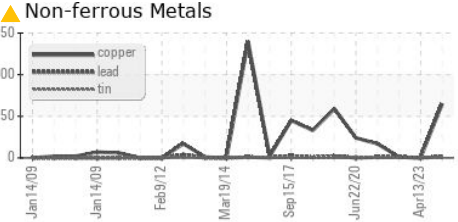
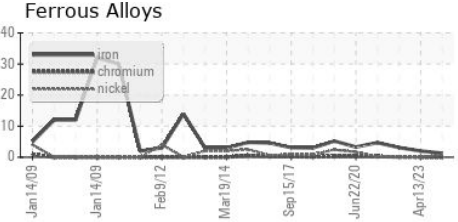


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	90.3	101	92.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857252
Lab Number : 06000440
Unique Number : 10728800
Test Package : CONST
Received : 07 Nov 2023
Diagnosed : 09 Nov 2023
Diagnostician : Jonathan Hester

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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)