

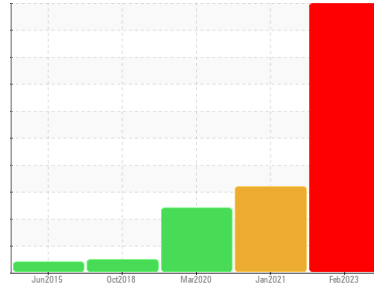


# PROBLEM SUMMARY

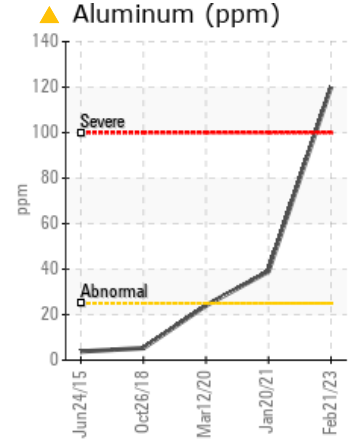
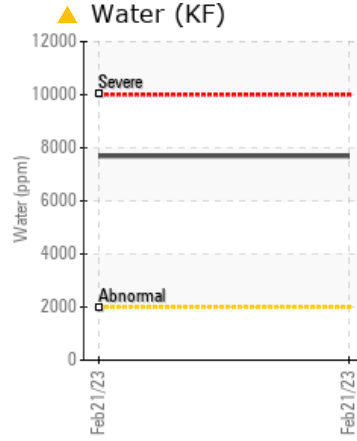
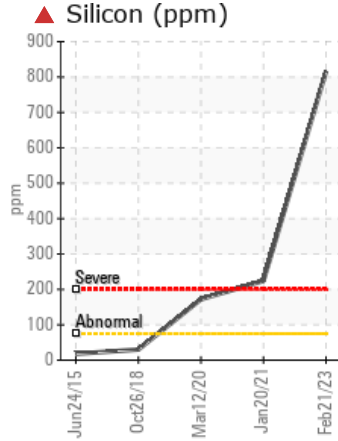
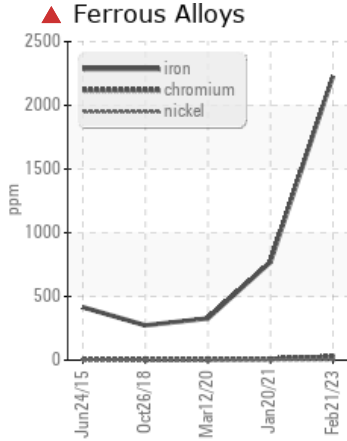


Area  
**KANSAS/44/EG - OTHER SERVICE**  
 Machine Id  
**41.33W [KANSAS^44^EG - OTHER SERVICE]**  
 Component  
**Right Final Drive**  
 Fluid  
**MOBIL MOBILUBE HD PLUS 75W90 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>500	▲ 2228	▲ 770	328
Chromium	ppm	ASTM D5185m	>10	▲ 27	10	4
Aluminum	ppm	ASTM D5185m	>25	▲ 120	● 39	● 24
Silicon	ppm	ASTM D5185m	>75	▲ 816	▲ 224	▲ 172
Water	%	ASTM D6304	>0.2	▲ 0.769	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 7690	---	---

Customer Id: SHEWIC  
 Sample No.: WC0741725  
 Lab Number: 05777927  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	SKIPPED	Mar 02 2023	?	We recommend an early resample to monitor this condition.
Check Dirt Access	SKIPPED	Mar 02 2023	?	We advise that you check all areas where dirt can enter the system.
Check Water Access	SKIPPED	Mar 02 2023	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

### 20 Jan 2021 Diag: Jonathan Hester

DIRT



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report



### 12 Mar 2020 Diag: Jonathan Hester

DIRT



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report



### 26 Oct 2018 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 component. The condition of the oil is acceptable for the time in service.

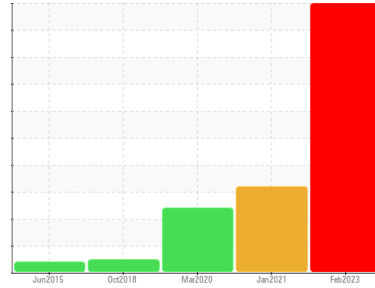
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area  
**KANSAS/44/EG - OTHER SERVICE**  
Machine Id  
**41.33W [KANSAS^44^EG - OTHER SERVICE]**  
Component  
**Right Final Drive**  
Fluid  
**MOBIL MOBILUBE HD PLUS 75W90 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### ▲ Wear

Chromium and iron ppm levels are severe. Aluminum ppm levels are abnormal. Gear wear is indicated.

### ▲ Contamination

There is a moderate concentration of water present in the oil. High concentration of dirt present in the oil.

### Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0741725</b>	WC0528039	WC0434391
Sample Date	Client Info		<b>21 Feb 2023</b>	20 Jan 2021	12 Mar 2020
Machine Age	hrs	Client Info	<b>4408</b>	3130	2870
Oil Age	hrs	Client Info	<b>1278</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>SEVERE</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>▲ 2228</b>	▲ 770	328
Chromium	ppm	ASTM D5185m >10	<b>▲ 27</b>	10	4
Nickel	ppm	ASTM D5185m	<b>2</b>	1	<1
Titanium	ppm	ASTM D5185m	<b>10</b>	2	1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>▲ 120</b>	● 39	● 24
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>3</b>	2	<1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>291</b>	273	236
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>2</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>19</b>	7	3
Magnesium	ppm	ASTM D5185m	<b>46</b>	13	12
Calcium	ppm	ASTM D5185m	<b>559</b>	203	610
Phosphorus	ppm	ASTM D5185m	<b>1553</b>	1370	1249
Zinc	ppm	ASTM D5185m	<b>24</b>	57	230
Sulfur	ppm	ASTM D5185m	<b>27075</b>	21673	17880

## CONTAMINANTS

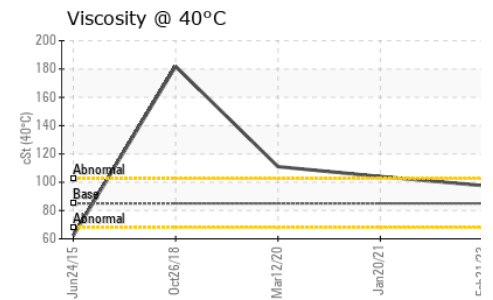
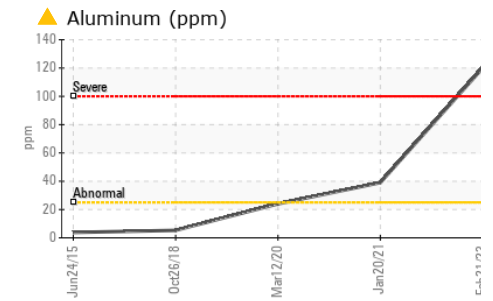
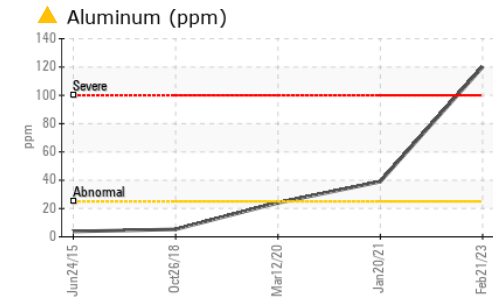
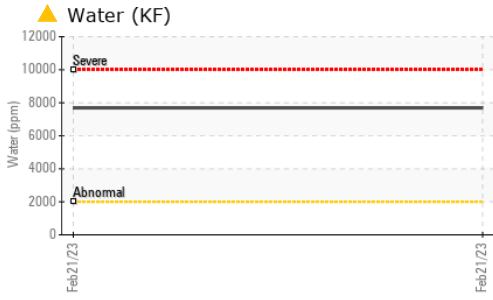
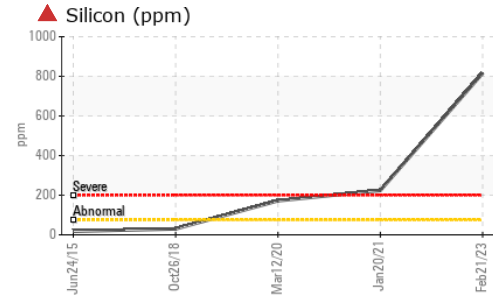
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>▲ 816</b>	▲ 224	▲ 172
Sodium	ppm	ASTM D5185m	<b>28</b>	8	4
Potassium	ppm	ASTM D5185m >20	<b>72</b>	15	9
Water	%	ASTM D6304 >0.2	<b>▲ 0.769</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 7690</b>	---	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
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>0.2%</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG



# OIL ANALYSIS REPORT

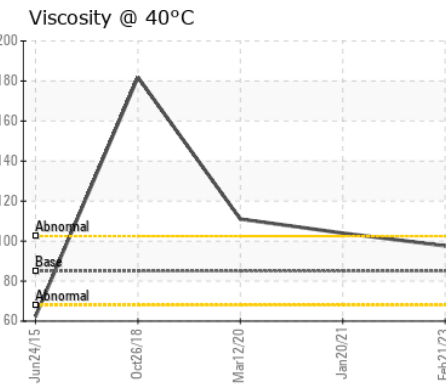
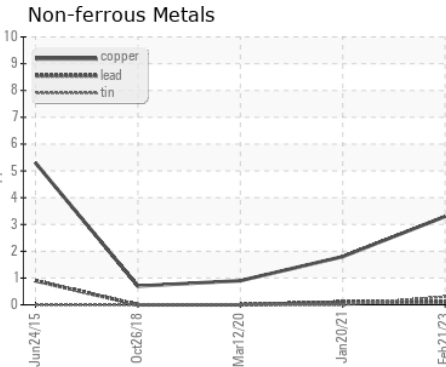
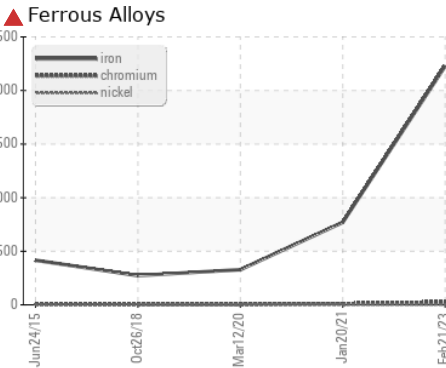


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	85	97.6	104	111

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------

Color	no image	no image	no image
Bottom	no image	no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0741725 **Received** : 27 Feb 2023  
**Lab Number** : 05777927 **Tested** : 28 Feb 2023  
**Unique Number** : 10357597 **Diagnosed** : 01 Mar 2023 - Angela Borella  
**Test Package** : CONST ( Additional Tests: KF )

**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:

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)