

### **PROBLEM SUMMARY**

# OKLAHOMA/102/EG - OTHER SERVICE 54.09L [OKLAHOMA^102^EG - OTHER SERVICE]

Main Transmission (Manual)

MOBIL MOBILUBE HD PLUS 85W140 (--- GAL)

### COMPONENT CONDITION SUMMARY







### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	ABNORMAL	ATTENTION	
Iron	ppm	ASTM D5185m	>200	<b>A</b> 365	<b>A</b> 249	118	
Silicon	ppm	ASTM D5185m	>125	<u> </u>	<b>A</b> 89	10	
Silt	scalar	*Visual	NONE	A MODER	NONE	NONE	

Customer Id: SHEWIC Sample No.: WC0873881 Lab Number: 06200671 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Sean Felton +1 919-379-4092 sfelton@wearcheckusa.com

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



INCOMPLEMENTED ACTION
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Action	Status	Date	Done By	Description
Inspect Wear Source			?	We advise that you inspect for the source(s) of wear.
Resample			?	We recommend an early resample to monitor this condition.
Check Dirt Access			?	We advise that you check all areas where dirt can enter the system.

### HISTORICAL DIAGNOSIS



### 14 Nov 2022 Diag: Don Baldridge

We advise that you check all areas where dirt can enter the system. The fluid change at the time of sampling has been noted. Resample at the next service interval to monitor.Moderate concentration of visible metal present. Gear wear is indicated. Elemental level of silicon (Si) above normal. The fluid viscosity is lower than normal. Confirm oil type.



view report



### 15 Jun 2021 Diag: Jonathan Hester

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the fluid. The fluid viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.



#### 13 Apr 2021 Diag: Don Baldridge



The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Moderate concentration of visible metal present. Gear wear is indicated. There is no indication of any contamination in the fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.







### **OIL ANALYSIS REPORT**

Sample Number

hrs

hrs

ppm

Sample Date

Machine Age

Oil Changed

Sample Status

CONTAMINATION

WEAR METALS

Oil Age

Water

Iron

### Area **OKLAHOMA/102/EG - OTHER SERVICE** 54.09L [OKLAHOMA^102^EG - OTHER SERVICE]

Main Transmission (Manual)

MOBIL MOBILUBE HD PLUS 85W140 (--- GAL)

### DIAGNOSIS

#### Recommendation

We advise that you check all areas where dirt can enter the system. The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

#### A Wear

Gear wear is indicated.

### Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a moderate amount of visible silt present in the sample.

### Fluid Condition

The fluid viscosity is lower than normal. Confirm oil type. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.



Chromium	ppm	ASTM D5185m	>5	4	3	1
Nickel	ppm	ASTM D5185m	>5	0	1	<1
Titanium	ppm	ASTM D5185m		1	1	<1
Silver	ppm	ASTM D5185m	>7	0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	6	1
Lead	ppm	ASTM D5185m	>45	0	<1	<1
Copper	ppm	ASTM D5185m	>225	10	5	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	ppm	ASTM D5185m				<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
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				and a second		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	limit/base	current 8	history1 12	history2
ADDITIVES Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	current 8 <1	12 0	52 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 <1	12 0 <1	52 0 <1
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 <1 <1 15	12 0 <1 11	52 0 <1 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 <1 15 5	nistory1 12 0 <1 11 5	52 0 <1 1 16
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 8 <1 <1 15 5 109	nistory1 12 0 <1 11 5 55	52 0 <1 1 16 3004
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           8           <1           <1           15           5           109           449	nistory1 12 0 <1 11 5 55 438	<ul> <li>52</li> <li>52</li> <li>0</li> <li>&lt;1</li> <li>16</li> <li>3004</li> <li>993</li> </ul>
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current           8           <1           15           5           109           449           15	history1 12 0 <1 11 5 55 438 5	history2 52 0 <1 1 16 3004 993 1188
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current           8           <1           15           5           109           449           15           19756	history1 12 0 <1 11 5 55 438 5 19810	Nistory2         52         0         <1         16         3004         993         1188         4529
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8           <1           <1           5           109           449           15           19756	history1 12 0 <1 11 5 55 438 5 19810	history2         52         0         <1         1         16         3004         993         1188         4529
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current         8         <1         15         5         109         449         15         19756         current	history1 12 0 <1 11 5 55 438 5 19810 history1	history2         52         0         <1         16         3004         993         1188         4529         history2

Silicon	ppm	ASTM D5185m	>125	<u> </u>	<b>A</b> 89	10
Sodium	ppm	ASTM D5185m		2	1	2
Potassium	ppm	ASTM D5185m	>20	2	0	0

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	A MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	A MODER	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	Supported By:	RUSEXRILEY



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## **OIL ANALYSIS REPORT**





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Certificate 12367 

Unique Number : 11062794 Diagnosed : 07 Jun 2024 - Sean Felton Test Package : CONST 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)

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Submitted By: RUSTY RILEY

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