



# OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**040-R0006**  
Component  
**Right Final Drive**  
Fluid  
**SCHAEFFER SCHAEFFER 293 MOLY 75W90 (2 QTS)**

## RECOMMENDATION

The oil 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0903846</b>	WC0868438	WC0698081
Sample Date		Client Info		<b>19 Apr 2024</b>	21 Dec 2023	20 Jul 2022
Machine Age	hrs	Client Info		<b>6945</b>	6459	2244
Oil Age	hrs	Client Info		<b>6631</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>SEVERE</b>	SEVERE	NORMAL

## WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	<b>▲ 3206</b>	▲ 2762	74
Chromium	ppm	ASTM D5185m	>10	<b>▲ 32</b>	▲ 22	2
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	1	0
Titanium	ppm	ASTM D5185m		<b>1</b>	1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>▲ 62</b>	▲ 43	1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>50	<b>11</b>	13	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

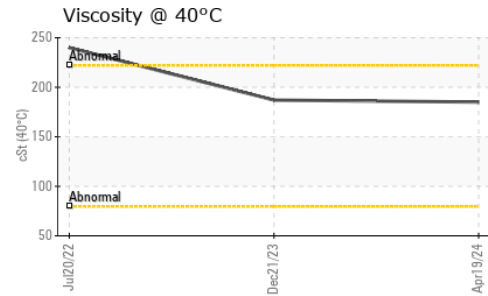
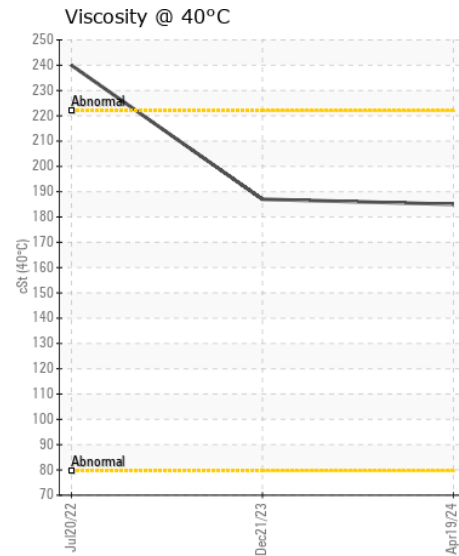
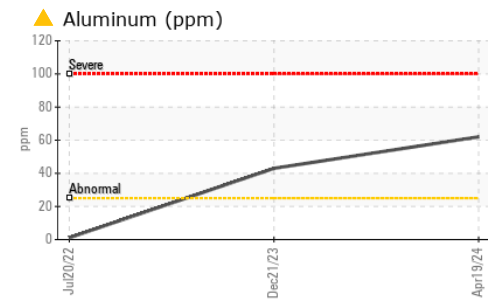
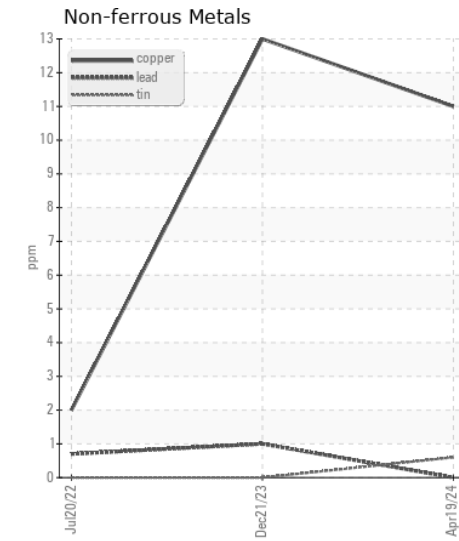
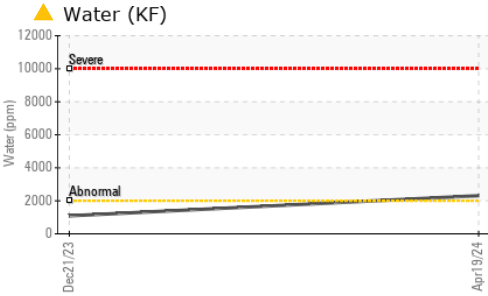
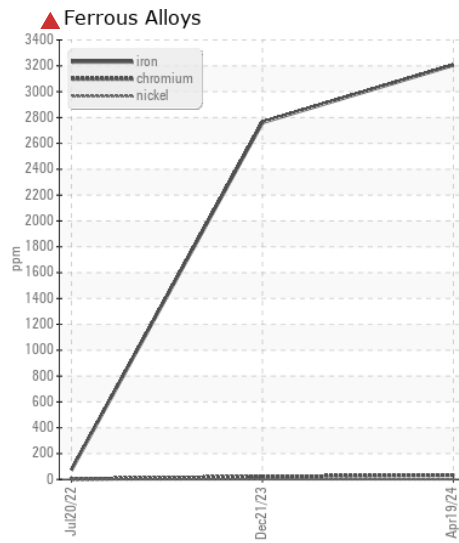
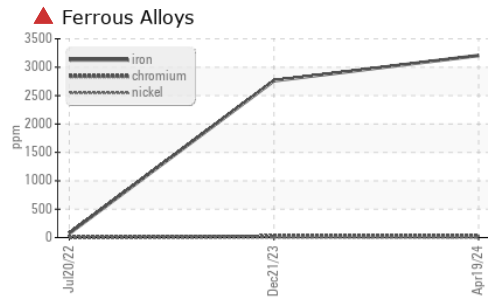
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>59</b>	25	3
Potassium	ppm	ASTM D5185m	>20	<b>35</b>	24	9
Water	%	ASTM D6304	>0.2	<b>▲ 0.231</b>	0.109	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2310</b>	1090	---
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>	0.2%	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>27</b>	20	13
Boron	ppm	ASTM D5185m		<b>99</b>	65	258
Barium	ppm	ASTM D5185m		<b>12</b>	1	24
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Manganese	ppm	ASTM D5185m		<b>23</b>	18	2
Magnesium	ppm	ASTM D5185m		<b>12</b>	5	<1
Calcium	ppm	ASTM D5185m		<b>132</b>	78	17
Phosphorus	ppm	ASTM D5185m		<b>1261</b>	1071	1227
Zinc	ppm	ASTM D5185m		<b>97</b>	74	57
Sulfur	ppm	ASTM D5185m		<b>28725</b>	24012	25077
Visc @ 40°C	cSt	ASTM D445		<b>185</b>	187	240



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0903846 **Received** : 24 Apr 2024  
**Lab Number** : 06159496 **Tested** : 25 Apr 2024  
**Unique Number** : 10994919 **Diagnosed** : 26 Apr 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: KF )

**SHIMMICK CONSTRUCTION**  
 5535 TRAILHEAD DRIVE  
 CHATTANOOGA, TN  
 US 37415  
 Contact: DANIEL LISELLA  
 daniel.lisella@shimmick.com

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)

T:  
F: