



# OIL ANALYSIS REPORT

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

Machine Id  
**016-0114**  
 Component  
**Rear Differential**  
 Fluid  
**SCHAEFFER SCHAEFFER 293 MOLY 75W90 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0904069</b>	WC0815123	WC0750619
Sample Date		Client Info		<b>14 Feb 2024</b>	06 Sep 2023	04 May 2023
Machine Age	hrs	Client Info		<b>12374</b>	11388	10376
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

Gear wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>▲ 1193</b>	▲ 1110	▲ 1020
Chromium	ppm	ASTM D5185m	>10	<b>3</b>	3	2
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

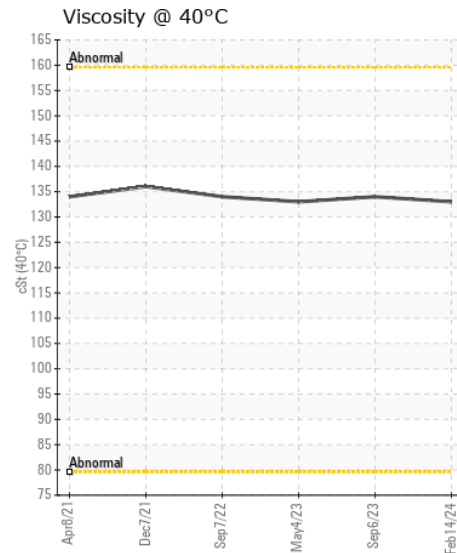
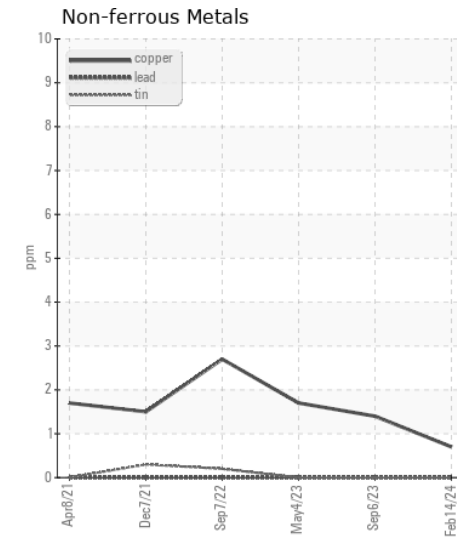
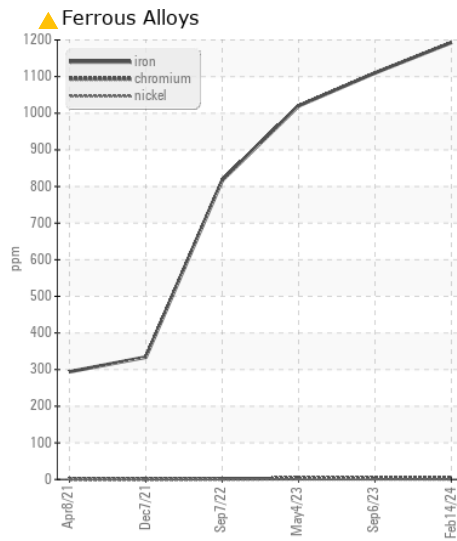
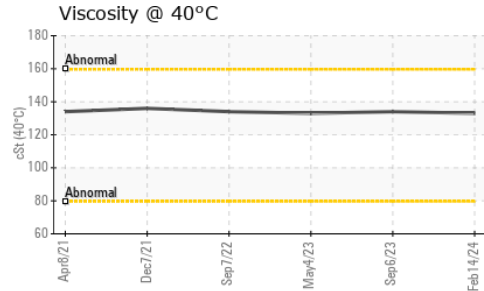
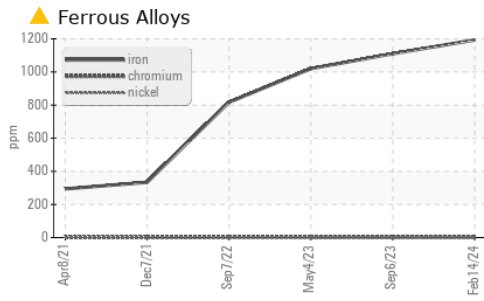
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>6</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>2</b>	4	2
Boron	ppm	ASTM D5185m		<b>43</b>	52	53
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>5</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>13</b>	12	11
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Calcium	ppm	ASTM D5185m		<b>18</b>	24	15
Phosphorus	ppm	ASTM D5185m		<b>1536</b>	1526	1528
Zinc	ppm	ASTM D5185m		<b>12</b>	36	10
Sulfur	ppm	ASTM D5185m		<b>23424</b>	26328	27014
Visc @ 40°C	cSt	ASTM D445		<b>133</b>	134	133



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0904069  
**Lab Number** : 06105537  
**Unique Number** : 10903767  
**Test Package** : CONST

**Received** : 29 Feb 2024  
**Tested** : 01 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Don Baldrige

**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: