



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



Area  
**[05W44711]**  
 Machine Id  
**CATERPILLAR 950GC C285096 (S/N 0M5T05487)**  
 Component  
**Front Differential**  
 Fluid  
**CAT TDTO SAE 50 (40 QTS)**

### RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0203115</b>	JR0192204	---
Sample Date		Client Info		<b>12 Feb 2024</b>	14 Nov 2023	---
Machine Age	hrs	Client Info		<b>2018</b>	1485	---
Oil Age	hrs	Client Info		<b>2018</b>	1485	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

The copper level is abnormal. All other component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>91</b>	74	---
Iron	ppm	ASTM D5185m	>500	<b>127</b>	124	---
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>30	<b>8</b>	8	---
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>103	<b>▲ 121</b>	▲ 115	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

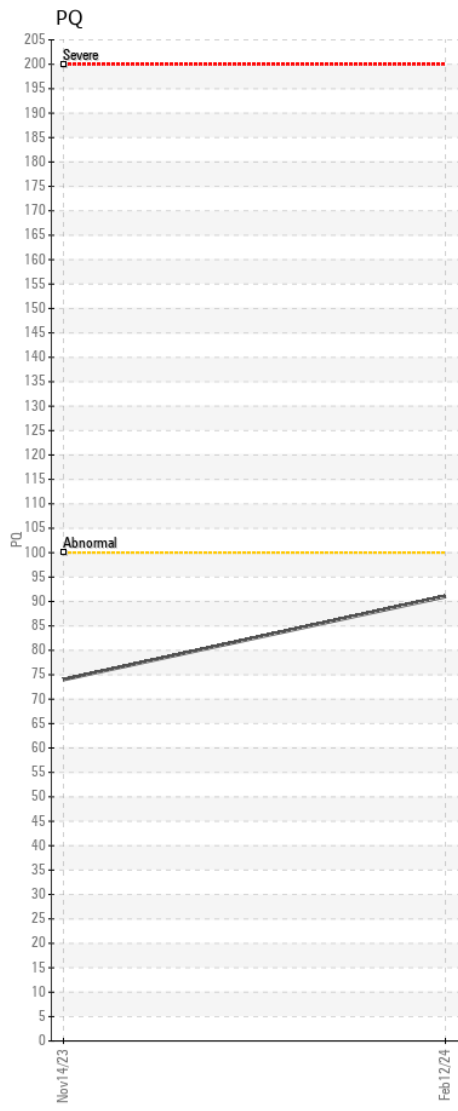
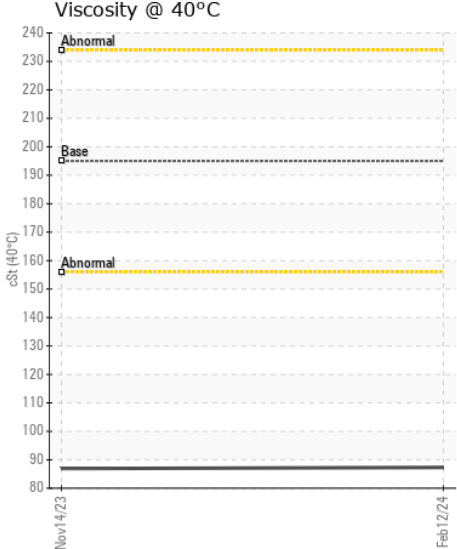
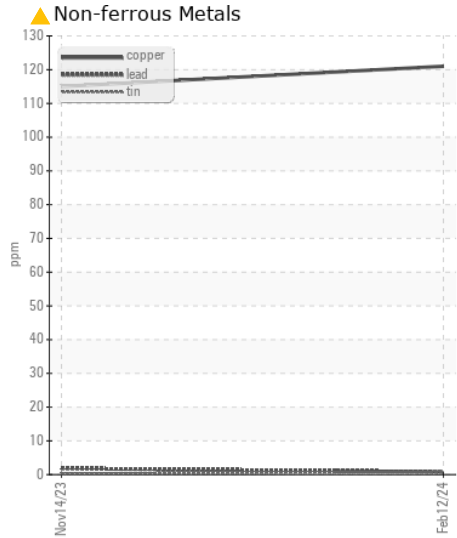
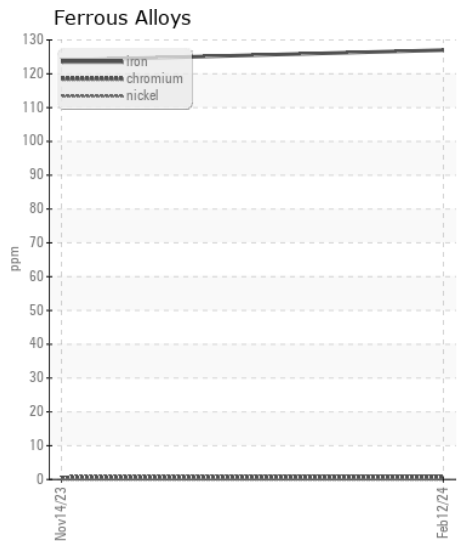
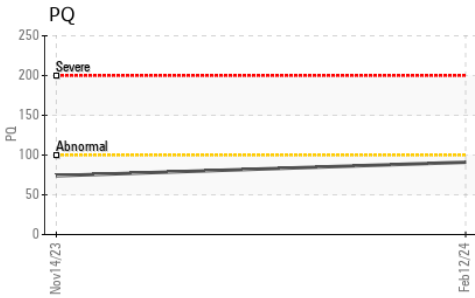
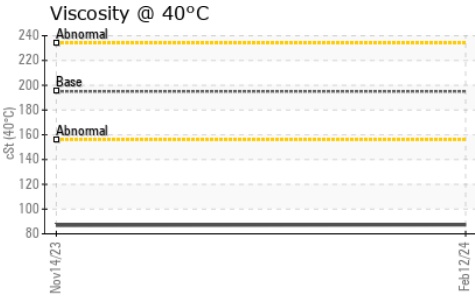
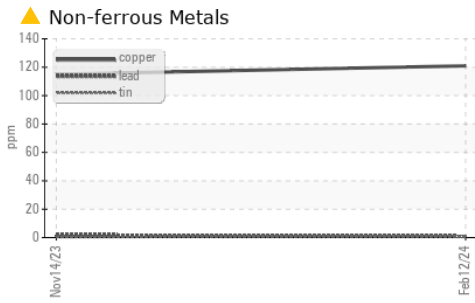
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>100	<b>7</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Water		WC Method	>.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		<b>4</b>	4	---
Boron	ppm	ASTM D5185m		<b>4</b>	2	---
Barium	ppm	ASTM D5185m		<b>2</b>	3	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>6</b>	6	---
Magnesium	ppm	ASTM D5185m		<b>11</b>	8	---
Calcium	ppm	ASTM D5185m	2980	<b>2934</b>	2977	---
Phosphorus	ppm	ASTM D5185m	1100	<b>1064</b>	1073	---
Zinc	ppm	ASTM D5185m	1270	<b>1329</b>	1350	---
Sulfur	ppm	ASTM D5185m		<b>4663</b>	4627	---
Visc @ 40°C	cSt	ASTM D445	195	<b>87.3</b>	86.9	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203115 **Received** : 14 Feb 2024  
**Lab Number** : 06089708 **Tested** : 16 Feb 2024  
**Unique Number** : 10877153 **Diagnosed** : 16 Feb 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**TITAN VIRGINIA READY MIX LLC**  
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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)