



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

Machine Id

**110**

Component

**Differential**

Fluid

**GEAR OIL SAE 80W90 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CL0005218</b>	CL0004457	CL0003608
Sample Date		Client Info		<b>10 Mar 2024</b>	04 Jul 2023	25 Sep 2022
Machine Age	mls	Client Info		<b>191275</b>	160031	123510
Oil Age	mls	Client Info		<b>191275</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>181</b>	229	151
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>100	<b>2</b>	2	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>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

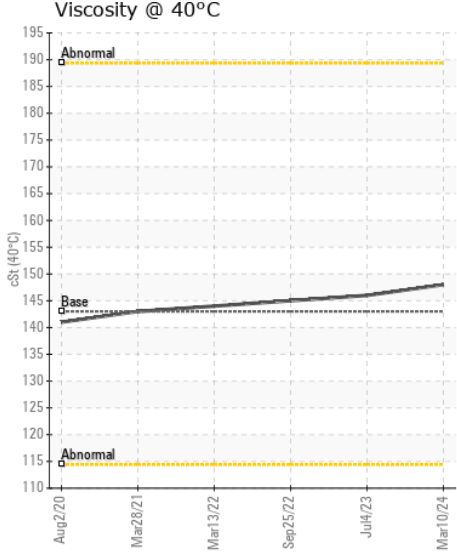
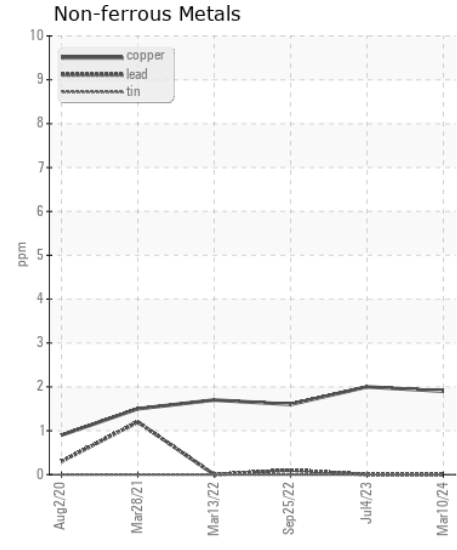
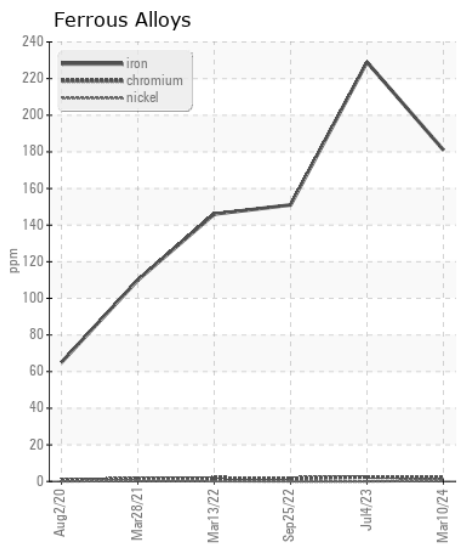
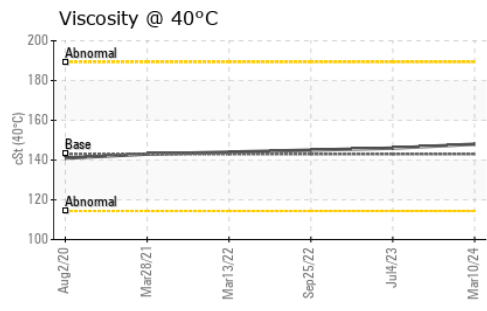
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>41</b>	46	55
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	5	8
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER	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	>170	<b>9</b>	11	8
Boron	ppm	ASTM D5185m	400	<b>73</b>	70	70
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>8</b>	9	7
Magnesium	ppm	ASTM D5185m	12	<b>3</b>	6	2
Calcium	ppm	ASTM D5185m	150	<b>50</b>	65	38
Phosphorus	ppm	ASTM D5185m	1650	<b>945</b>	935	914
Zinc	ppm	ASTM D5185m	125	<b>22</b>	37	24
Sulfur	ppm	ASTM D5185m	22500	<b>27142</b>	25056	29709
Visc @ 40°C	cSt	ASTM D445	143	<b>148</b>	146	145



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0005218  
**Lab Number** : 06121826  
**Unique Number** : 10935977  
**Test Package** : CONST  
**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 19 Mar 2024 - Wes Davis

**RACE CITY STEEL**  
 4052 N HWY 16  
 DENVER, NC  
 US 28037  
 Contact: SERVICE MANAGER

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: