



WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**

Machine Id  
**110**  
Component  
**Transmission (Auto)**  
Fluid  
**ATF (PAO) (--- GAL)**

**RECOMMENDATION**

We advise that you check all areas where dirt can enter the system. The filter 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>CL0005219</b>	CL0004458	CL0003609
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 Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR**

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

Iron	ppm	ASTM D5185m	>160	<b>152</b>	120	118
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>50	<b>26</b>	16	13
Lead	ppm	ASTM D5185m	>50	<b>32</b>	29	31
Copper	ppm	ASTM D5185m	>225	<b>31</b>	23	21
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
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**

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

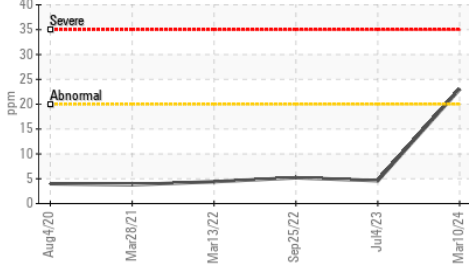
Silicon	ppm	ASTM D5185m	>20	<b>▲ 23</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	4
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

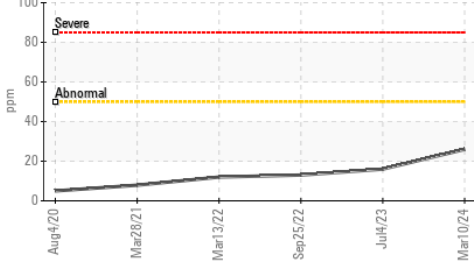
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>8</b>	9	6
Boron	ppm	ASTM D5185m	175	<b>103</b>	105	102
Barium	ppm	ASTM D5185m	5	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>6</b>	5	6
Magnesium	ppm	ASTM D5185m	5	<b>1</b>	5	<1
Calcium	ppm	ASTM D5185m	125	<b>46</b>	52	41
Phosphorus	ppm	ASTM D5185m	290	<b>295</b>	261	261
Zinc	ppm	ASTM D5185m	10	<b>10</b>	22	7
Sulfur	ppm	ASTM D5185m	400	<b>599</b>	656	766
Visc @ 40°C	cSt	ASTM D445	32.3	<b>35.9</b>	35.9	36.3

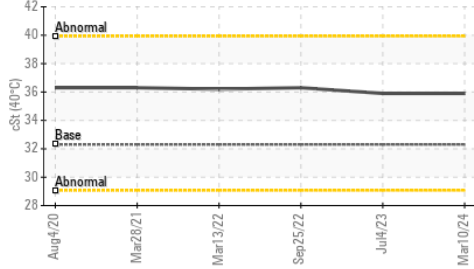
▲ Silicon (ppm)



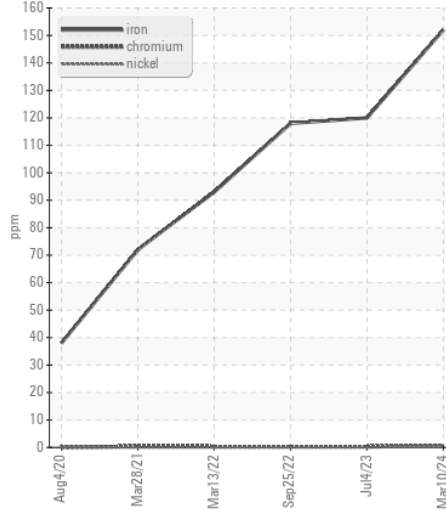
● Aluminum (ppm)



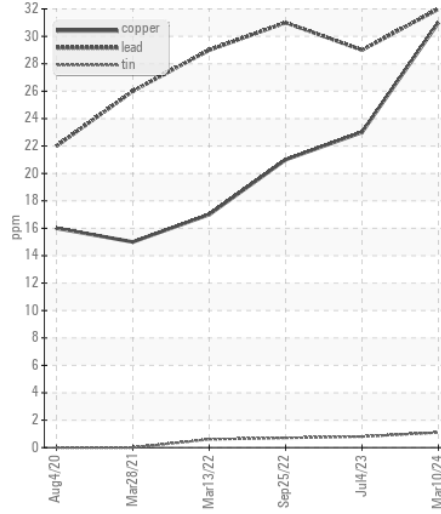
Viscosity @ 40°C



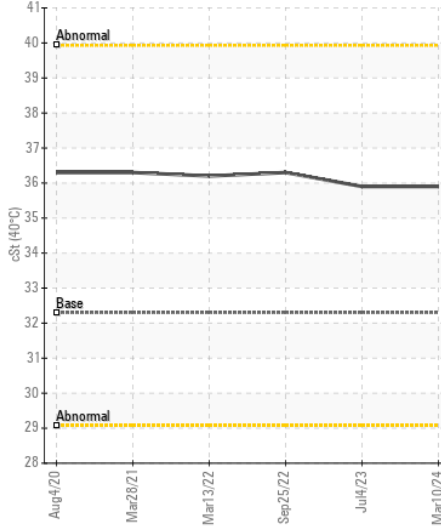
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0005219  
**Lab Number** : 06121847  
**Unique Number** : 10935998  
**Test Package** : CONST  
**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Angela Borella

**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: