



# OIL ANALYSIS REPORT

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

Machine Id  
**RA511**  
Component  
**Hydraulic System**  
Fluid  
**DURALENE Trans-Flo UTF (--- GAL)**

## RECOMMENDATION

Oil and 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>WC0675115</b>	WC0615354	WC0564365
Sample Date		Client Info		<b>09 Jan 2024</b>	04 Feb 2022	21 Jul 2021
Machine Age	hrs	Client Info		<b>2995</b>	1975	1595
Oil Age	hrs	Client Info		<b>490</b>	0	0
Filter Age	hrs	Client Info		<b>490</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

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

Iron	ppm	ASTM D5185m	>20	<b>▲ 36</b>	▲ 27	▲ 22
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	1	<1
Lead	ppm	ASTM D5185m	>10	<b>1</b>	2	4
Copper	ppm	ASTM D5185m	>75	<b>8</b>	9	8
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	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. The amount and size of particulates present in the system are acceptable.

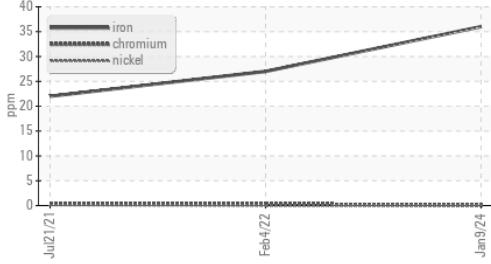
Silicon	ppm	ASTM D5185m	>20	<b>2</b>	5	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	4
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>3188</b>	▲ 14796	2474
Particles >6µm		ASTM D7647	>1300	<b>90</b>	447	152
Particles >14µm		ASTM D7647	>160	<b>8</b>	11	6
Particles >21µm		ASTM D7647	>40	<b>2</b>	3	1
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/14/10</b>	▲ 21/16/11	18/14/10
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

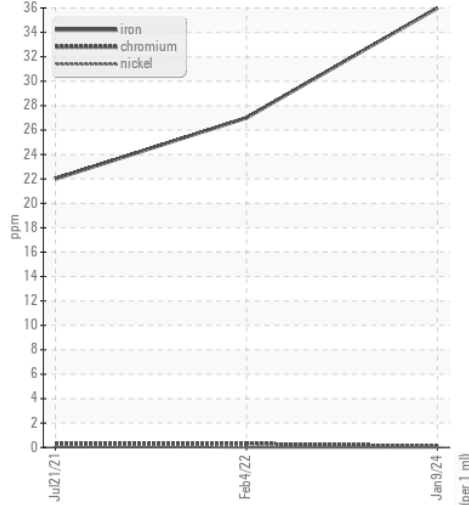
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	3	2
Boron	ppm	ASTM D5185m		<b>11</b>	8	9
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>22</b>	21	18
Calcium	ppm	ASTM D5185m		<b>779</b>	454	392
Phosphorus	ppm	ASTM D5185m		<b>718</b>	663	665
Zinc	ppm	ASTM D5185m		<b>893</b>	882	848
Sulfur	ppm	ASTM D5185m		<b>2271</b>	1912	2032
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.84</b>	0.69	0.773
Visc @ 40°C	cSt	ASTM D445		<b>40.0</b>	40.5	40.8

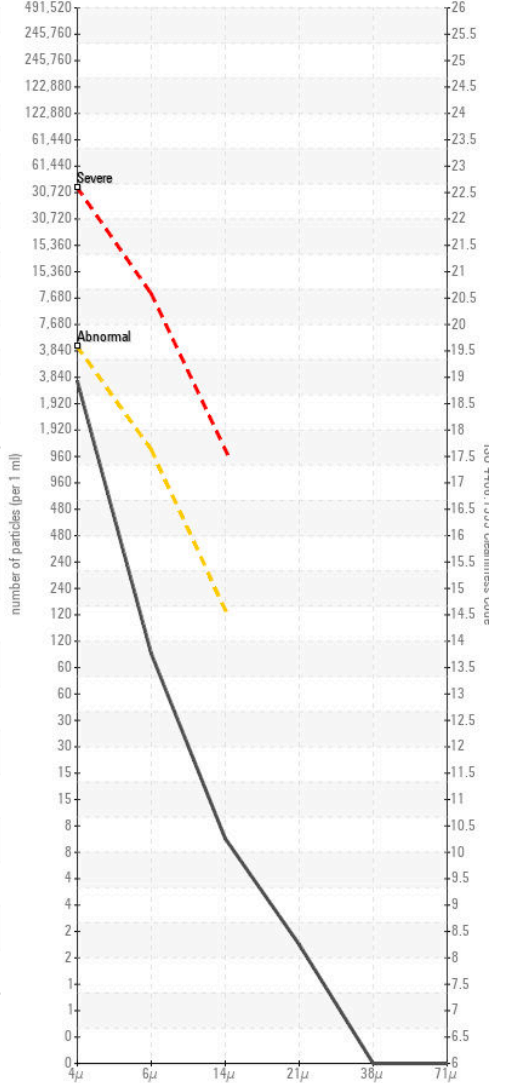
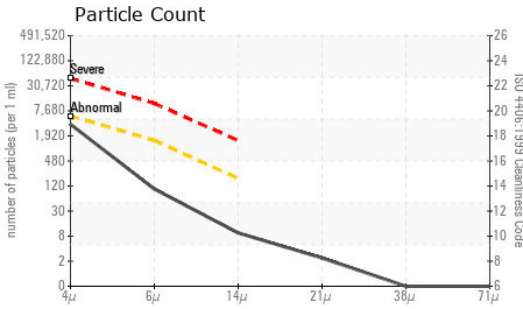
**▲ Ferrous Alloys**



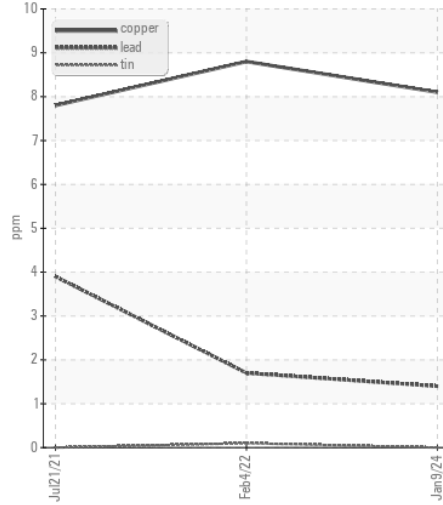
**▲ Ferrous Alloys**



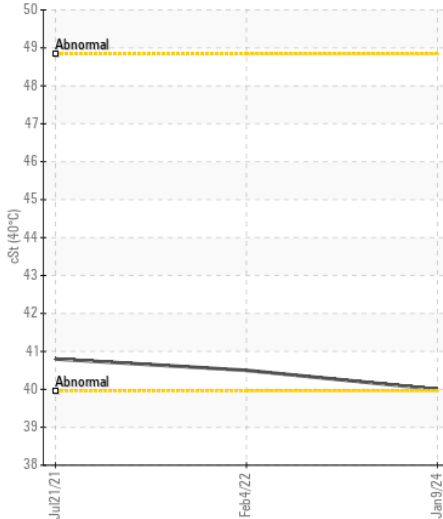
**Particle Count**



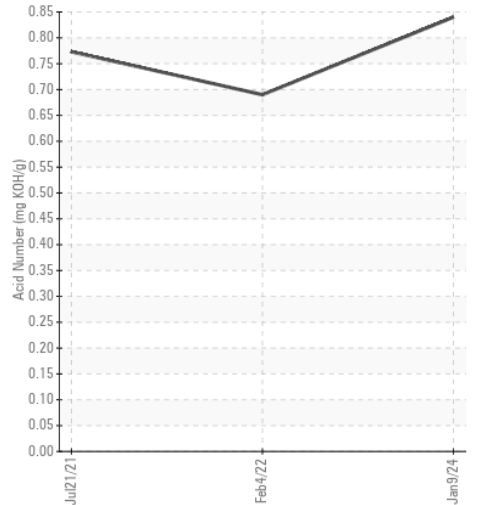
**Non-ferrous Metals**



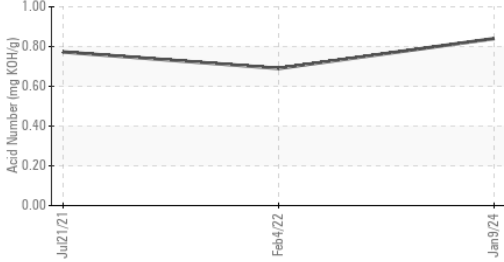
**Viscosity @ 40°C**



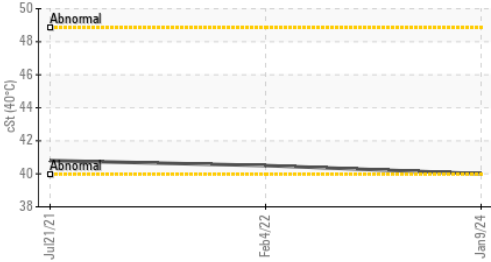
**Acid Number**



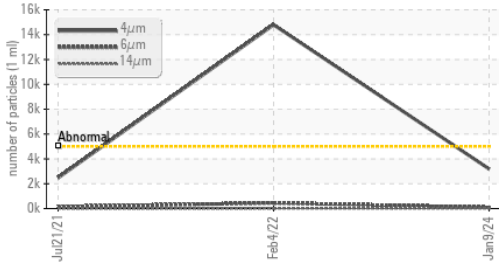
**Acid Number**



**Viscosity @ 40°C**



**Particle Trend**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0675115 **Received** : 17 Jan 2024  
**Lab Number** : 06062581 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10833963 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

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)

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