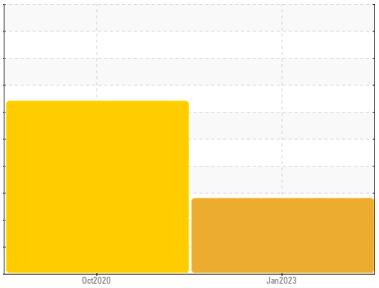
PROBLEM SUMMARY

Sample Rating Trend

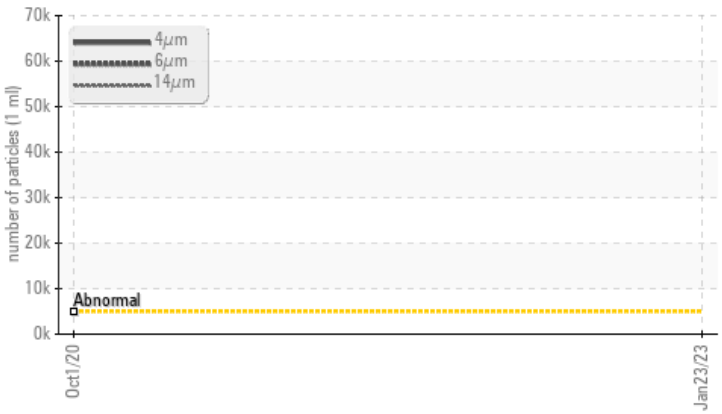


VISCOSITY

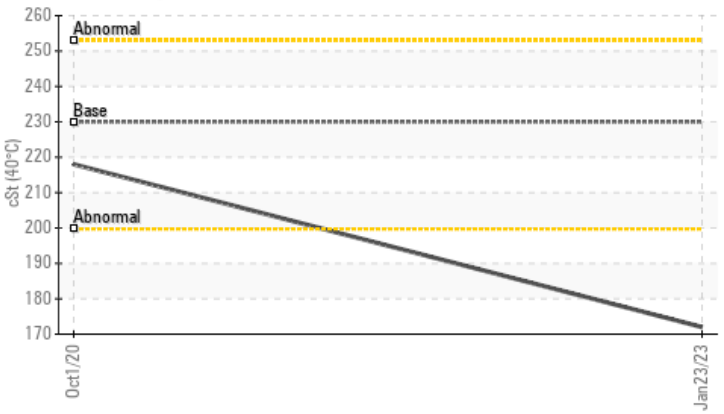
Area
DERRY TOWNSHIP
Machine Id
1A - DERRY TOWNSHIP
Component
Hydraulic System
Fluid
SHELL OMALA S4 GX 220 (--- GAL)

COMPONENT CONDITION SUMMARY

Particle Trend



Viscosity @ 40°C



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	SEVERE	---
Particles >4µm		ASTM D7647	>5000	▲ **62637**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **16168**	---	---
Particles >14µm		ASTM D7647	>160	▲ **1021**	---	---
Particles >21µm		ASTM D7647	>40	▲ **217**	---	---
Particles >38µm		ASTM D7647	>10	▲ **20**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **23/21/17**	---	---
Visc @ 40°C	cSt	ASTM D445	230	▲ **172**	218	---

Customer Id: MOTYOR
Sample No.: WC0774463
Lab Number: 05750756
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

01 Oct 2020 Diag: Doug Bogart

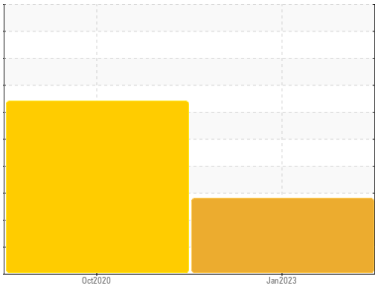
WEAR

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.The iron level is severe. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Area
DERRY TOWNSHIP
Machine Id
1A - DERRY TOWNSHIP
Component
Hydraulic System
Fluid
SHELL OMALA S4 GX 220 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0774463**	WC0509335	---
Sample Date		Client Info		**23 Jan 2023**	01 Oct 2020	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Not Changd**	N/A	---
Sample Status				**ABNORMAL**	SEVERE	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**16**	240	---
Chromium	ppm	ASTM D5185m	>20	**0**	<1	---
Nickel	ppm	ASTM D5185m	>20	**0**	<1	---
Titanium	ppm	ASTM D5185m		**0**	<1	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>20	**0**	0	---
Lead	ppm	ASTM D5185m	>20	**0**	<1	---
Copper	ppm	ASTM D5185m	>20	**0**	<1	---
Tin	ppm	ASTM D5185m	>20	**0**	0	---
Antimony	ppm	ASTM D5185m		**---**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	2	---
Barium	ppm	ASTM D5185m		**1**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	<1	---
Manganese	ppm	ASTM D5185m		**<1**	2	---
Magnesium	ppm	ASTM D5185m		**1**	10	---
Calcium	ppm	ASTM D5185m		**67**	966	---
Phosphorus	ppm	ASTM D5185m		**216**	1328	---
Zinc	ppm	ASTM D5185m		**11**	17	---
Sulfur	ppm	ASTM D5185m		**5941**	482	---

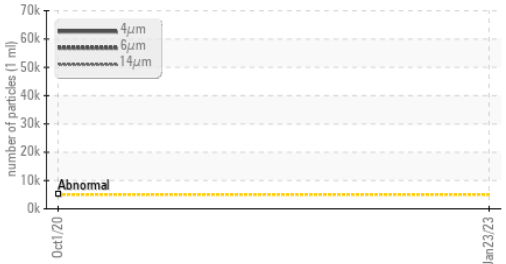
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**5**	12	---
Sodium	ppm	ASTM D5185m		**0**	11	---
Potassium	ppm	ASTM D5185m	>20	**<1**	1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**62637**	---	---
Particles >6µm		ASTM D7647	>1300	**16168**	---	---
Particles >14µm		ASTM D7647	>160	**1021**	---	---
Particles >21µm		ASTM D7647	>40	**217**	---	---
Particles >38µm		ASTM D7647	>10	**20**	---	---
Particles >71µm		ASTM D7647	>3	**1**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**23/21/17**	---	---

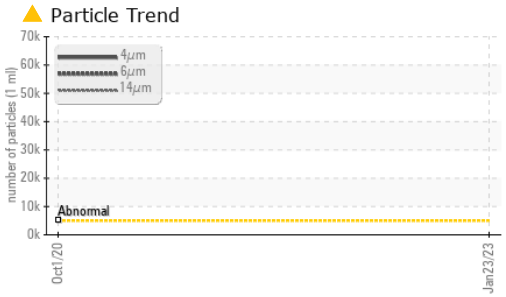
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.53**	0.949	---

OIL ANALYSIS REPORT

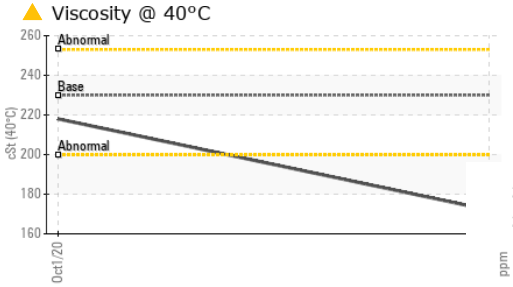
Particle Trend



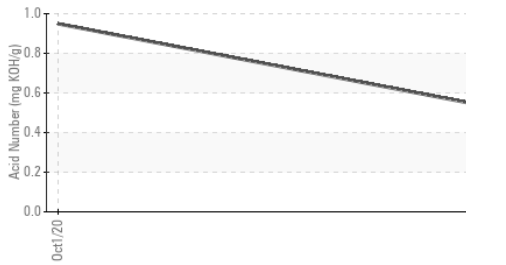
Particle Trend



Viscosity @ 40°C

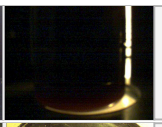
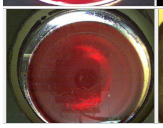


Acid Number



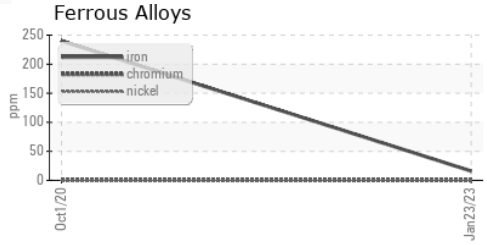
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**LIGHT**	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	230	▲ **172**	218	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

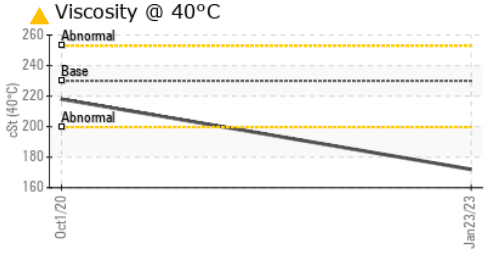
GRAPHS

Ferrous Alloys

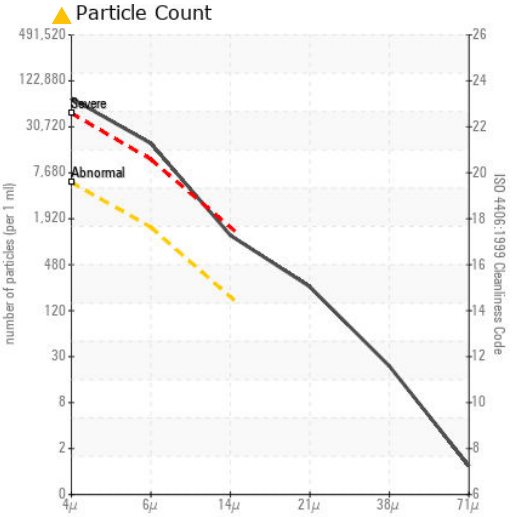


Non-ferrous Metals

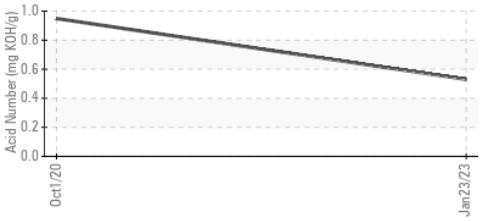
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0774463
Lab Number : 05750756
Unique Number : 10310360
Test Package : IND 2

Received : 26 Jan 2023
Diagnosed : 27 Jan 2023
Diagnostician : Don Baldridge

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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