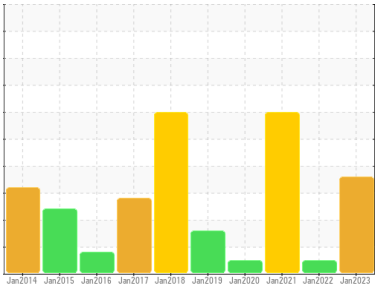
PROBLEM SUMMARY

Sample Rating Trend

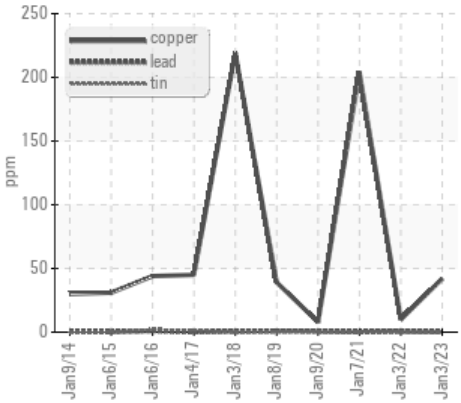


WEAR

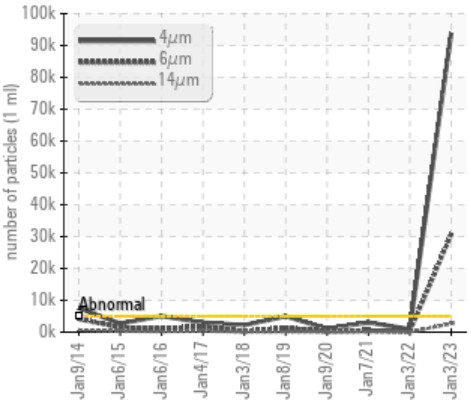
Machine Id
FT4566
Component
Hydraulic System
Fluid
MOBIL VACUOLINE OIL 1405 (6 GAL)

COMPONENT CONDITION SUMMARY

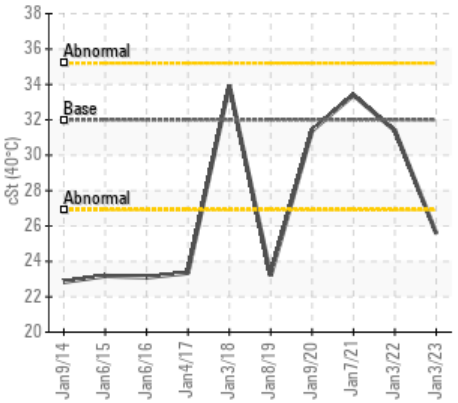
Non-ferrous Metals



Particle Trend



Viscosity @ 40°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	SEVERE
Copper	ppm	ASTM D5185m	>20	▲ **42**	10	⬢ 204
Particles >4µm		ASTM D7647	>5000	▲ **93839**	920	3032
Particles >6µm		ASTM D7647	>1300	▲ **30626**	234	513
Particles >14µm		ASTM D7647	>160	▲ **2670**	24	37
Particles >21µm		ASTM D7647	>40	▲ **841**	4	11
Particles >38µm		ASTM D7647	>10	▲ **41**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/22/19**	17/15/12	19/16/12
Visc @ 40°C	cSt	ASTM D445	32	▲ **25.59**	31.4	33.4

Customer Id: THESYL
Sample No.: WC0767611
Lab Number: 05730996
Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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	DONE	Jan 18 2023	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

03 Jan 2022 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

07 Jan 2021 Diag: Jonathan Hester

WEAR

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.A sharp increase in the copper level is noted. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

09 Jan 2020 Diag: Don Baldridge

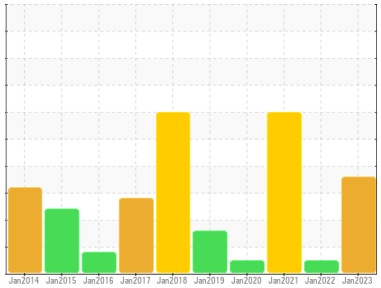
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
FT4566
Component
Hydraulic System
Fluid
MOBIL VACUOLINE OIL 1405 (6 GAL)

DIAGNOSIS

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

Wear
The copper level is abnormal. All other 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		**WC0767611**	WC0651813	WC0534728
Sample Date		Client Info		**03 Jan 2023**	03 Jan 2022	07 Jan 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**8**	4	3
Chromium	ppm	ASTM D5185m	>20	**0**	<1	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	1	0
Lead	ppm	ASTM D5185m	>20	**0**	<1	0
Copper	ppm	ASTM D5185m	>20	▲ **42**	10	⬢ 204
Tin	ppm	ASTM D5185m	>20	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	<1	0
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**0**	0	<1
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m		**0**	<1	0
Calcium	ppm	ASTM D5185m		**114**	79	121
Phosphorus	ppm	ASTM D5185m		**511**	342	433
Zinc	ppm	ASTM D5185m		**615**	492	625
Sulfur	ppm	ASTM D5185m		**2203**	4880	4277

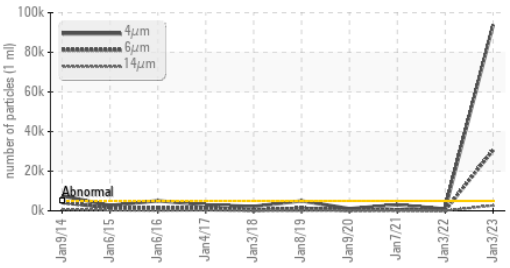
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	1	1
Sodium	ppm	ASTM D5185m		**<1**	0	2
Potassium	ppm	ASTM D5185m	>20	**0**	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **93839**	920	3032
Particles >6µm		ASTM D7647	>1300	▲ **30626**	234	513
Particles >14µm		ASTM D7647	>160	▲ **2670**	24	37
Particles >21µm		ASTM D7647	>40	▲ **841**	4	11
Particles >38µm		ASTM D7647	>10	▲ **41**	0	0
Particles >71µm		ASTM D7647	>3	**2**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/22/19**	17/15/12	19/16/12

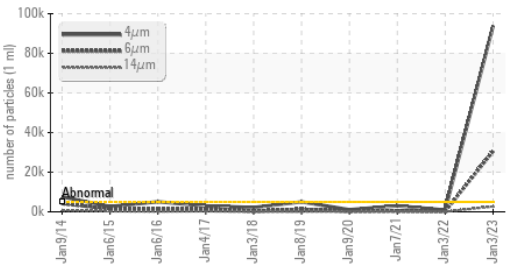
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.2	**0.583**	0.556	1.054

OIL ANALYSIS REPORT

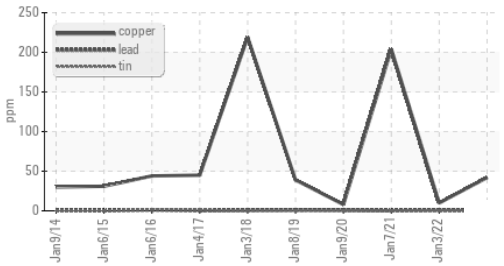
Particle Trend



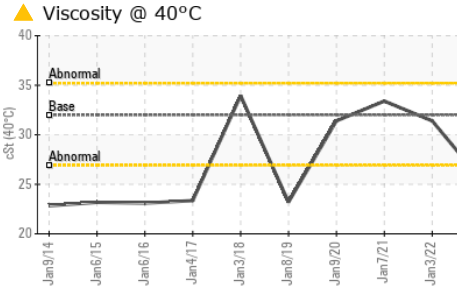
Particle Trend



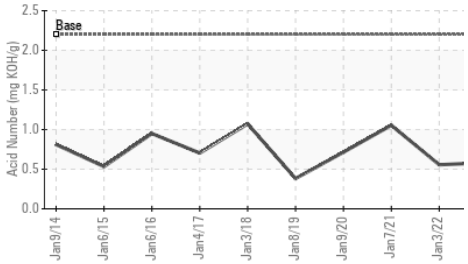
Non-ferrous Metals



Viscosity @ 40°C

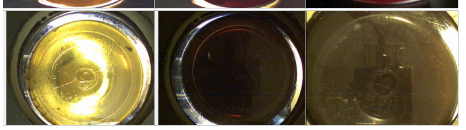


Acid Number



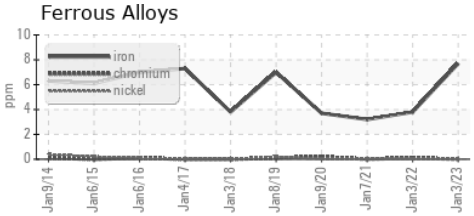
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	▲ **25.59**	31.4	33.4

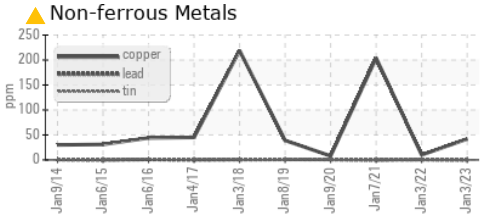
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

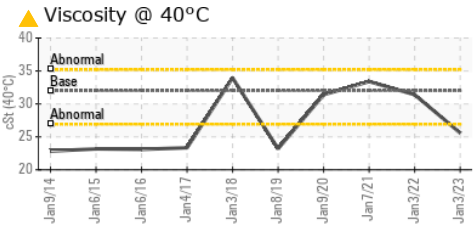
Ferrous Alloys



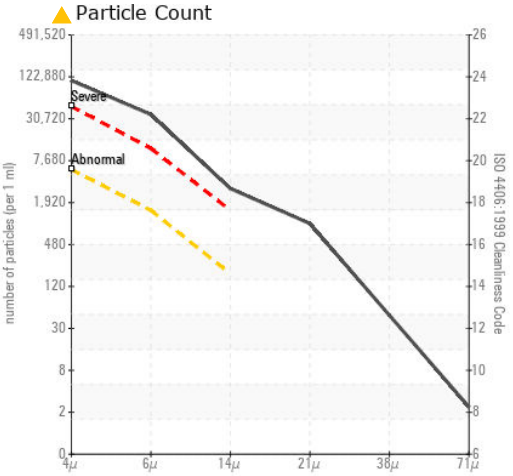
Non-ferrous Metals



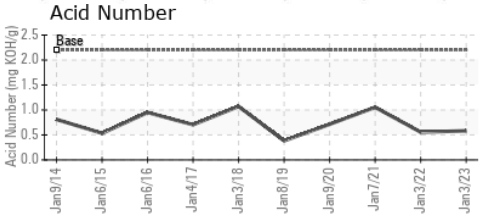
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0767611 **Received** : 05 Jan 2023
Lab Number : 05730996 **Diagnosed** : 09 Jan 2023
Unique Number : 10280594 **Diagnostician** : Doug Bogart
Test Package : PLANT

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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