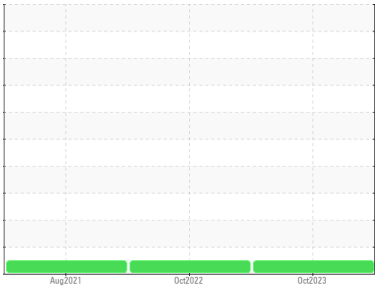
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
MT
Machine Id
TEST CELL E7
Component
Hydraulic System
Fluid
MOBIL DTE 25 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0810907**	WC0611437	WC0553161
Sample Date		Client Info		**31 Oct 2023**	10 Oct 2022	27 Aug 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	4
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m		**<1**	<1	0
Calcium	ppm	ASTM D5185m		**105**	104	115
Phosphorus	ppm	ASTM D5185m		**429**	407	418
Zinc	ppm	ASTM D5185m		**676**	639	640
Sulfur	ppm	ASTM D5185m		**5143**	5677	4654

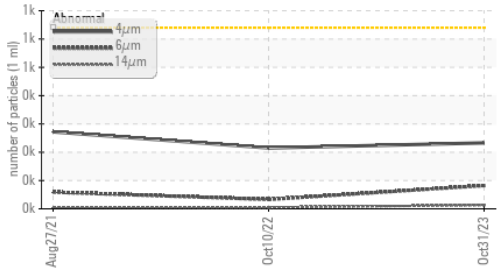
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	<1	<1
Sodium	ppm	ASTM D5185m		**0**	0	1
Potassium	ppm	ASTM D5185m	>20	**1**	1	0

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	**233**	215	272
Particles >6µm	ASTM D7647	>160	**82**	33	59
Particles >14µm	ASTM D7647	>20	**13**	5	6
Particles >21µm	ASTM D7647	>4	**4**	1	2
Particles >38µm	ASTM D7647	>3	**0**	0	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>16/14/11	**15/14/11**	15/12/10	15/13/10

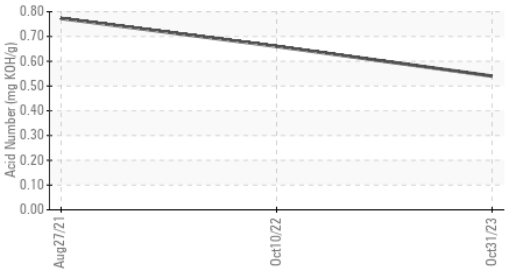
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.54**	0.66	0.773

OIL ANALYSIS REPORT

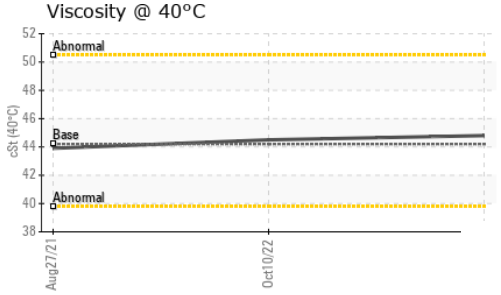
Particle Trend



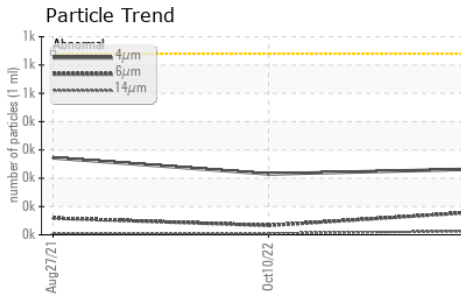
Acid Number



Viscosity @ 40°C

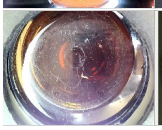
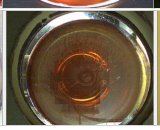
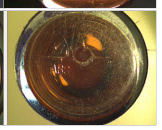


Particle Trend



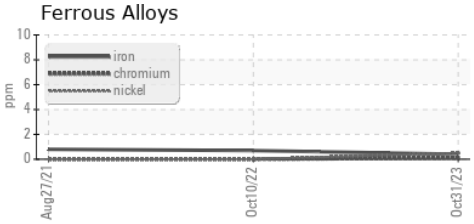
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	44.2	**44.8**	44.5	43.9

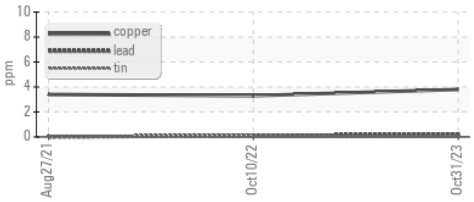
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

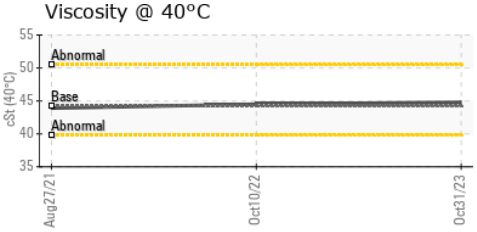
Ferrous Alloys



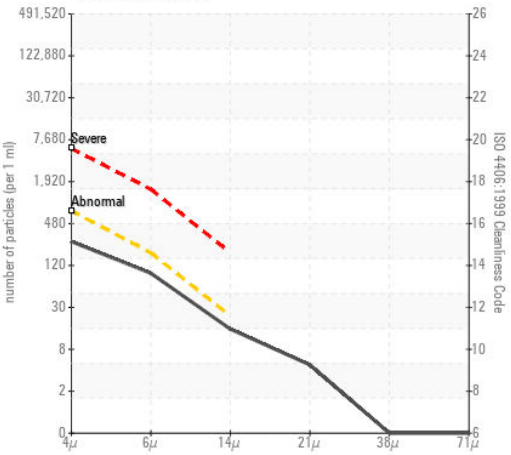
Non-ferrous Metals



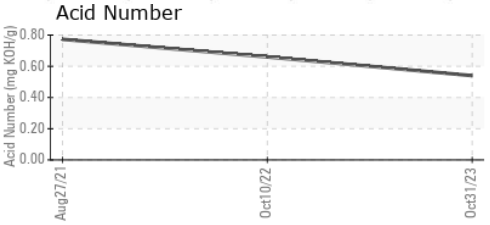
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0810907
Lab Number : 05996650
Unique Number : 10725010
Test Package : IND 2

Received : 02 Nov 2023
Diagnosed : 03 Nov 2023
Diagnostician : Wes Davis

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)

Michelin Americas Research Company
515 Michelin Road
Greenville, SC
US 29605
Contact: Vince Wilson
vince.wilson@michelin.com
T: (864)422-3913
F: (864)422-3518