

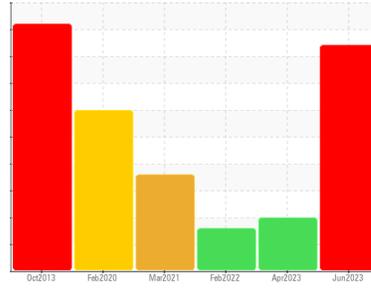


PROBLEM SUMMARY

Area
ICD [6057372]
Machine Id
GATE #14

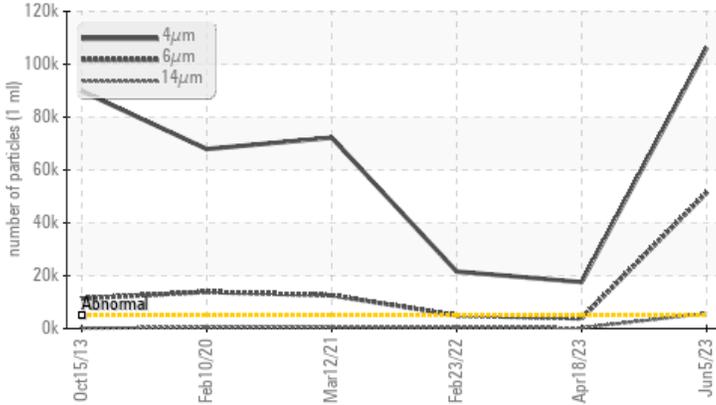
Component
Main Hydraulic System
Fluid
MOBIL VELOCITE OIL NO.10 (500 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	SEVERE	ABNORMAL	ABNORMAL
Particles >4µm	>5000	106209	17553	21563
Particles >6µm	>1300	51437	3855	4996
Particles >14µm	>160	5716	265	368
Particles >21µm	>40	1638	82	79
Particles >38µm	>10	73	8	3
Particles >71µm	>3	7	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	24/23/20	21/19/15	22/19/16

Customer Id: ONTQUE
 Sample No.: WC894444
 Lab Number: 02562911
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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Kevin.Marson@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

18 Apr 2023 Diag: Kevin Marson

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



23 Feb 2022 Diag: Kevin Marson

ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. Component wear rates appear to be normal (unconfirmed). Particles >14µm are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >21µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



12 Mar 2021 Diag: Kevin Marson

ISO



We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. Particles >6µm are severely high. Particles >4µm are severely high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

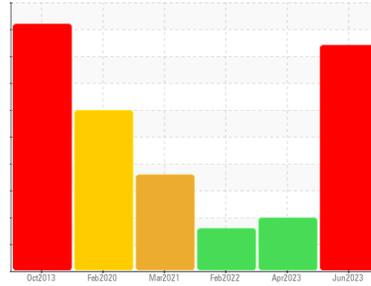
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
ICD [6057372]
 Machine Id
GATE #14

Component
Main Hydraulic System

Fluid
MOBIL VELOCITE OIL NO.10 (500 GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC894444	WC0801173	WC
Sample Date	Client Info		05 Jun 2023	18 Apr 2023	23 Feb 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	<1
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)		0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0
Lead	ppm	ASTM D5185(m)	>20	<1	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	0
Barium	ppm	ASTM D5185(m)		0	0
Molybdenum	ppm	ASTM D5185(m)		0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)		0	0
Calcium	ppm	ASTM D5185(m)		0	0
Phosphorus	ppm	ASTM D5185(m)		11	9
Zinc	ppm	ASTM D5185(m)		1	<1
Sulfur	ppm	ASTM D5185(m)		3535	3582
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	2
Sodium	ppm	ASTM D5185(m)		0	0
Potassium	ppm	ASTM D5185(m)	>20	0	0

FLUID CLEANLINESS

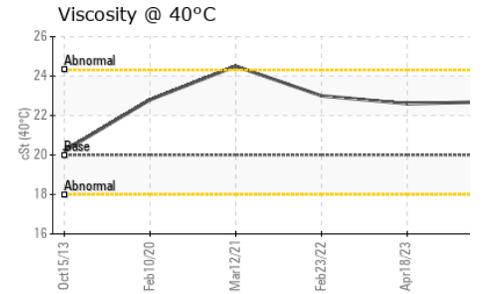
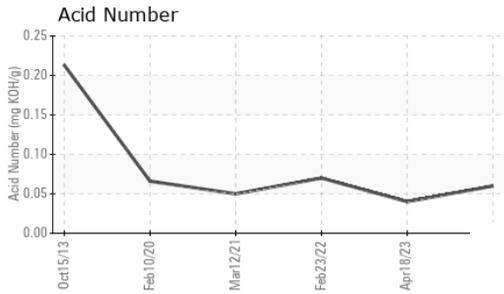
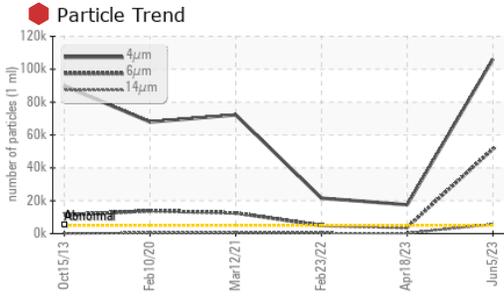
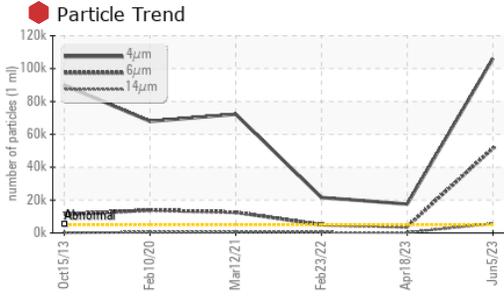
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Particles >71µm	ASTM D7647	>3	7	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/23/20	21/19/15	22/19/16

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.06	0.04	0.07



OIL ANALYSIS REPORT



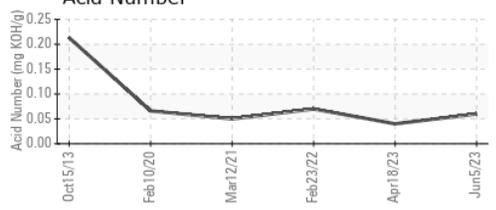
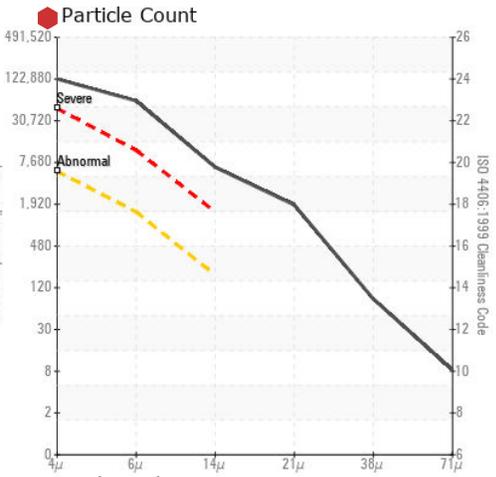
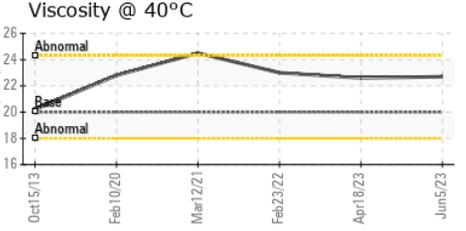
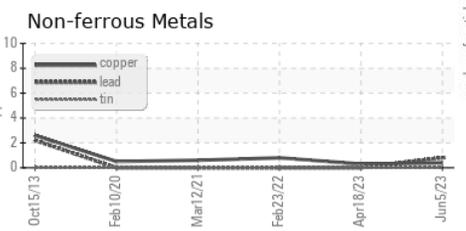
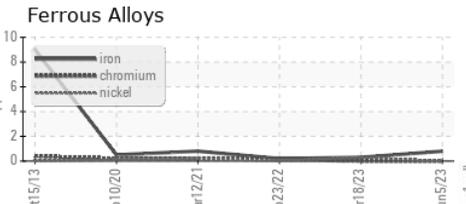
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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 D7279(m)	20	22.7	22.6	23.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC894444 **Received** : 08 Jun 2023
Lab Number : 02562911 **Diagnosed** : 08 Jun 2023
Unique Number : 5591952 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.