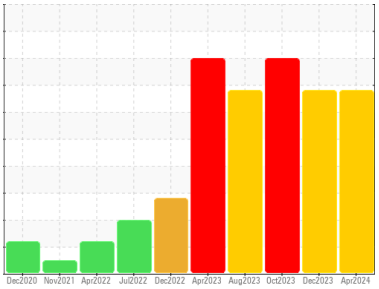
PROBLEM SUMMARY

Area
Mobile Fleet
Machine Id
5215 5215
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC 10W (38 GAL)

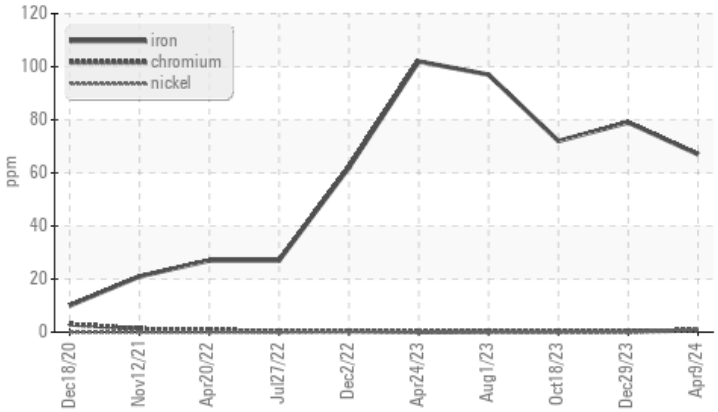
Sample Rating Trend



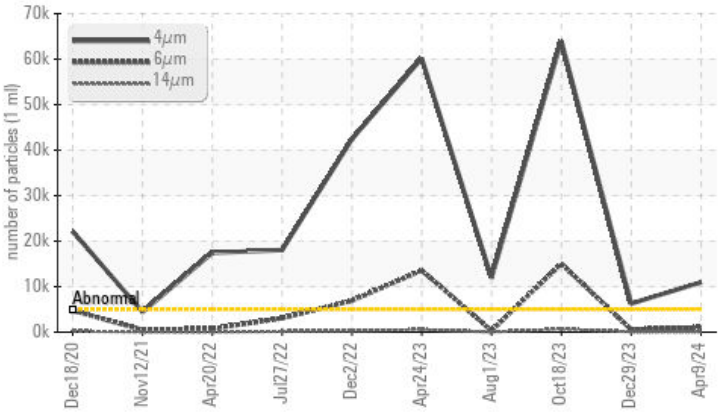
WEAR

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>20	▲ **67**	▲ 79	▲ 72
Particles >4µm		ASTM D7647	>5000	▲ **10948**	● 6276	▲ 63999
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/17/13**	● 20/16/13	▲ 23/21/17

Customer Id: CARBUTNC
Sample No.: WC0919030
Lab Number: 06146515
Test Package: CONST

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 Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WEAR

29 Dec 2023 Diag: Don Baldridge
The filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. All other component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

WEAR

18 Oct 2023 Diag: Don Baldridge
The filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

WEAR

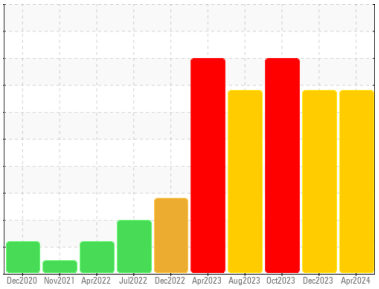
01 Aug 2023 Diag: Don Baldridge
The filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Area
Mobile Fleet
Machine Id
5215 5215
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC 10W (38 GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
The iron level has decreased, but is still severe. All other component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0919030**	WC0861904	WC0867234
Sample Date		Client Info		**09 Apr 2024**	29 Dec 2023	18 Oct 2023
Machine Age	hrs	Client Info		**12329**	11759	11234
Oil Age	hrs	Client Info		**2268**	1698	1173
Oil Changed		Client Info		**Changed**	Not Changd	Not Changd
Sample Status				**SEVERE**	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **67**	▲ 79	▲ 72
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>10	**1**	2	2
Lead	ppm	ASTM D5185m	>10	**1**	0	0
Copper	ppm	ASTM D5185m	>75	**6**	6	5
Tin	ppm	ASTM D5185m	>10	**1**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**1**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**1**	1	3
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**3**	2	2
Manganese	ppm	ASTM D5185m		**2**	<1	1
Magnesium	ppm	ASTM D5185m		**582**	697	642
Calcium	ppm	ASTM D5185m		**128**	96	86
Phosphorus	ppm	ASTM D5185m		**1116**	1085	1002
Zinc	ppm	ASTM D5185m		**1181**	1279	1216
Sulfur	ppm	ASTM D5185m		**6674**	7627	6202

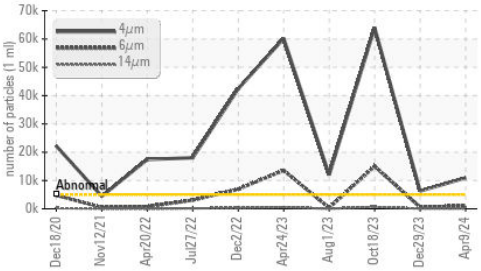
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**6**	6	7
Sodium	ppm	ASTM D5185m		**0**	0	<1
Potassium	ppm	ASTM D5185m	>20	**1**	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **10948**	● 6276	▲ 63999
Particles >6µm		ASTM D7647	>1300	**1055**	571	▲ 15024
Particles >14µm		ASTM D7647	>160	**79**	63	▲ 668
Particles >21µm		ASTM D7647	>40	**21**	16	▲ 128
Particles >38µm		ASTM D7647	>10	**1**	0	4
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/17/13**	● 20/16/13	▲ 23/21/17

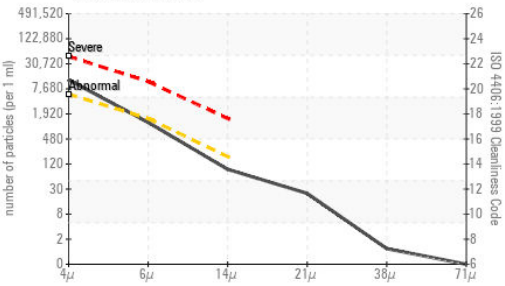
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.45**	1.42	1.57

OIL ANALYSIS REPORT

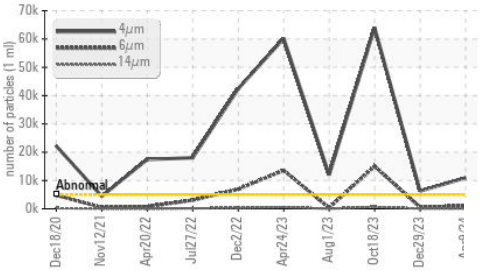
Particle Trend



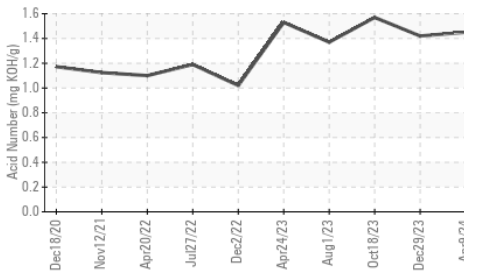
Particle Count



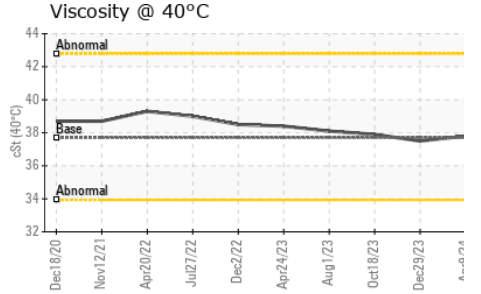
Particle Trend



Acid Number



Viscosity @ 40°C



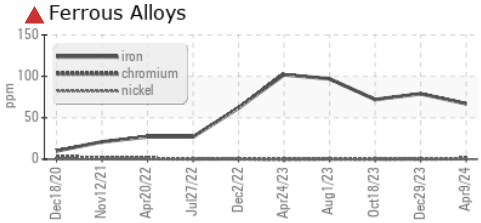
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	37.7	**37.8**	37.5	37.9

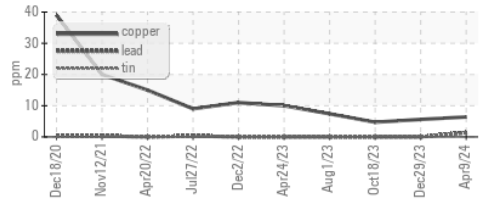
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

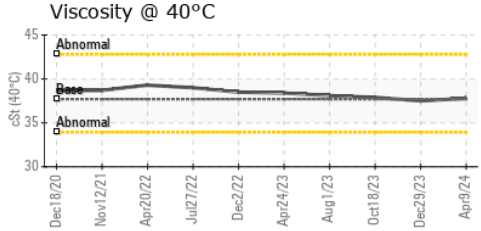
Ferrous Alloys



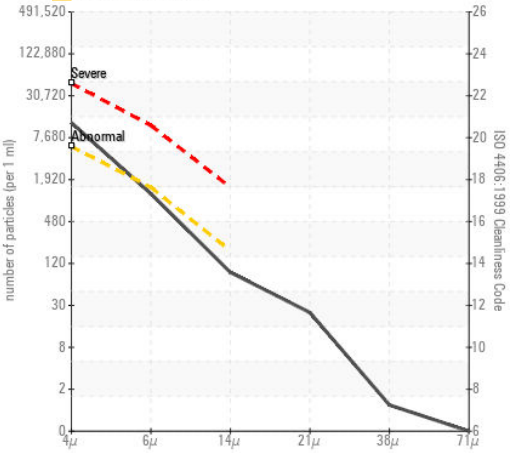
Non-ferrous Metals



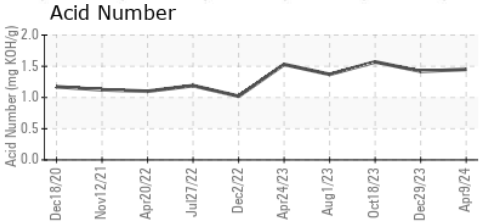
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919030
Lab Number : 06146515
Unique Number : 10976593
Test Package : CONST

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 15 Apr 2024 - Don Baldridge

Certificate L2367

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)

CAROLINA SUNROCK
PO BOX 25
BUTNER, NC
US 27509
Contact: Leigh Dennis
rdennis@thesunrockgroup.com
T: (919)575-4505
F: (919)575-0162