



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
ATTENTION
NORMAL



Area
Mobile Fleet
Machine Id
5214 5214
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC 10W (38 GAL)

RECOMMENDATION

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0861920	WC0867199	WC0834948
Sample Date		Client Info		05 Jan 2024	20 Oct 2023	24 Jul 2023
Machine Age	hrs	Client Info		11449	10920	10359
Oil Age	hrs	Client Info		529	2002	1441
Filter Age	hrs	Client Info		529	2002	1441
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

The iron level is severe.

Iron	ppm	ASTM D5185m	>20	85	145	127
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	4
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	4	9	8
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

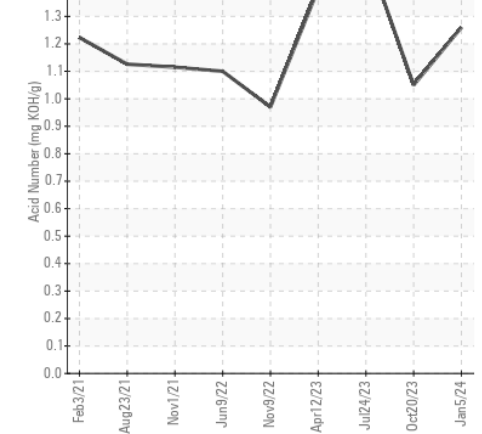
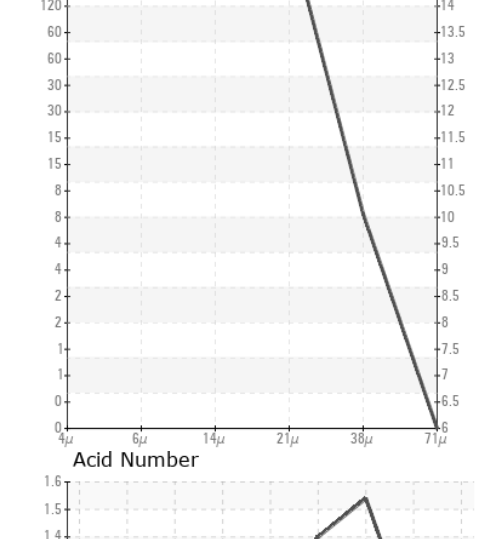
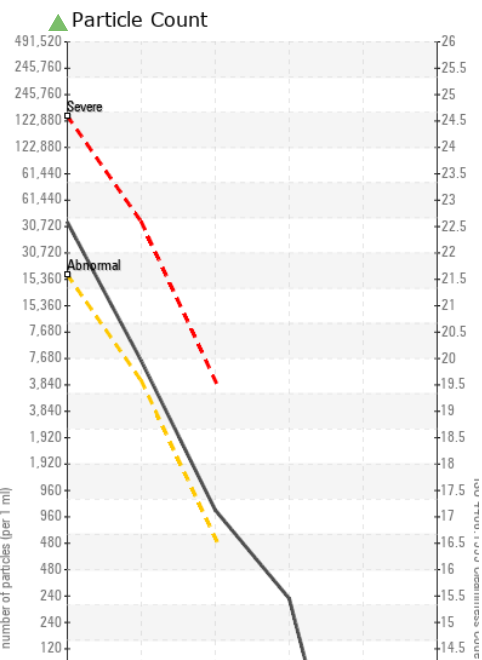
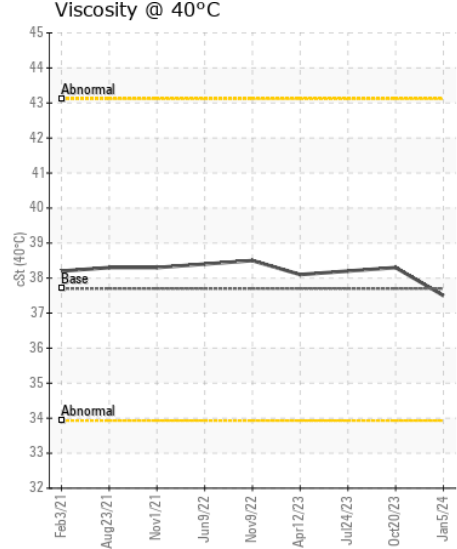
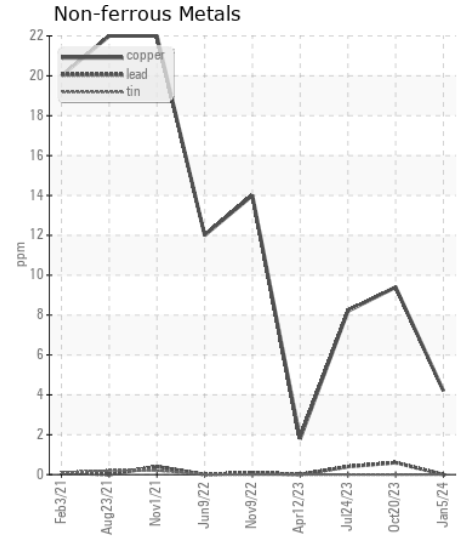
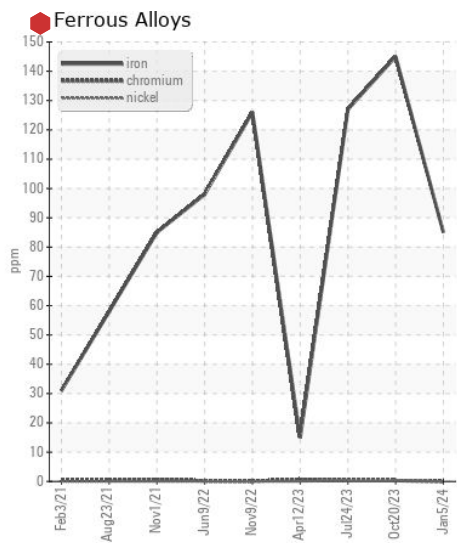
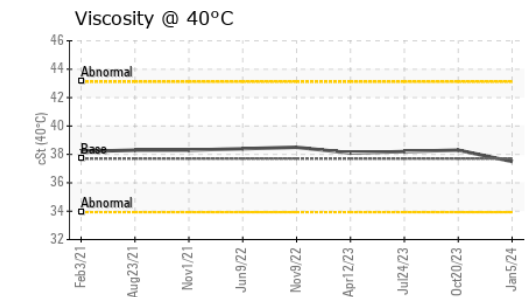
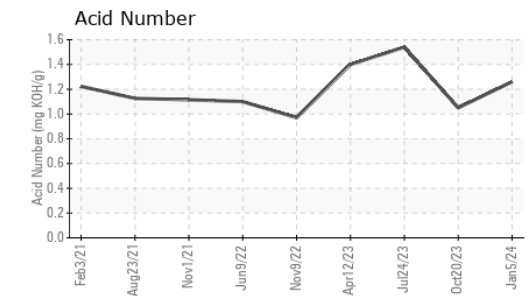
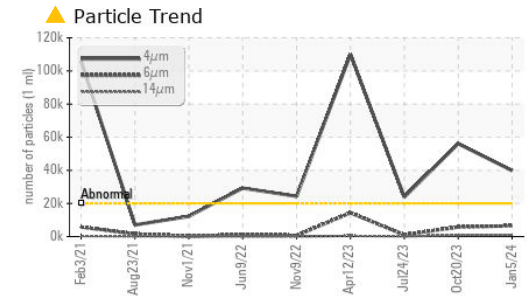
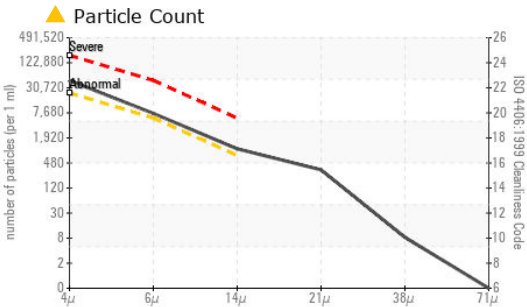
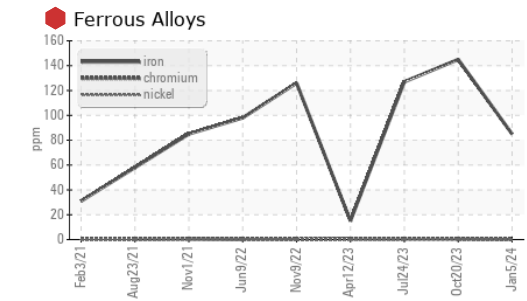
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	8	14	12
Potassium	ppm	ASTM D5185m	>20	0	2	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	39816	56049	23854
Particles >6µm		ASTM D7647	>5000	6485	5723	1026
Particles >14µm		ASTM D7647	>640	920	777	71
Particles >21µm		ASTM D7647	>160	289	245	16
Particles >38µm		ASTM D7647	>40	7	7	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/20/17	23/20/17	22/17/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		0	1	<1
Barium	ppm	ASTM D5185m		0	9	1
Molybdenum	ppm	ASTM D5185m		<1	2	2
Manganese	ppm	ASTM D5185m		<1	2	2
Magnesium	ppm	ASTM D5185m		659	578	592
Calcium	ppm	ASTM D5185m		241	311	337
Phosphorus	ppm	ASTM D5185m		1124	993	1062
Zinc	ppm	ASTM D5185m		1148	1215	1224
Sulfur	ppm	ASTM D5185m		5929	6748	6557
Acid Number (AN)	mg KOH/g	ASTM D8045		1.26	1.05	1.54
Visc @ 40°C	cSt	ASTM D445	37.7	37.5	38.3	38.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0861920 **Received** : 09 Jan 2024
Lab Number : 06055841 **Diagnosed** : 10 Jan 2024
Unique Number : 10821790 **Diagnostician** : Don Baldrige
Test Package : CONST

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

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)