CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
1525 1525
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC 10W (20 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

WEAR

The iron level is abnormal.

CONTAMINATION

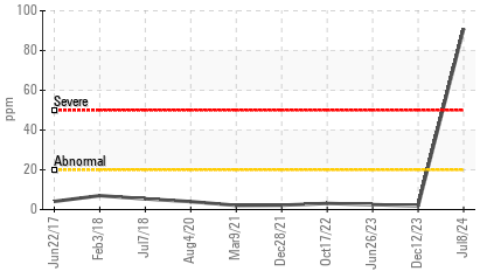
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate amount of visible silt present in the sample.

FLUID CONDITION

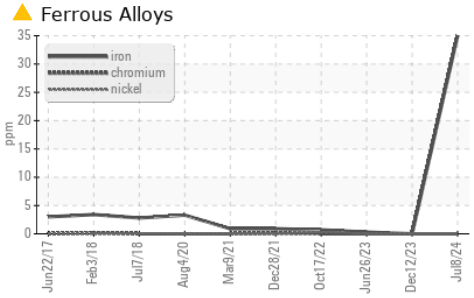
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0937846	WC0861613	WC0808387
Sample Date		Client Info		08 Jul 2024	12 Dec 2023	26 Jun 2023
Machine Age	hrs	Client Info		19794	18995	18384
Oil Age	hrs	Client Info		1424	625	1772
Filter Age	hrs	Client Info		1424	625	1772
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ 35	0	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		2	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	● 43	<1	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>75	2	1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	▲ 91	2	2
Potassium	ppm	ASTM D5185m	>20	4	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	---	▲ 17358	▲ 9771
Particles >6µm		ASTM D7647	>1300	---	▲ 4654	▲ 3721
Particles >14µm		ASTM D7647	>160	---	▲ 346	▲ 381
Particles >21µm		ASTM D7647	>40	---	▲ 96	▲ 80
Particles >38µm		ASTM D7647	>10	---	6	2
Particles >71µm		ASTM D7647	>3	---	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	---	▲ 21/19/16	▲ 20/19/16
Silt	scalar	*Visual	NONE	▲ MODER	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
Sodium	ppm	ASTM D5185m		7	<1	<1
Boron	ppm	ASTM D5185m		10	1	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		595	712	696
Calcium	ppm	ASTM D5185m		332	197	221
Phosphorus	ppm	ASTM D5185m		1210	1133	1080
Zinc	ppm	ASTM D5185m		1350	1326	1311
Sulfur	ppm	ASTM D5185m		8148	7049	8226
Acid Number (AN)	mg KOH/g	ASTM D8045		1.91	1.75	2.09
Visc @ 40°C	cSt	ASTM D445	37.7	36.5	38.9	38.7

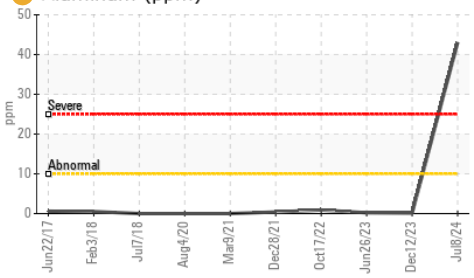
Silicon (ppm)



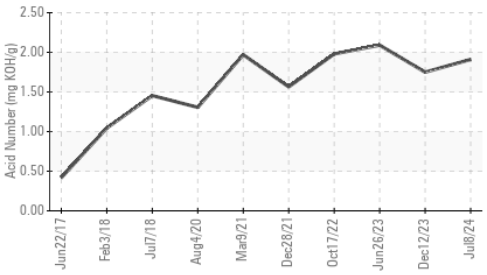
Ferrous Alloys



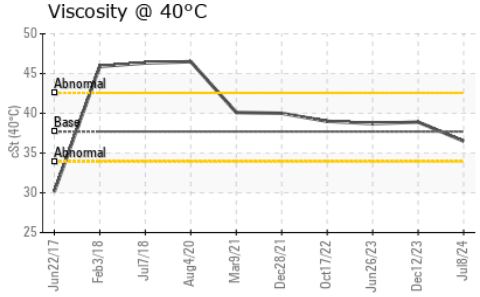
Aluminum (ppm)



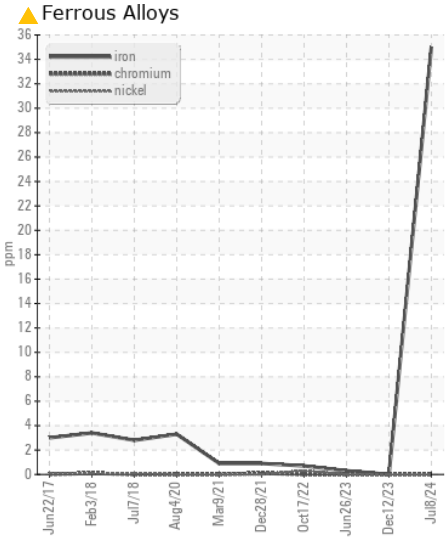
Acid Number



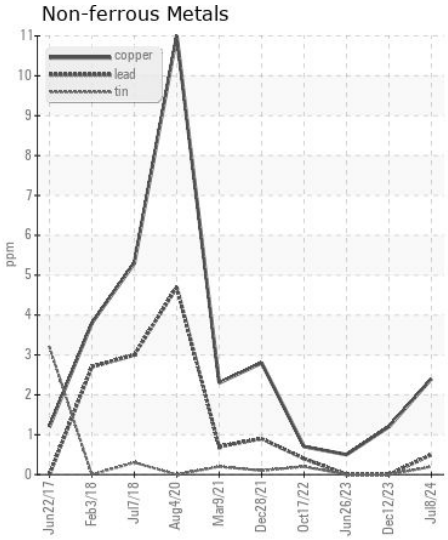
Viscosity @ 40°C



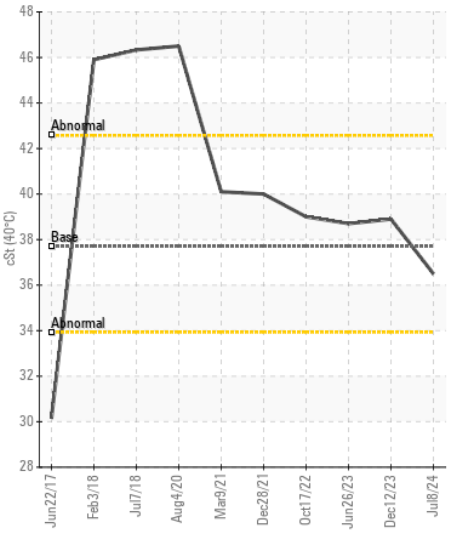
Ferrous Alloys



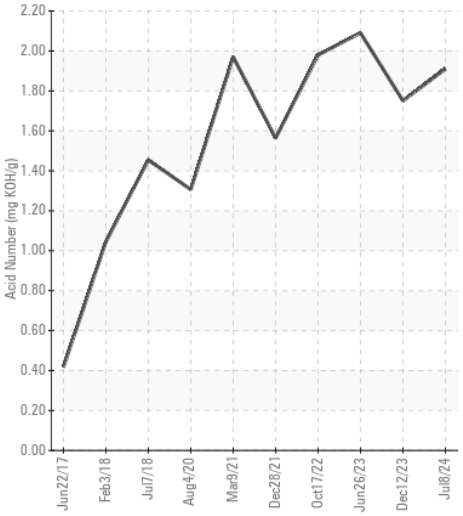
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0937846
Lab Number : 06232170
Unique Number : 11115663
Test Package : CONST

Received : 10 Jul 2024
Tested : 11 Jul 2024
Diagnosed : 11 Jul 2024 - Don Baldridge

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