CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
5215 5215
Component
Front Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

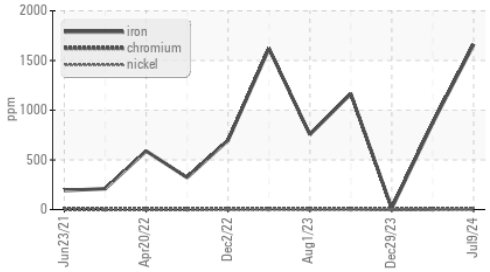
There is a high amount of particulates present in the oil.

FLUID CONDITION

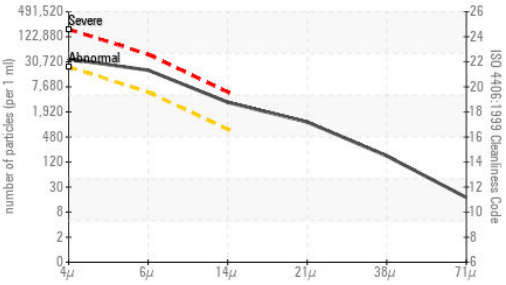
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0956059	WC0919029	WC0861909
Sample Date		Client Info		09 Jul 2024	09 Apr 2024	29 Dec 2023
Machine Age	hrs	Client Info		12932	12329	11759
Oil Age	hrs	Client Info		552	1119	1698
Filter Age	hrs	Client Info		552	0	1698
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>500	▲ 1661	▲ 870	13
Chromium	ppm	ASTM D5185m	>3	4	3	<1
Nickel	ppm	ASTM D5185m	>3	4	4	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	13	5	2
Lead	ppm	ASTM D5185m	>13	0	1	0
Copper	ppm	ASTM D5185m	>103	90	70	1
Tin	ppm	ASTM D5185m	>5	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>100	35	20	4
Potassium	ppm	ASTM D5185m	>20	0	1	<1
Water		WC Method	>.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	▲ 30797	▲ 20618	1383
Particles >6µm		ASTM D7647	>5000	▲ 16777	▲ 11232	754
Particles >14µm		ASTM D7647	>640	▲ 2855	▲ 1912	128
Particles >21µm		ASTM D7647	>160	▲ 962	▲ 644	43
Particles >38µm		ASTM D7647	>40	▲ 148	▲ 99	7
Particles >71µm		ASTM D7647	>10	▲ 15	10	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 22/21/19	▲ 22/21/18	18/17/14
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	>.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	0	0
Boron	ppm	ASTM D5185m		2	2	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	4	1
Manganese	ppm	ASTM D5185m		10	7	0
Magnesium	ppm	ASTM D5185m		37	17	10
Calcium	ppm	ASTM D5185m		3502	3335	2005
Phosphorus	ppm	ASTM D5185m		1007	962	551
Zinc	ppm	ASTM D5185m		1072	975	663
Sulfur	ppm	ASTM D5185m		14591	13004	7682
Visc @ 40°C	cSt	ASTM D445	195	179	192	191

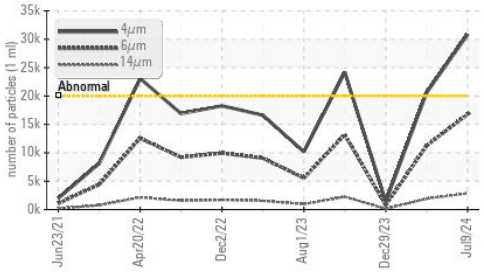
Ferrous Alloys



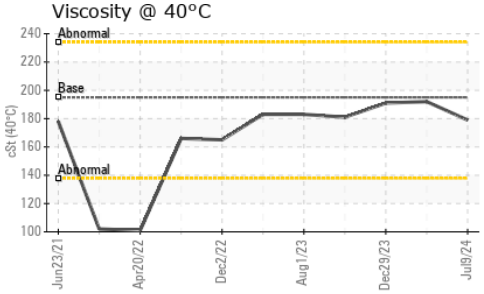
Particle Count



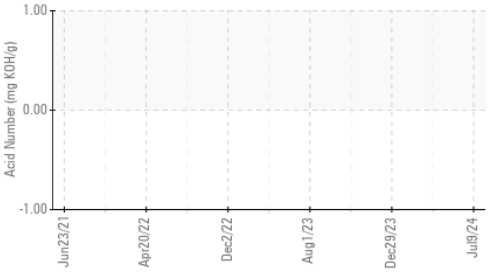
Particle Trend



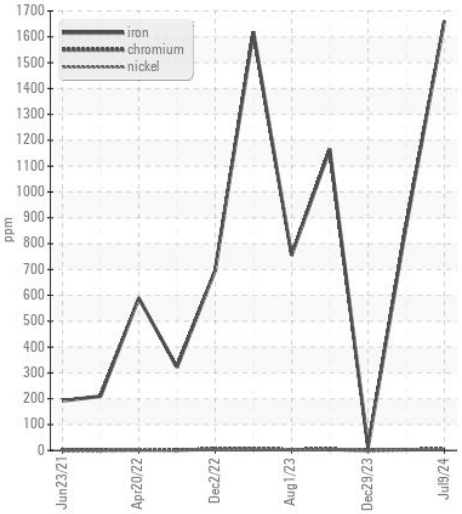
Viscosity @ 40°C



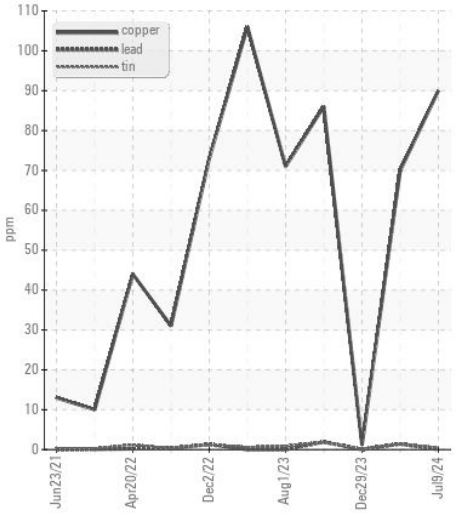
Acid Number



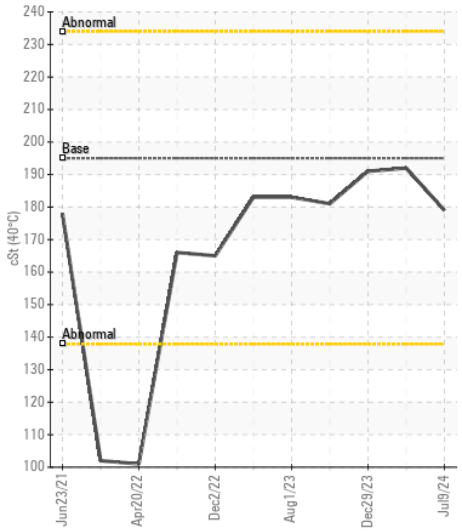
Ferrous Alloys



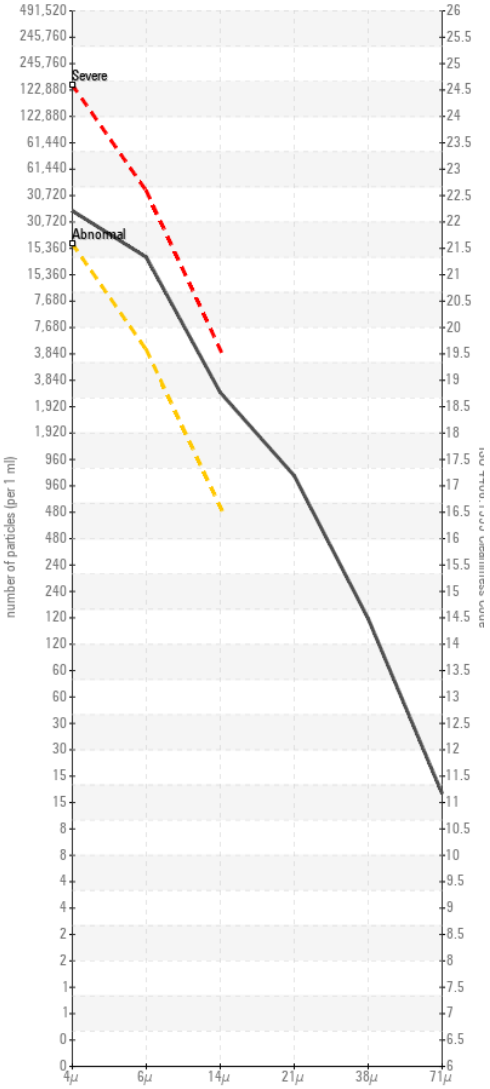
Non-ferrous Metals



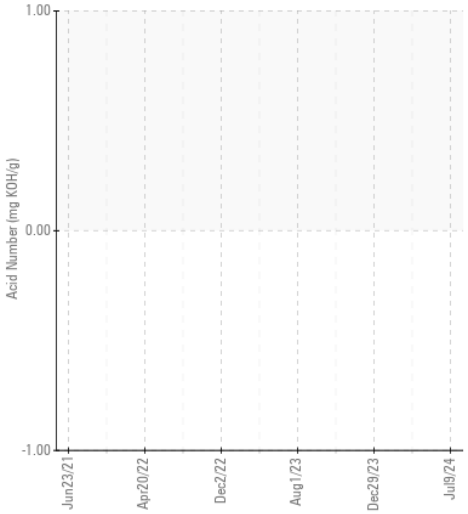
Viscosity @ 40°C



Particle Count



Acid Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: WC0956059	**Received**	: 11 Jul 2024
Lab Number	: 06233149	**Tested**	: 12 Jul 2024
Unique Number	: 11116642	**Diagnosed**	: 12 Jul 2024 - Don Baldridge
Test Package	: CONST (Additional Tests: PrtCount)		

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)

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