



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Mobile Fleet
Machine Id
345 345
Component
Rear Differential
Fluid
MOBIL MOBILTRANS HD 30 (17 GAL)

RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0939277	WC0819195	WC0740719
Sample Date		Client Info		16 May 2024	22 Jun 2023	16 Sep 2022
Machine Age	hrs	Client Info		31225	30695	30119
Oil Age	hrs	Client Info		1129	599	2112
Filter Age	hrs	Client Info		1129	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	146	99	▲ 699
Chromium	ppm	ASTM D5185m	>3	<1	<1	3
Nickel	ppm	ASTM D5185m	>3	0	0	2
Titanium	ppm	ASTM D5185m	>2	<1	<1	2
Silver	ppm	ASTM D5185m	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>30	8	6	▲ 36
Lead	ppm	ASTM D5185m	>13	2	0	3
Copper	ppm	ASTM D5185m	>103	▲ 468	▲ 310	▲ 534
Tin	ppm	ASTM D5185m	>5	2	<1	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

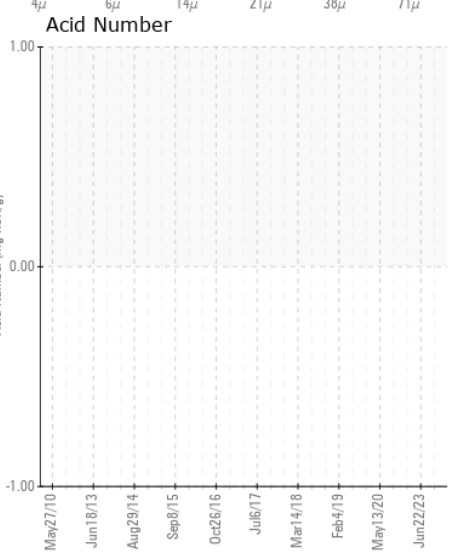
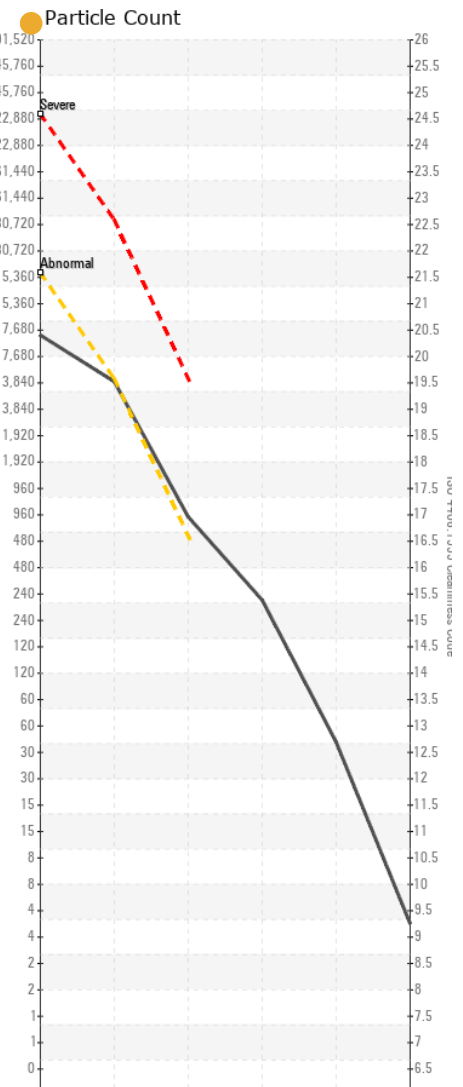
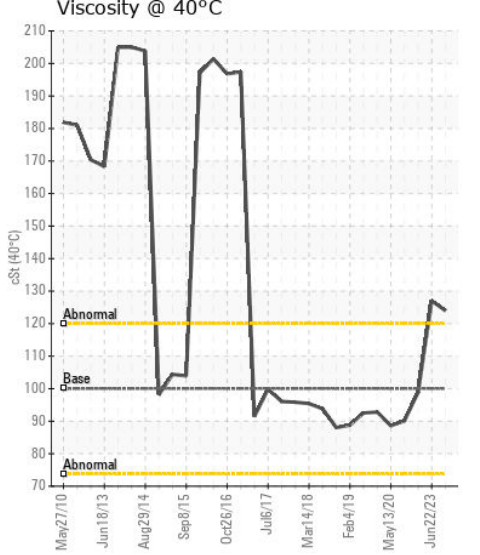
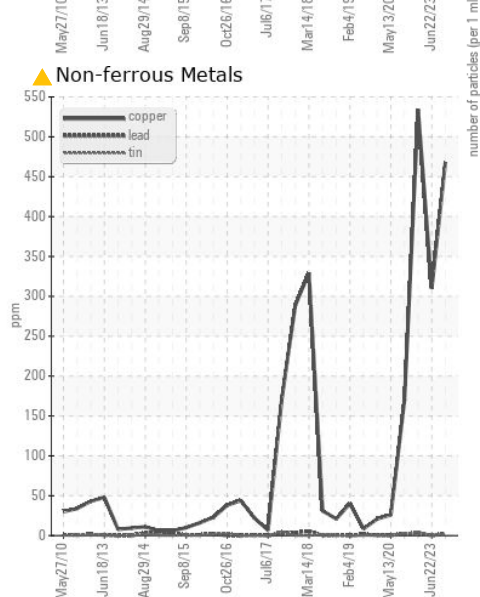
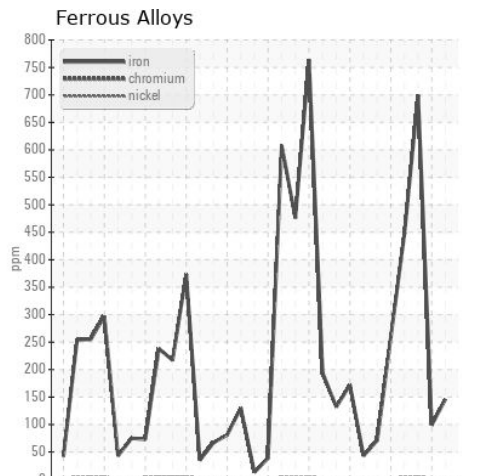
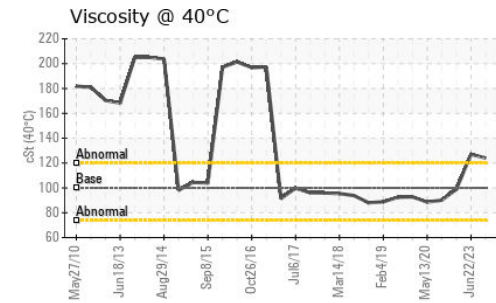
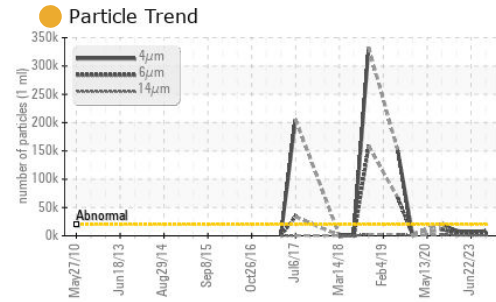
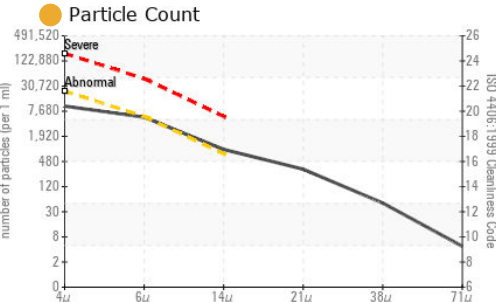
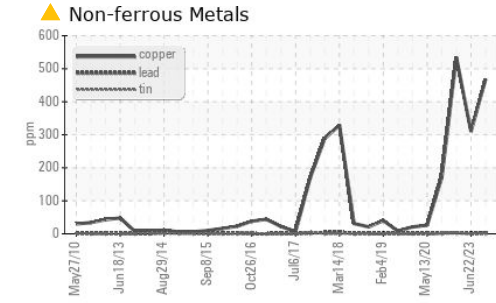
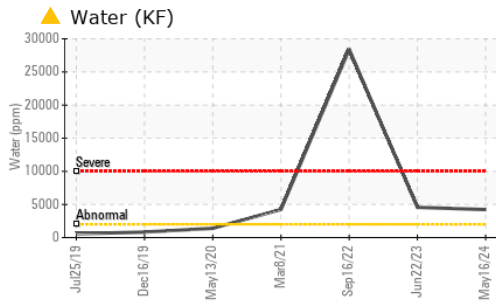
Appearance is hazy. There is a moderate amount of particulates present in the oil. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>100	38	30	96
Potassium	ppm	ASTM D5185m	>20	<1	0	2
Water	%	ASTM D6304	>.2	▲ 0.423	▲ 0.457	▲ 2.84
ppm Water	ppm	ASTM D6304	>2000	▲ 4230	▲ 4570	▲ 28400
Particles >4µm		ASTM D7647	>20000	8839	6542	9048
Particles >6µm		ASTM D7647	>5000	4815	3564	4929
Particles >14µm		ASTM D7647	>640	● 819	607	● 839
Particles >21µm		ASTM D7647	>160	● 276	204	● 283
Particles >38µm		ASTM D7647	>40	● 43	32	44
Particles >71µm		ASTM D7647	>10	4	3	4
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 20/19/17	20/19/16	● 20/19/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	NORML	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	0.2%	▲ 0.2%	▲ 0.2%

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	<1	14
Boron	ppm	ASTM D5185m		1	7	15
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		3	2	8
Manganese	ppm	ASTM D5185m		2	1	5
Magnesium	ppm	ASTM D5185m		42	31	59
Calcium	ppm	ASTM D5185m		3547	3194	2530
Phosphorus	ppm	ASTM D5185m		1021	939	1032
Zinc	ppm	ASTM D5185m		1278	1260	1261
Sulfur	ppm	ASTM D5185m		12899	14312	8191
Visc @ 40°C	cSt	ASTM D445	100	124	127	98.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0939277 **Received** : 21 May 2024
Lab Number : 06185997 **Tested** : 23 May 2024
Unique Number : 11042749 **Diagnosed** : 23 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PrtCount)

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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)