



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

Mobile Fleet

Machine Id

6424 6424

Component

Rear Differential

Fluid

MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90 (5 GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil 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		WC0955984	WC0808817	WC0694911
Sample Date		Client Info		01 Jul 2024	20 Jul 2023	28 Apr 2022
Machine Age	hrs	Client Info		12260	10833	8179
Oil Age	hrs	Client Info		4076	2649	4177
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

The iron level is severe. Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 1780	▲ 774	370
Chromium	ppm	ASTM D5185m	>10	▲ 11	6	3
Nickel	ppm	ASTM D5185m	>10	2	2	5
Titanium	ppm	ASTM D5185m		1	1	<1
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	20	▲ 28	20
Lead	ppm	ASTM D5185m	>25	<1	<1	<1
Copper	ppm	ASTM D5185m	>100	3	2	2
Tin	ppm	ASTM D5185m	>10	5	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

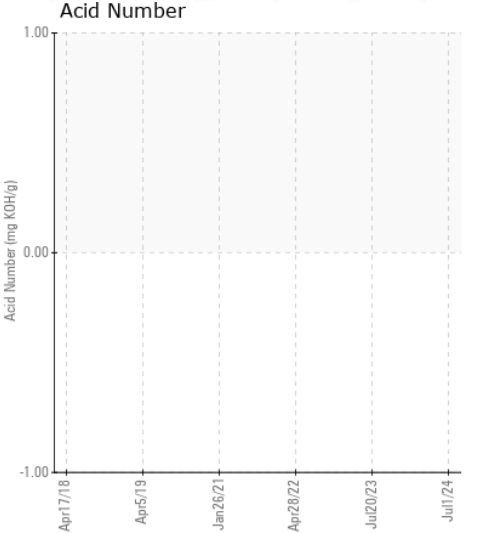
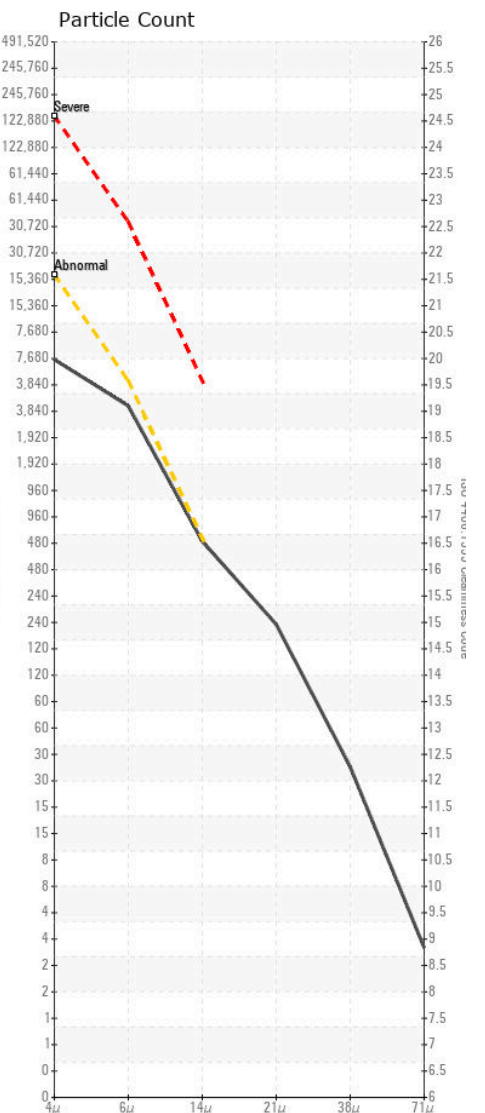
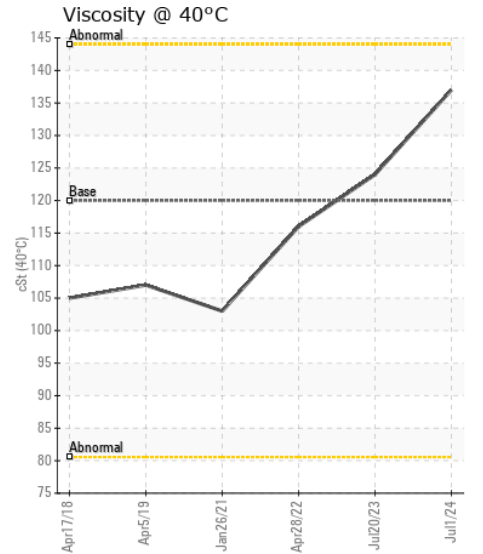
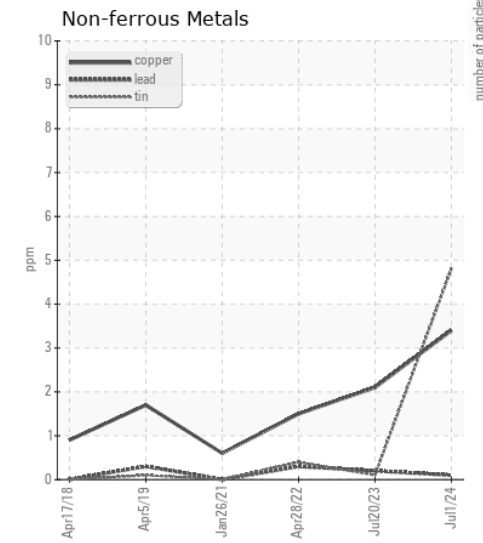
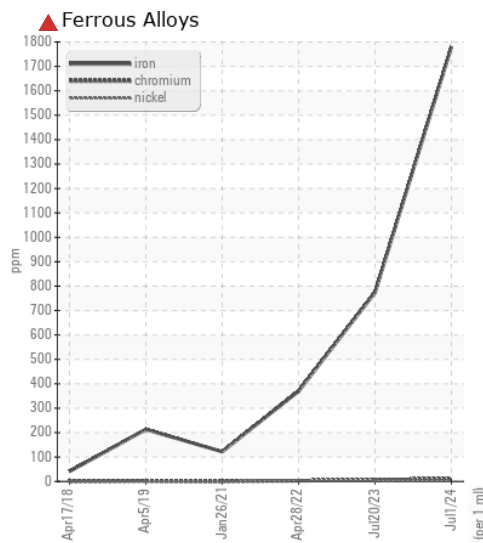
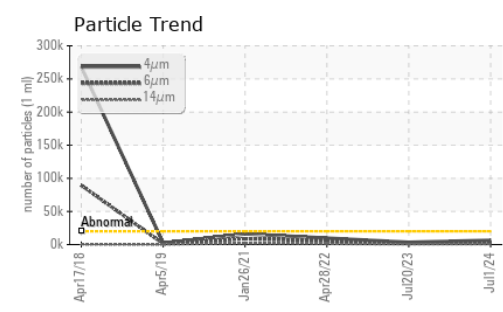
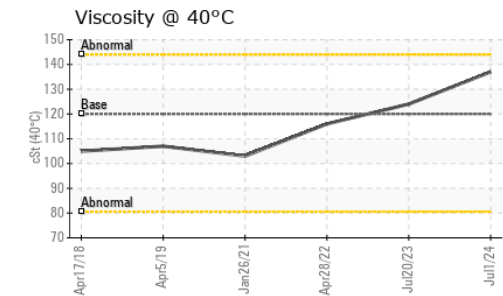
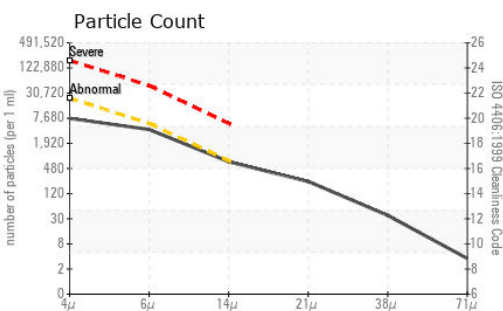
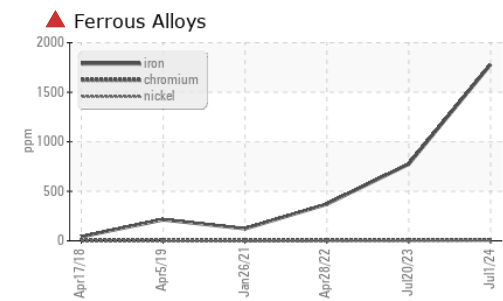
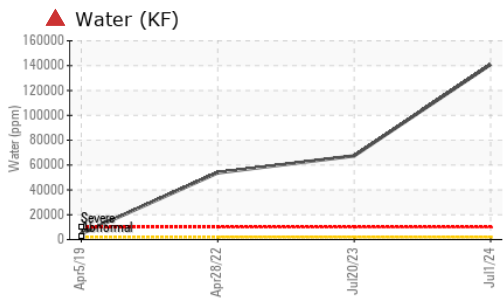
Appearance is milky. There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>75	67	71	33
Potassium	ppm	ASTM D5185m	>20	22	21	11
Water	%	ASTM D6304	>.2	▲ 14.1	▲ 6.74	▲ 5.38
ppm Water	ppm	ASTM D6304	>2000	▲ 141000	▲ 67400	▲ 53800
Particles >4µm		ASTM D7647	>20000	6598	3497	9859
Particles >6µm		ASTM D7647	>5000	3594	1905	● 5371
Particles >14µm		ASTM D7647	>640	612	324	● 914
Particles >21µm		ASTM D7647	>160	206	109	● 308
Particles >38µm		ASTM D7647	>40	32	17	● 48
Particles >71µm		ASTM D7647	>10	3	2	5
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/19/16	19/18/16	● 20/20/17
Silt	scalar	*Visual	NONE	MODER	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	● MILKY	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	▲ 0.2%	▲ 0.2%	▲ 0.2%

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		6	15	9
Boron	ppm	ASTM D5185m		190	219	268
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		3	4	1
Manganese	ppm	ASTM D5185m		21	10	6
Magnesium	ppm	ASTM D5185m		31	29	18
Calcium	ppm	ASTM D5185m		152	166	83
Phosphorus	ppm	ASTM D5185m		1314	1277	1469
Zinc	ppm	ASTM D5185m		93	94	76
Sulfur	ppm	ASTM D5185m		26777	24531	23327
Visc @ 40°C	cSt	ASTM D445	120	137	124	116



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0955984 **Received** : 05 Jul 2024
Lab Number : 06228417 **Tested** : 09 Jul 2024
Unique Number : 11111910 **Diagnosed** : 09 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PrtCount)

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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)