



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

Mobile Fleet

Machine Id

8114 8114

Component

Front Differential

Fluid

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

RECOMMENDATION

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		WC0885921	WC0740880	WC0585600
Sample Date		Client Info		09 Jan 2024	12 Sep 2022	20 May 2021
Machine Age	hrs	Client Info		12243	9481	6234
Oil Age	hrs	Client Info		6009	3247	6223
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

The copper level is severe. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	446	288	233
Chromium	ppm	ASTM D5185m	>10	3	1	1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	<1	2
Aluminum	ppm	ASTM D5185m	>25	2	5	1
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>100	752	409	181
Tin	ppm	ASTM D5185m	>10	10	5	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

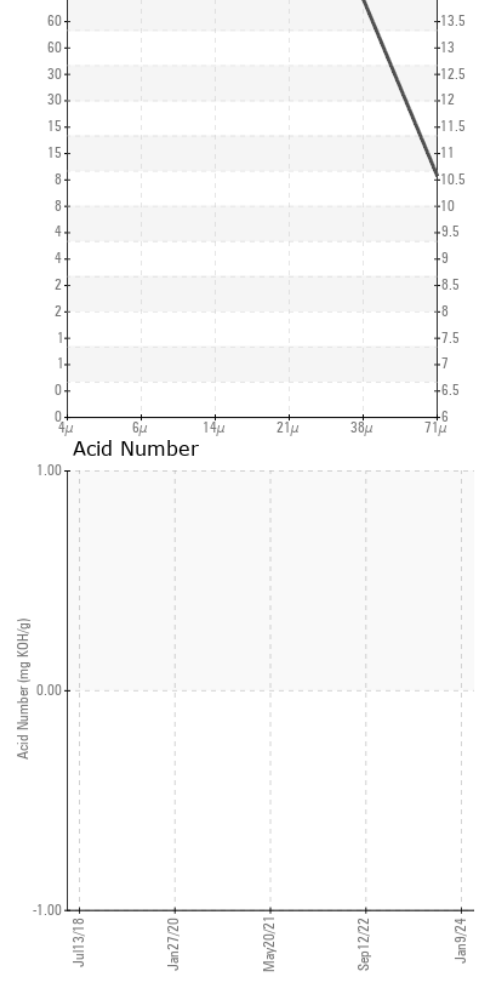
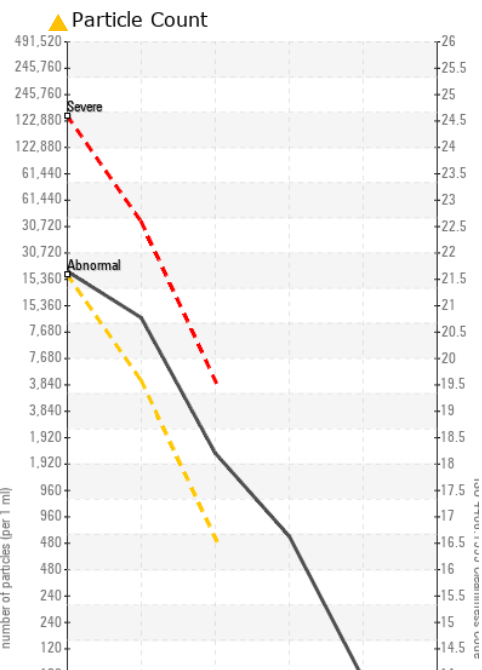
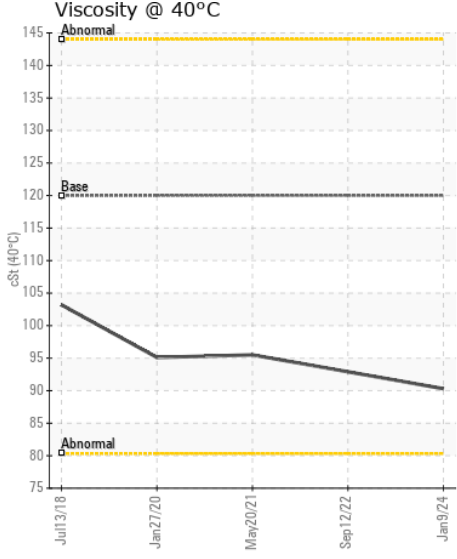
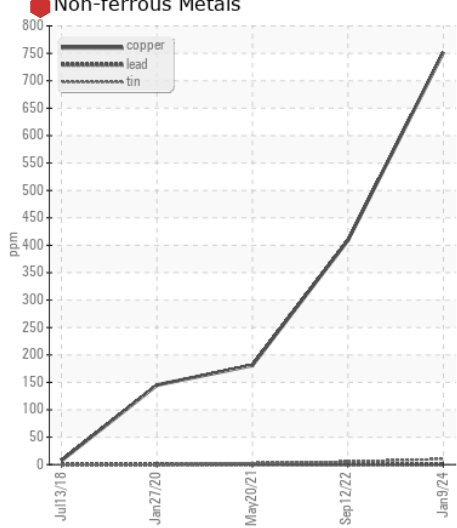
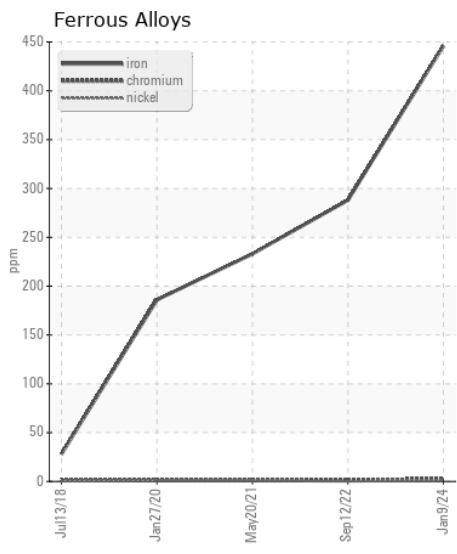
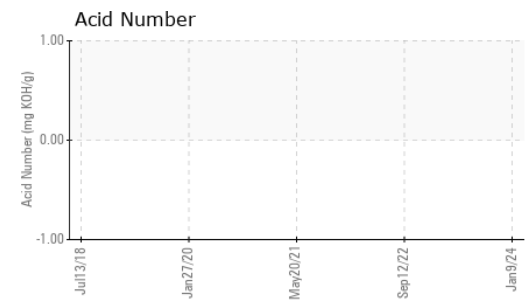
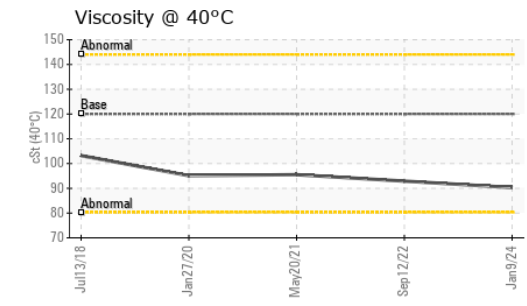
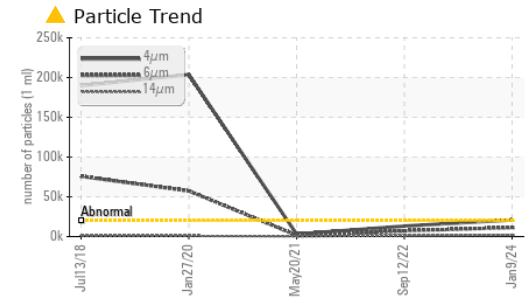
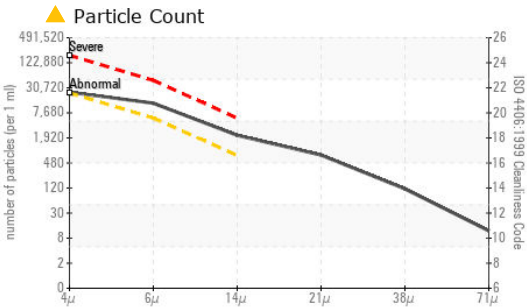
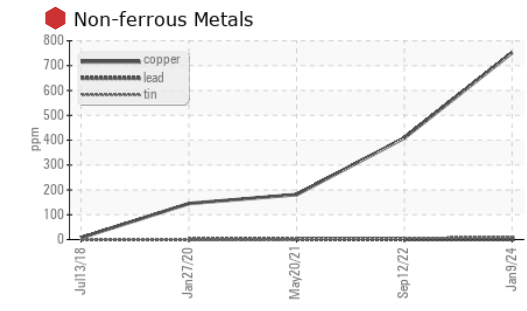
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>75	68	35	17
Potassium	ppm	ASTM D5185m	>20	3	2	<1
Water		WC Method	>.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	20914	13189	3138
Particles >6µm		ASTM D7647	>5000	11393	7185	1710
Particles >14µm		ASTM D7647	>640	1939	1223	291
Particles >21µm		ASTM D7647	>160	653	412	98
Particles >38µm		ASTM D7647	>40	101	64	15
Particles >71µm		ASTM D7647	>10	10	6	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/21/18	21/20/17	19/18/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	0	2
Boron	ppm	ASTM D5185m		307	346	324
Barium	ppm	ASTM D5185m		<1	0	<1
Molybdenum	ppm	ASTM D5185m		3	2	3
Manganese	ppm	ASTM D5185m		8	5	6
Magnesium	ppm	ASTM D5185m		20	17	33
Calcium	ppm	ASTM D5185m		53	49	79
Phosphorus	ppm	ASTM D5185m		1511	1279	1479
Zinc	ppm	ASTM D5185m		57	51	61
Sulfur	ppm	ASTM D5185m		26030	21149	22026
Visc @ 40°C	cSt	ASTM D445	120	90.3	92.9	95.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0885921 **Received** : 11 Jan 2024
Lab Number : 06057953 **Diagnosed** : 12 Jan 2024
Unique Number : 10829335 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: 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)