



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Mobile Fleet
Machine Id
5100 5100
Component
Center Differential
Fluid
MOBIL MOBILTRANS HD 50 (12 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0919125	WC0852354	WC0726535
Sample Date		Client Info		18 Apr 2024	06 Sep 2023	10 Aug 2022
Machine Age	hrs	Client Info		12788	11569	10374
Oil Age	hrs	Client Info		2419	1200	2150
Filter Age	hrs	Client Info		0	1200	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	301	107	204
Chromium	ppm	ASTM D5185m	>3	2	<1	1
Nickel	ppm	ASTM D5185m	>3	1	0	1
Titanium	ppm	ASTM D5185m	>2	5	2	6
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	27	7	9
Lead	ppm	ASTM D5185m	>13	<1	<1	<1
Copper	ppm	ASTM D5185m	>103	10	4	13
Tin	ppm	ASTM D5185m	>5	<1	<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

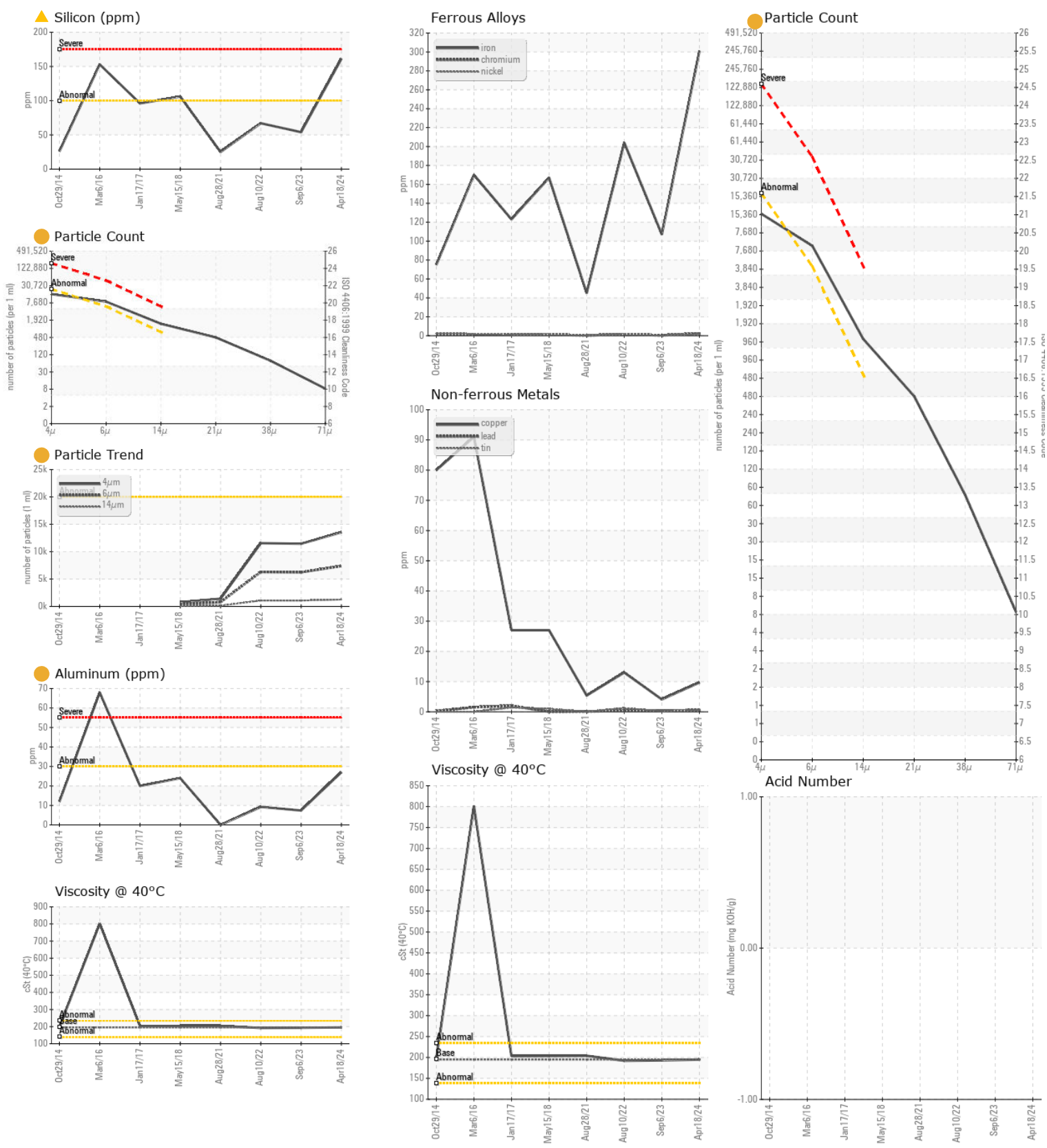
There is a moderate amount of particulates present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	161	54	67
Potassium	ppm	ASTM D5185m	>20	7	0	0
Water		WC Method	>.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	13545	11440	11547
Particles >6µm		ASTM D7647	>5000	7379	6232	6290
Particles >14µm		ASTM D7647	>640	1256	1061	1071
Particles >21µm		ASTM D7647	>160	423	357	361
Particles >38µm		ASTM D7647	>40	65	55	56
Particles >71µm		ASTM D7647	>10	7	6	6
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/20/17	21/20/17	21/20/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	HEAVY	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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	1	1
Boron	ppm	ASTM D5185m		2	<1	12
Barium	ppm	ASTM D5185m		3	0	3
Molybdenum	ppm	ASTM D5185m		2	<1	2
Manganese	ppm	ASTM D5185m		4	1	2
Magnesium	ppm	ASTM D5185m		33	17	16
Calcium	ppm	ASTM D5185m		5236	3792	3497
Phosphorus	ppm	ASTM D5185m		1463	945	935
Zinc	ppm	ASTM D5185m		1673	1209	1163
Sulfur	ppm	ASTM D5185m		20321	14864	10500
Visc @ 40°C	cSt	ASTM D445	195	195	193	192



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919125
Lab Number : 06156827
Unique Number : 10992250
Test Package : CONST (Additional Tests: 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)