



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

Contracting

Machine Id

5517 5517

Component

Right Final Drive

Fluid

MOBIL MOBILUBE HD PLUS 85W140 (2 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. 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		WC0885937	WC0808882	WC0740799
Sample Date		Client Info		26 Jan 2024	18 Apr 2023	04 Oct 2022
Machine Age	hrs	Client Info		8422	7913	7272
Oil Age	hrs	Client Info		1967	1458	817
Filter Age	hrs	Client Info		0	1458	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	1907	1677	751
Chromium	ppm	ASTM D5185m	>10	12	12	4
Nickel	ppm	ASTM D5185m	>10	6	5	0
Titanium	ppm	ASTM D5185m		10	10	3
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	222	201	60
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>50	6	5	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

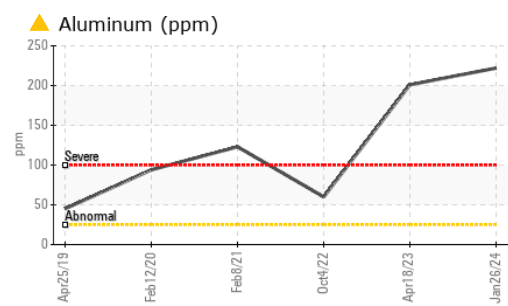
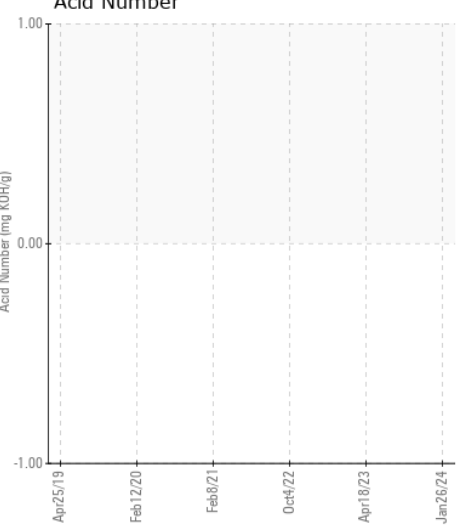
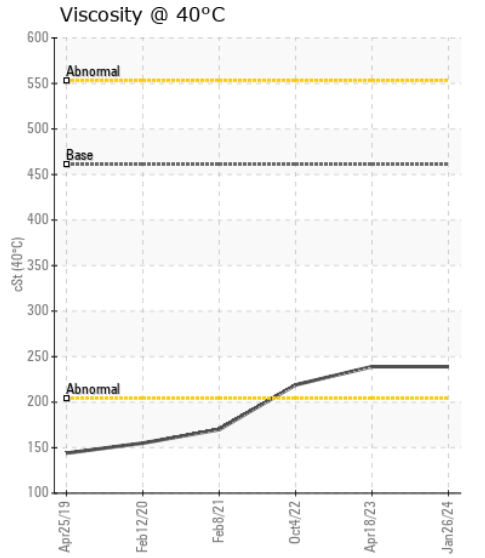
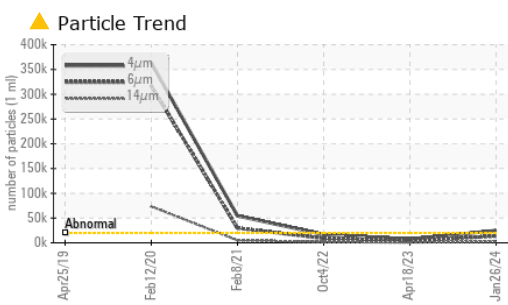
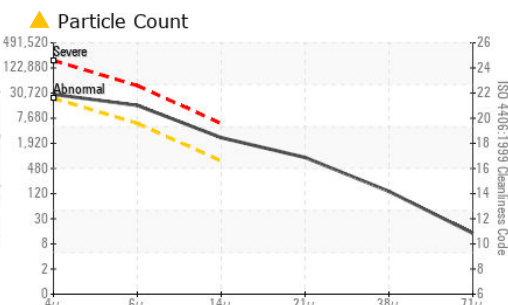
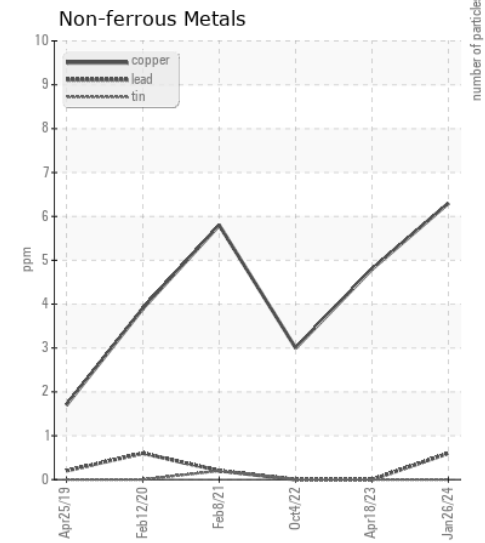
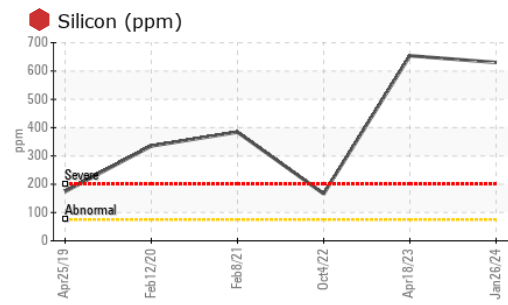
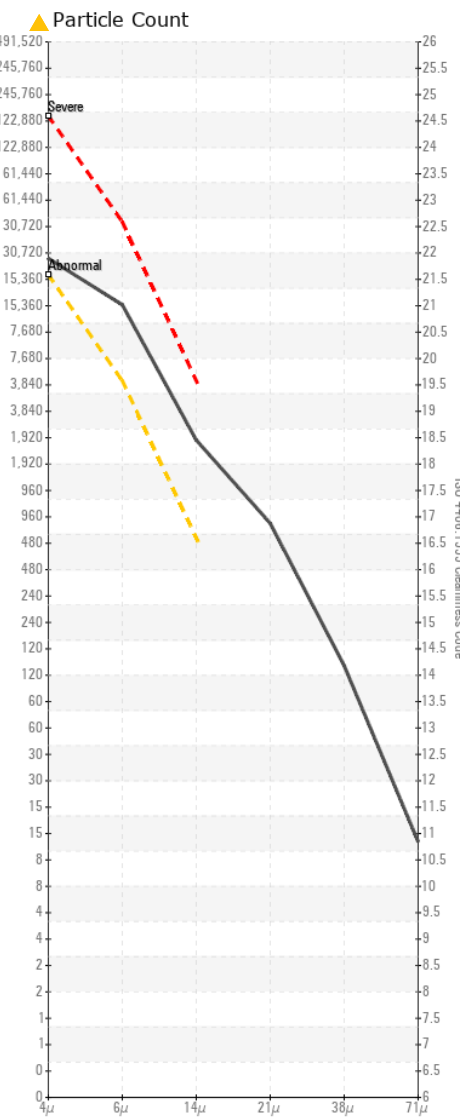
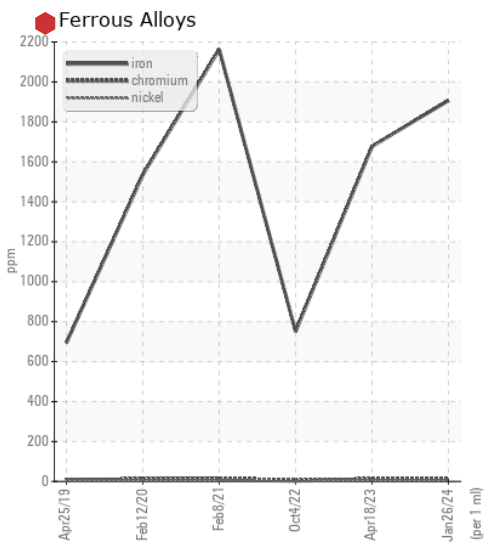
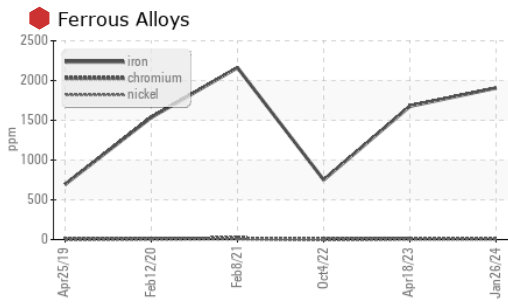
There is a high amount of particulates present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	630	654	166
Potassium	ppm	ASTM D5185m	>20	57	54	9
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	24794	7517	16645
Particles >6µm		ASTM D7647	>5000	13507	4095	9067
Particles >14µm		ASTM D7647	>640	2299	697	1543
Particles >21µm		ASTM D7647	>160	774	235	520
Particles >38µm		ASTM D7647	>40	120	36	80
Particles >71µm		ASTM D7647	>10	12	4	8
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/21/18	20/19/17	21/20/18
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	>0.2	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		20	24	4
Boron	ppm	ASTM D5185m		104	93	94
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		2	2	3
Manganese	ppm	ASTM D5185m		13	12	5
Magnesium	ppm	ASTM D5185m		27	29	36
Calcium	ppm	ASTM D5185m		70	76	119
Phosphorus	ppm	ASTM D5185m		1172	1284	1301
Zinc	ppm	ASTM D5185m		46	57	90
Sulfur	ppm	ASTM D5185m		25671	26950	28895
Visc @ 40°C	cSt	ASTM D445	461	239	239	219



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0885937 **Received** : 30 Jan 2024
Lab Number : 06074583 **Diagnosed** : 01 Feb 2024
Unique Number : 10856674 **Diagnostician** : Jonathan Hester
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)