



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Contracting
 Machine Id
5517 5517
 Component
Left 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		WC0885936	WC0808881	WC0740800
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	0	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	1715	1489	517
Chromium	ppm	ASTM D5185m	>10	11	10	3
Nickel	ppm	ASTM D5185m	>10	4	4	0
Titanium	ppm	ASTM D5185m		8	8	2
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	159	147	41
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>50	6	4	2
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

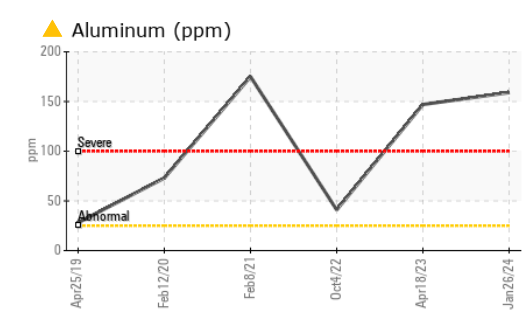
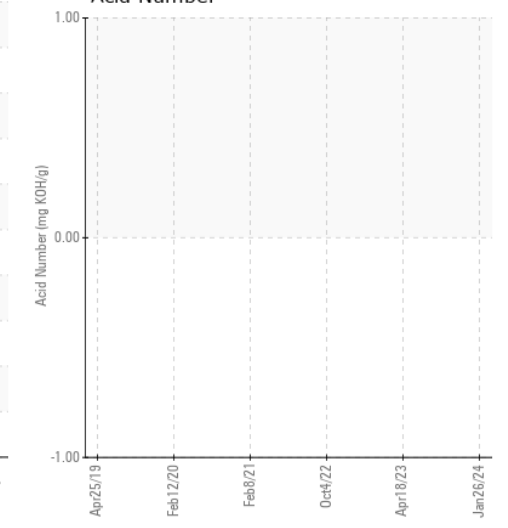
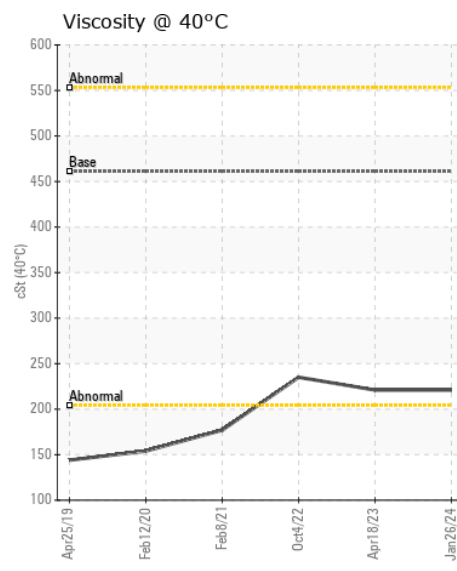
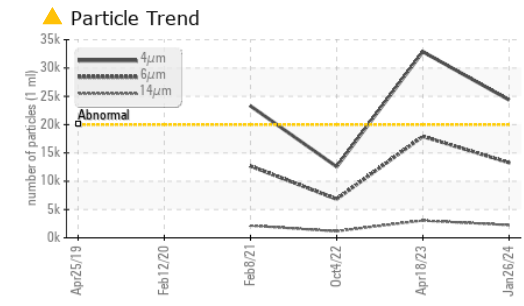
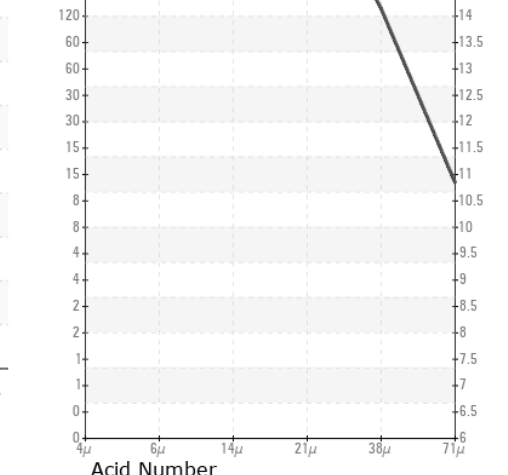
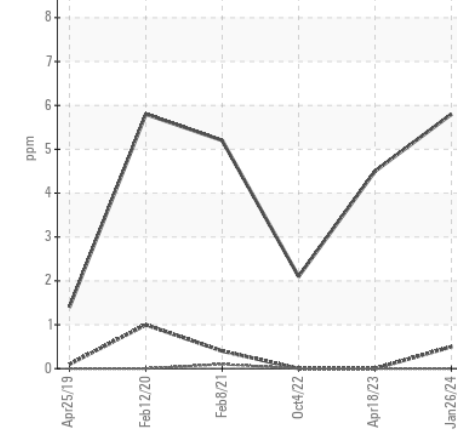
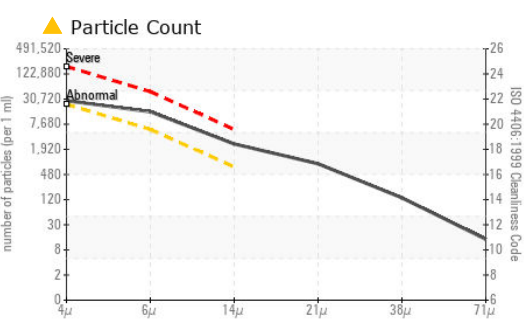
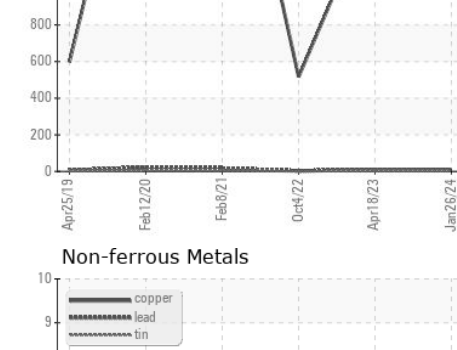
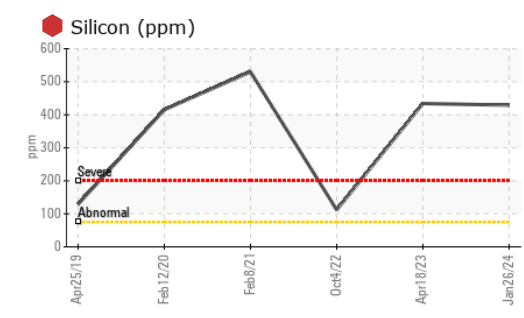
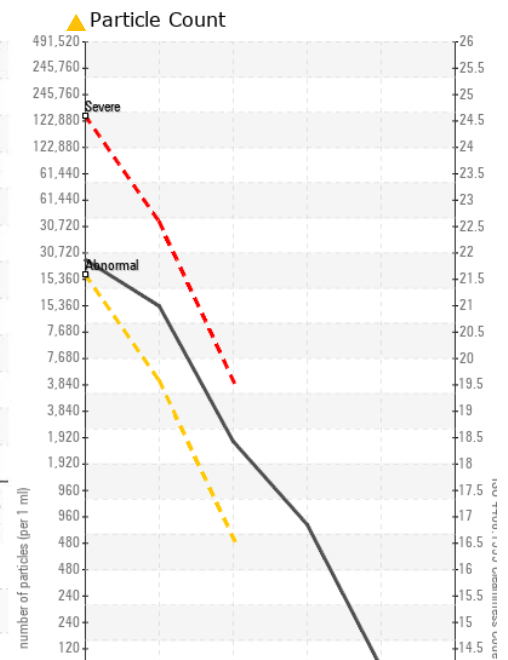
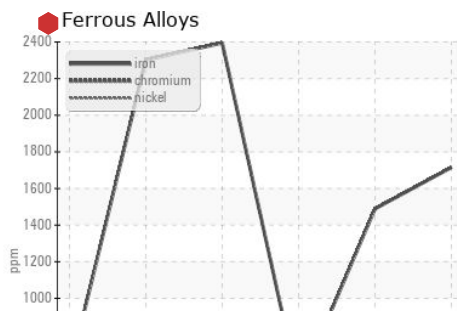
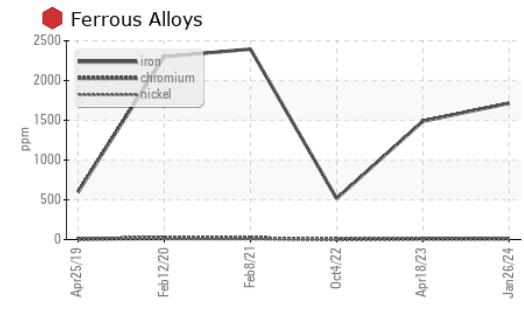
There is a high amount of particulates present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	429	434	112
Potassium	ppm	ASTM D5185m	>20	35	32	8
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	24359	32876	12558
Particles >6µm		ASTM D7647	>5000	13270	17909	6841
Particles >14µm		ASTM D7647	>640	2258	3048	1164
Particles >21µm		ASTM D7647	>160	761	1027	392
Particles >38µm		ASTM D7647	>40	117	159	61
Particles >71µm		ASTM D7647	>10	12	16	6
Oil Cleanliness		ISO 4406 (c)	>21/19/16	22/21/18	22/21/19	21/20/17
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 due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		12	16	2
Boron	ppm	ASTM D5185m		110	109	83
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		4	3	1
Manganese	ppm	ASTM D5185m		12	11	4
Magnesium	ppm	ASTM D5185m		41	45	14
Calcium	ppm	ASTM D5185m		117	128	63
Phosphorus	ppm	ASTM D5185m		1156	1302	1232
Zinc	ppm	ASTM D5185m		85	91	54
Sulfur	ppm	ASTM D5185m		24115	26335	27123
Visc @ 40°C	cSt	ASTM D445	461	221	221	235



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0885936 **Received** : 30 Jan 2024
Lab Number : 06074584 **Diagnosed** : 01 Feb 2024
Unique Number : 10856675 **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)