



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
MERCURY COMET 1964 MERCURY COMET

Component
Gasoline Engine

Fluid
{not provided} (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

The nickel level is abnormal. High concentration of visible metal present. Bearing and/or bushing wear is indicated.

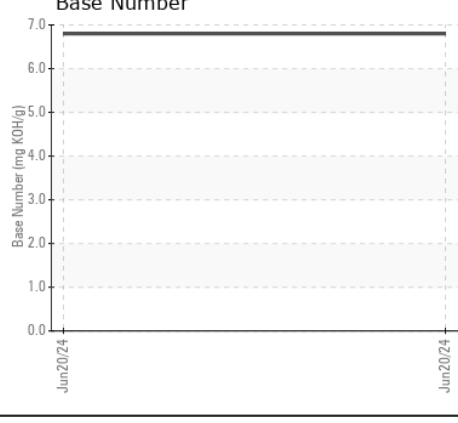
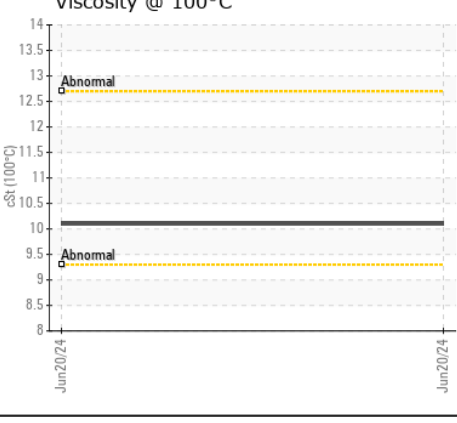
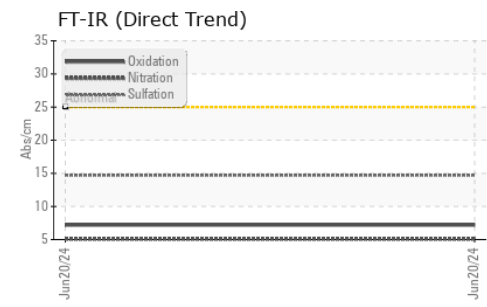
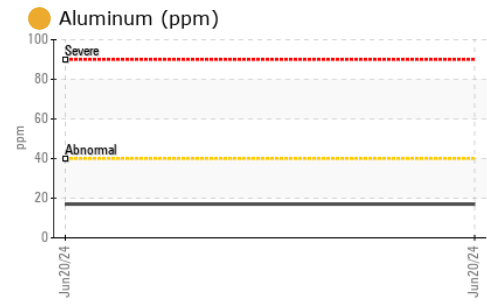
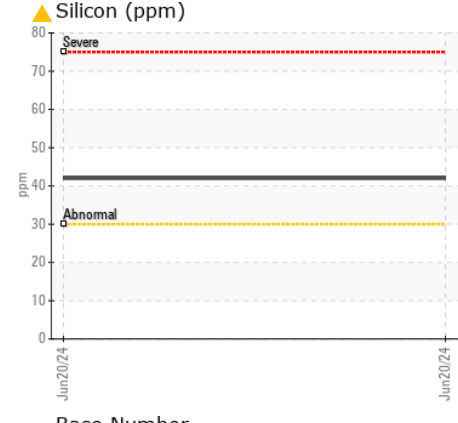
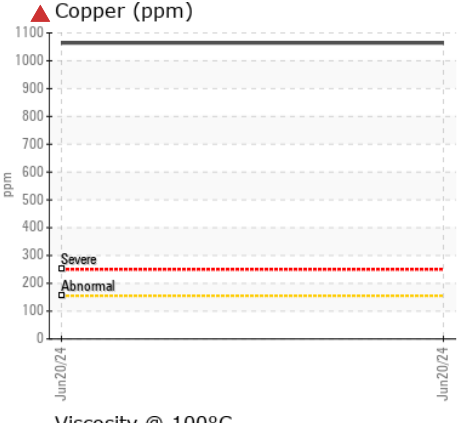
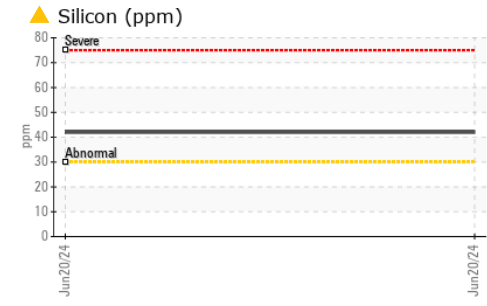
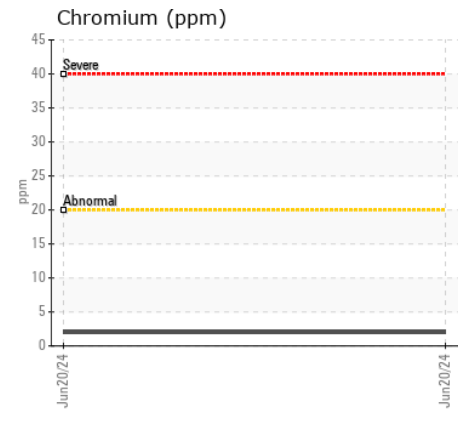
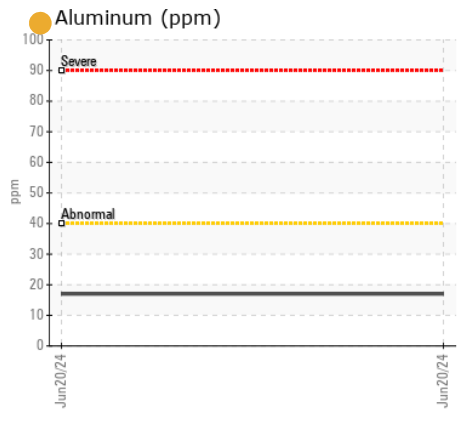
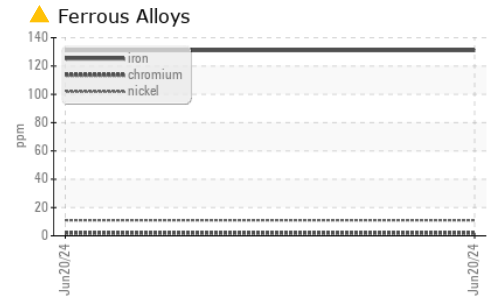
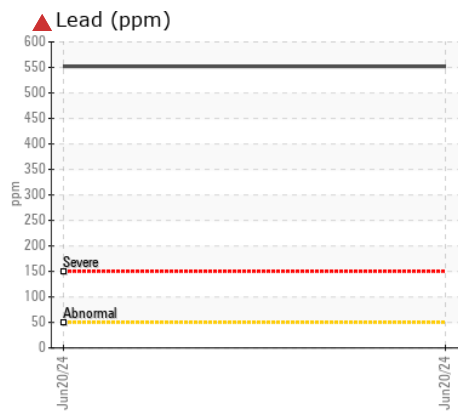
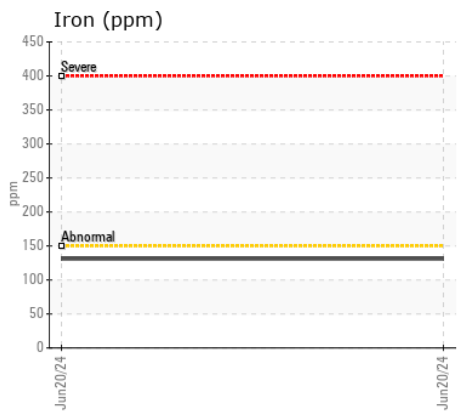
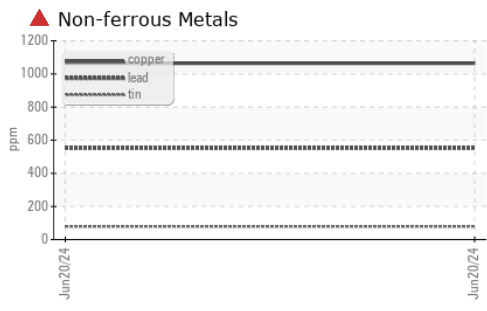
CONTAMINATION

Sodium and/or potassium levels are high. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LF169464	---	---
Sample Date		Client Info		20 Jun 2024	---	---
Machine Age	mls	Client Info		0	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>150	131	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>5	▲ 11	---	---
Titanium	ppm	ASTM D5185m		2	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>40	● 17	---	---
Lead	ppm	ASTM D5185m	>50	▲ 552	---	---
Copper	ppm	ASTM D5185m	>155	▲ 1064	---	---
Tin	ppm	ASTM D5185m	>10	▲ 79	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	▲ HEAVY	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>30	▲ 42	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 73	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844		0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.7	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m	>400	21	---	---
Boron	ppm	ASTM D5185m		99	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		63	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m		88	---	---
Calcium	ppm	ASTM D5185m		1760	---	---
Phosphorus	ppm	ASTM D5185m		589	---	---
Zinc	ppm	ASTM D5185m		702	---	---
Sulfur	ppm	ASTM D5185m		2337	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	---	---
Visc @ 100°C	cSt	ASTM D445		10.1	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LF169464 **Received** : 25 Jun 2024
Lab Number : **06219558** **Tested** : 27 Jun 2024
Unique Number : 11097755 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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 HAMPSTEAD, NC
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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)