



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**721061**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120461</b>	GFL0120452	GFL0108603
Sample Date		Client Info		<b>07 Jun 2024</b>	08 May 2024	21 Apr 2024
Machine Age	hrs	Client Info		<b>19551</b>	18812	18812
Oil Age	hrs	Client Info		<b>500</b>	18812	500
Filter Age	hrs	Client Info		<b>500</b>	0	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>49</b>	26	51
Chromium	ppm	ASTM D5185m	>5	<b>3</b>	2	3
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>25	<b>1</b>	2	<1
Copper	ppm	ASTM D5185m	>100	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

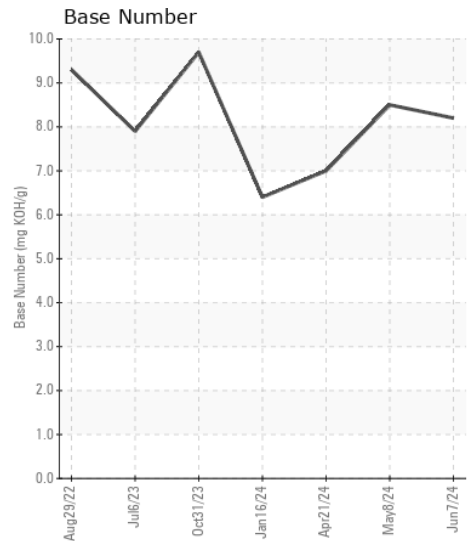
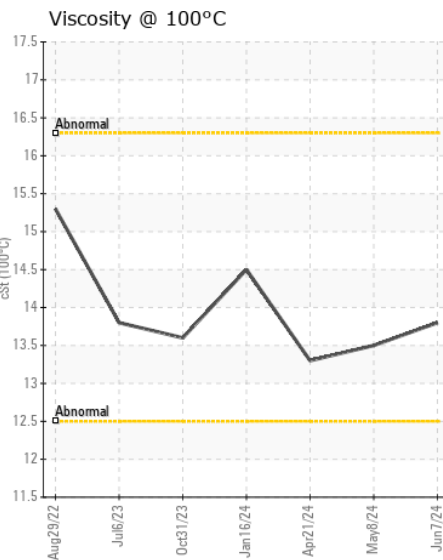
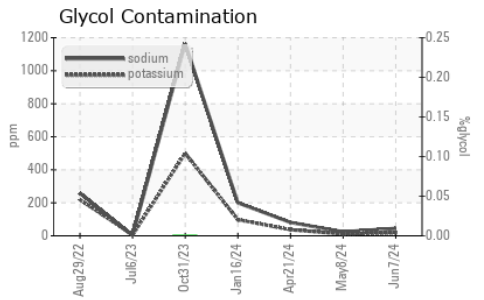
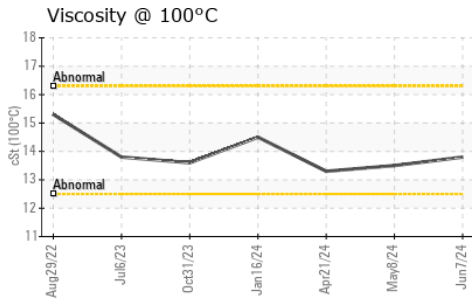
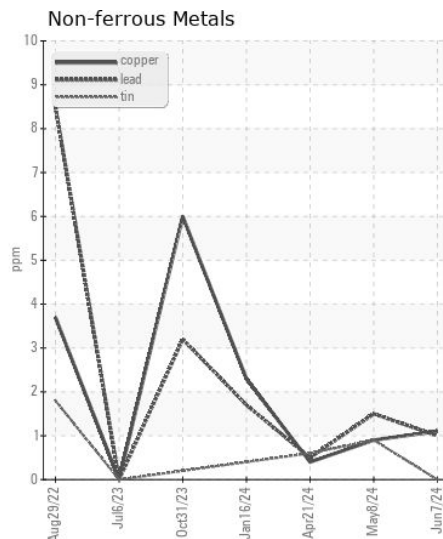
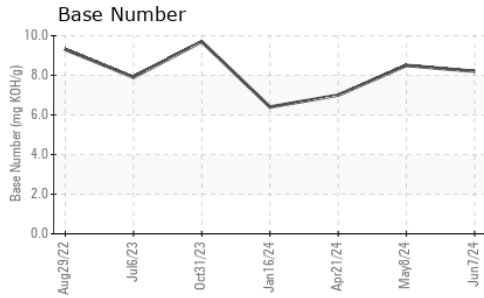
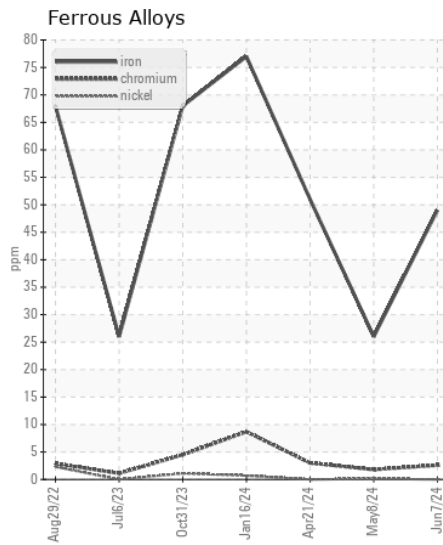
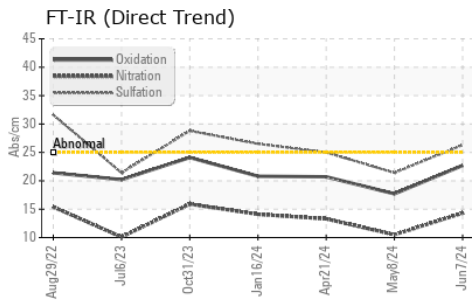
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	6	14
Potassium	ppm	ASTM D5185m	>20	<b>19</b>	11	37
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>2.6</b>	1.4	2.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.3</b>	10.5	13.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.3</b>	21.4	25.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>45</b>	24	81
Boron	ppm	ASTM D5185m		<b>9</b>	6	11
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>62</b>	58	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>1015</b>	979	874
Calcium	ppm	ASTM D5185m		<b>1212</b>	1155	1024
Phosphorus	ppm	ASTM D5185m		<b>1089</b>	1056	970
Zinc	ppm	ASTM D5185m		<b>1315</b>	1306	1169
Sulfur	ppm	ASTM D5185m		<b>3549</b>	3681	3124
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.7</b>	17.7	20.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	8.5	7.0
Visc @ 100°C	cSt	ASTM D445		<b>13.8</b>	13.5	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120461 **Received** : 28 Jun 2024  
**Lab Number** : 06223215 **Tested** : 01 Jul 2024  
**Unique Number** : 11101412 **Diagnosed** : 01 Jul 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 938 - Hager City**  
W9724 WIS-35  
HAGER CITY, WI  
US 54014  
Contact: ANDY KANE

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)

T: (715)202-3420

F: