



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

Area  
**(36J4GJ)**  
Machine Id  
**225047-603258**

Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (8 Shots)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0098722</b>	GFL0065472	GFL0065459
Sample Date		Client Info		<b>16 Jan 2024</b>	13 Oct 2023	06 Oct 2023
Machine Age	mls	Client Info		<b>263550</b>	692	46
Oil Age	mls	Client Info		<b>0</b>	150	150
Filter Age	mls	Client Info		<b>0</b>	150	150
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>6</b>	2	48
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	3	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

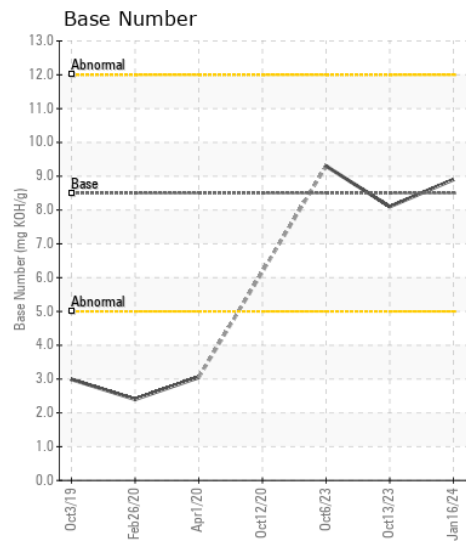
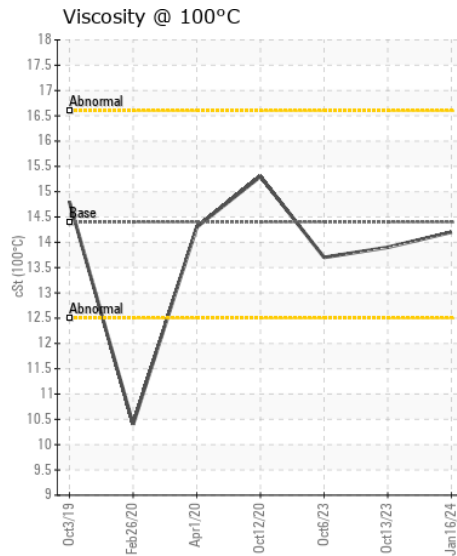
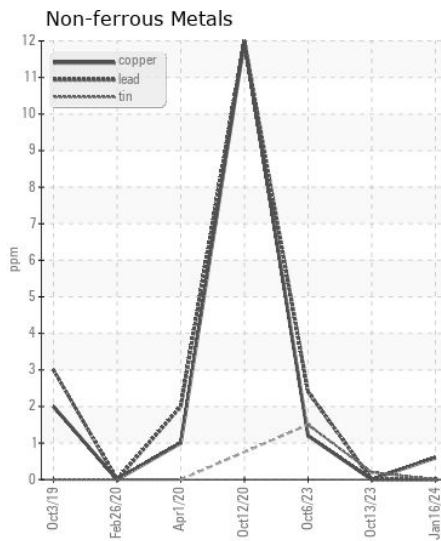
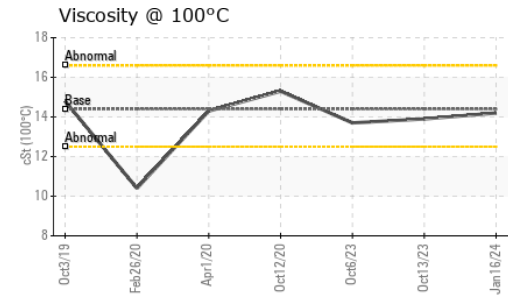
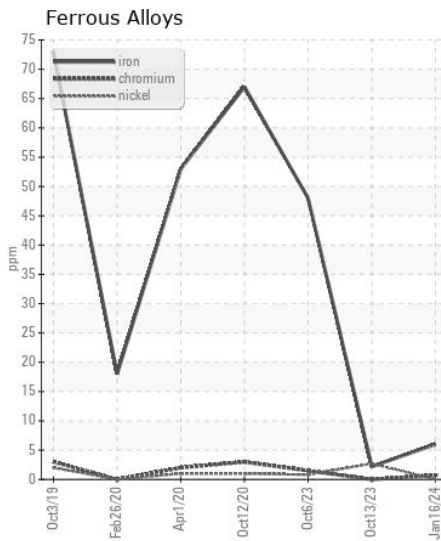
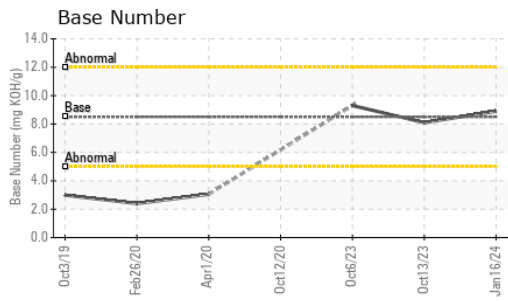
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	1.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.7</b>	5.1	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</b>	17.6	20.9
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	>158	<b>2</b>	2	3
Boron	ppm	ASTM D5185m	250	<b>&lt;1</b>	3	4
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	100	<b>57</b>	59	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	450	<b>1001</b>	952	934
Calcium	ppm	ASTM D5185m	3000	<b>1009</b>	1006	1037
Phosphorus	ppm	ASTM D5185m	1150	<b>1095</b>	1048	1034
Zinc	ppm	ASTM D5185m	1350	<b>1281</b>	1271	1256
Sulfur	ppm	ASTM D5185m	4250	<b>3243</b>	3118	2982
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.3</b>	13.3	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.9</b>	8.1	9.3
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.2</b>	13.9	13.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098722 **Received** : 18 Jan 2024  
**Lab Number** : 06064860 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836242 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 829 - Wilco Hauling**  
 5054 Highway HH  
 Hartville, MO  
 US 65667  
 Contact: James Jones  
 james.jones@gflenv.com  
 T: (417)349-5006  
 F:

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)