



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



Machine Id  
**MACK 129059-SW8904**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC ELITE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0111287</b>	GFL0111276	GFL0095473
Sample Date		Client Info		<b>07 Jun 2024</b>	19 Feb 2024	16 Jan 2024
Machine Age	hrs	Client Info		<b>10961</b>	10438	10224
Oil Age	hrs	Client Info		<b>523</b>	0	500
Filter Age	hrs	Client Info		<b>0</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	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>4</b>	2	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</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.

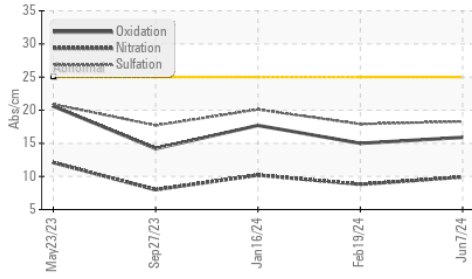
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	5
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.2</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	8.8	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.3</b>	17.9	20.1
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**

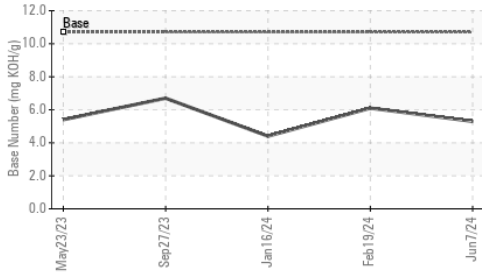
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	2	0
Boron	ppm	ASTM D5185m		<b>70</b>	105	56
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>123</b>	120	125
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>638</b>	670	620
Calcium	ppm	ASTM D5185m		<b>1171</b>	1249	1157
Phosphorus	ppm	ASTM D5185m		<b>665</b>	717	668
Zinc	ppm	ASTM D5185m		<b>799</b>	820	786
Sulfur	ppm	ASTM D5185m		<b>2800</b>	3186	3095
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	15.0	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>5.3</b>	6.1	4.4
Visc @ 100°C	cSt	ASTM D445	15.2	<b>13.1</b>	13.0	13.0

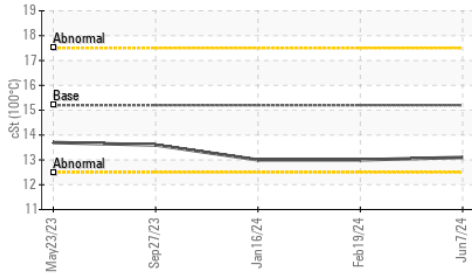
**FT-IR (Direct Trend)**



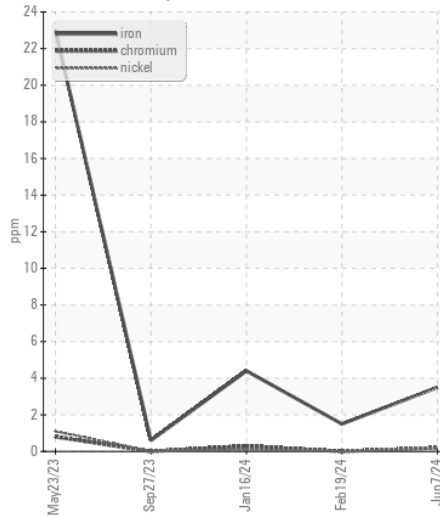
**Base Number**



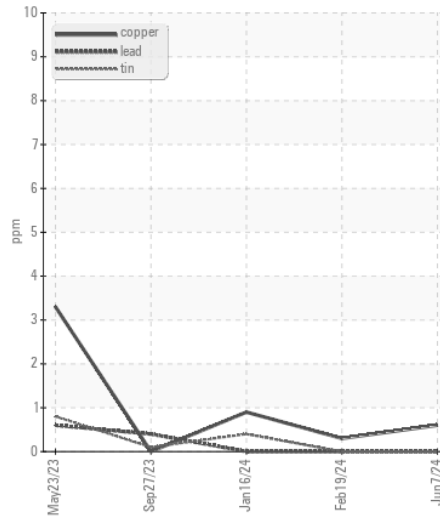
**Viscosity @ 100°C**



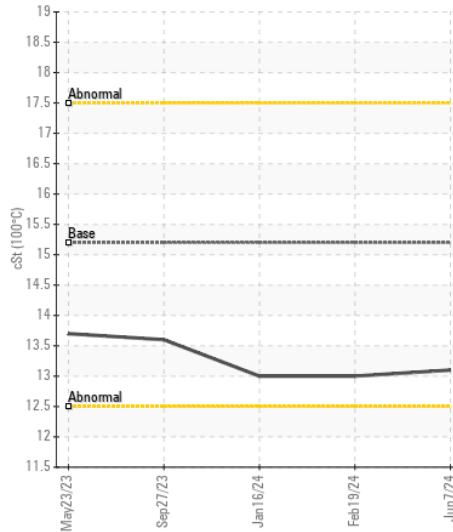
**Ferrous Alloys**



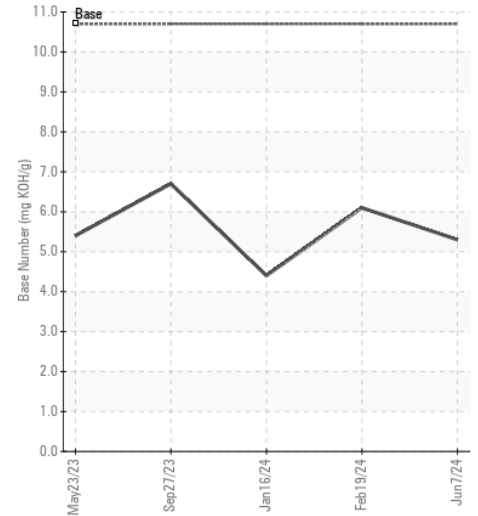
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111287  
**Lab Number** : 06241409  
**Unique Number** : 11130243  
**Test Package** : FLEET

**Received** : 19 Jul 2024  
**Tested** : 20 Jul 2024  
**Diagnosed** : 20 Jul 2024 - Wes Davis

**GFL Environmental - 981 - Port Arthur Hauling**  
 1000 S Business Park Dr  
 Port Arthur, TX  
 US 77640  
 Contact: MICHAEL KAY  
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 T: (336)660-9331  
 F:

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)