



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

Area  
**(EDB369)**

Machine Id  
**2508**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110802</b>	GFL0088470	GFL0088466
Sample Date		Client Info		<b>11 Mar 2024</b>	13 Sep 2023	12 Jul 2023
Machine Age	hrs	Client Info		<b>22063</b>	21750	21440
Oil Age	hrs	Client Info		<b>600</b>	600	650
Filter Age	hrs	Client Info		<b>600</b>	600	650
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	>165	<b>12</b>	18	15
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	1
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185m	>90	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
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**

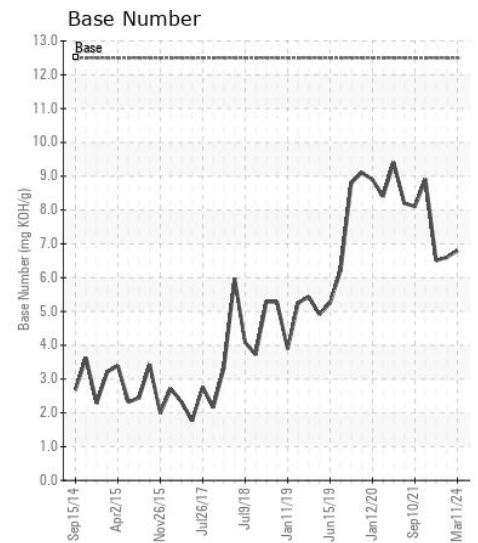
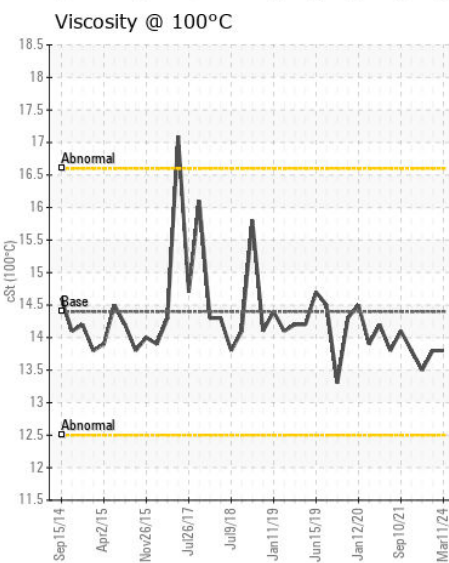
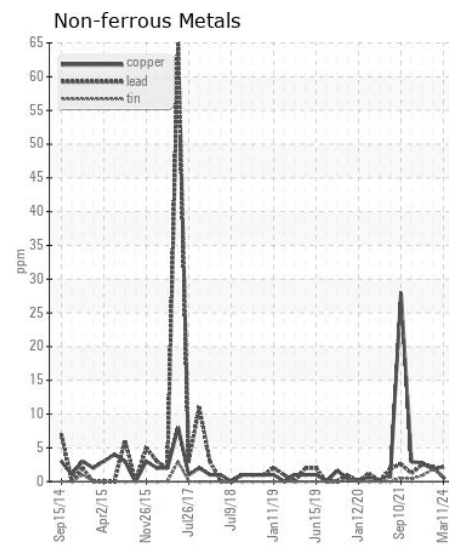
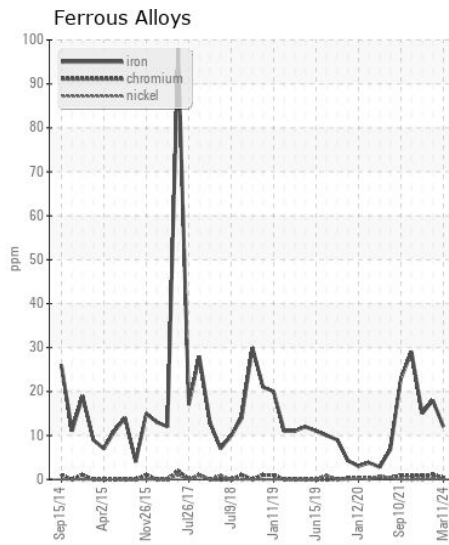
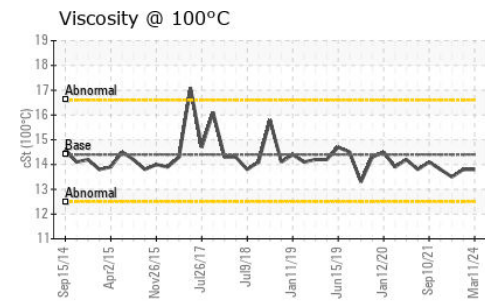
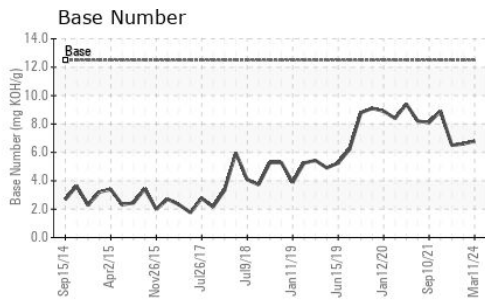
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>7</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	2
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	>7.5	<b>0.5</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	9.8	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.8</b>	24.5	24.9
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		<b>23</b>	28	20
Boron	ppm	ASTM D5185m	151	<b>281</b>	204	38
Barium	ppm	ASTM D5185m	0.4	<b>2</b>	44	0
Molybdenum	ppm	ASTM D5185m	250	<b>84</b>	81	61
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	0	<b>367</b>	449	797
Calcium	ppm	ASTM D5185m	2046	<b>1588</b>	1326	1221
Phosphorus	ppm	ASTM D5185m	1043	<b>1113</b>	977	972
Zinc	ppm	ASTM D5185m	943	<b>1314</b>	1217	1226
Sulfur	ppm	ASTM D5185m	5012	<b>3781</b>	3430	3508
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	19.7	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>6.8</b>	6.6	6.5
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.8	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110802  
**Lab Number** : 06124782  
**Unique Number** : 10938933  
**Test Package** : FLEET

**Received** : 21 Mar 2024  
**Tested** : 22 Mar 2024  
**Diagnosed** : 24 Mar 2024 - Don Baldrige

**GFL Environmental - 146 - Augusta**  
 1064 Franke Industrial  
 Augusta, GA  
 US 30909  
 Contact: JEFFERY WASHINGTON  
 jeff.washington@gflenv.com

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)

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F: