FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
427039-751
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (5 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

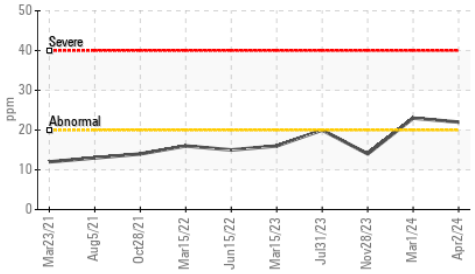
There is no indication of any contamination in the oil.

FLUID CONDITION

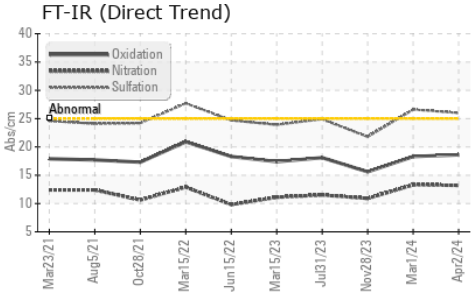
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0104664	GFL0096245	GFL0096269
Sample Date		Client Info		02 Apr 2024	01 Mar 2024	28 Nov 2023
Machine Age	hrs	Client Info		12719	12674	12400
Oil Age	hrs	Client Info		12674	12003	0
Filter Age	hrs	Client Info		12674	12003	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	87	80	34
Chromium	ppm	ASTM D5185m	>20	2	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		10	10	10
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 22	▲ 23	14
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	1	2	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	10	6
Potassium	ppm	ASTM D5185m	>20	25	6	6
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.2	2.2	1.5
Nitration	Abs/cm	*ASTM D7624	>20	13.2	13.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.0	26.6	21.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		7	8	2
Boron	ppm	ASTM D5185m		59	60	90
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		53	56	50
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		678	692	630
Calcium	ppm	ASTM D5185m		1559	1557	1385
Phosphorus	ppm	ASTM D5185m	760	690	649	639
Zinc	ppm	ASTM D5185m	830	809	790	759
Sulfur	ppm	ASTM D5185m	2770	3252	2785	3068
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	18.3	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.5	7.0	8.6
Visc @ 100°C	cSt	ASTM D445	14.9	13.8	13.9	13.4

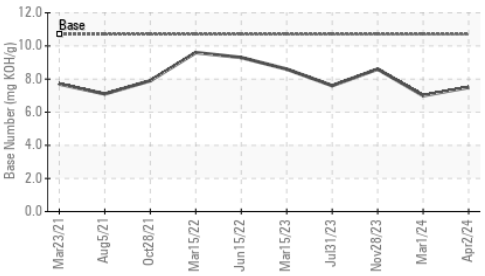
Aluminum (ppm)



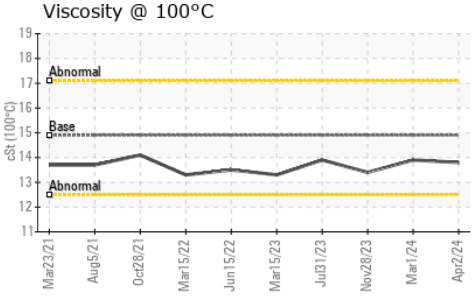
FT-IR (Direct Trend)



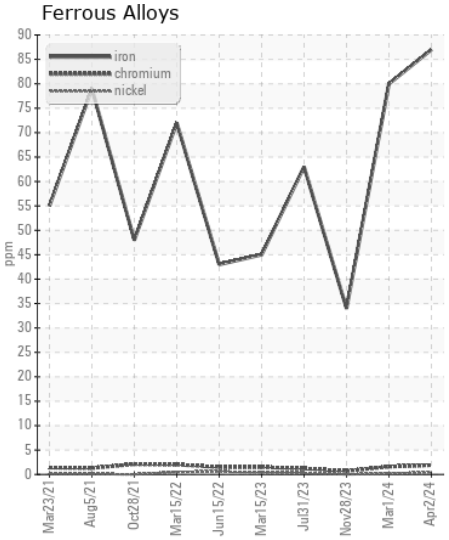
Base Number



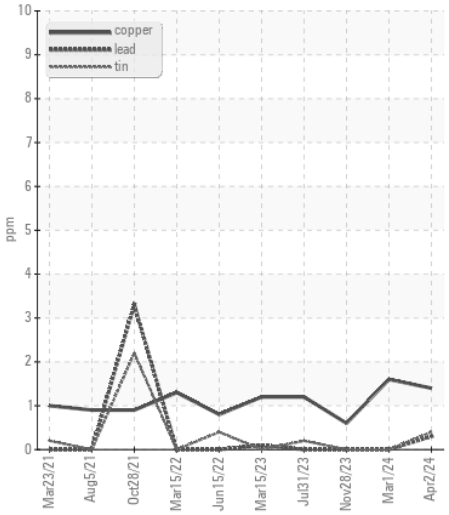
Viscosity @ 100°C



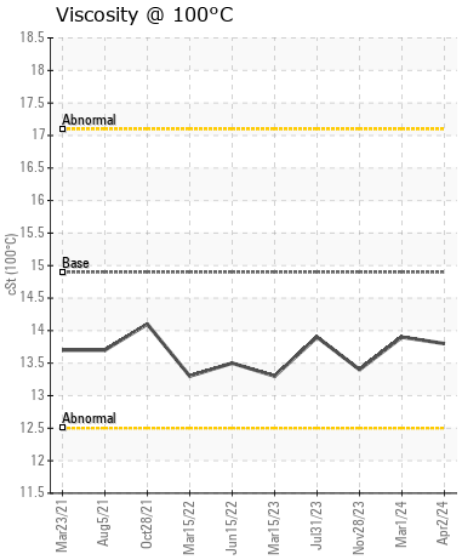
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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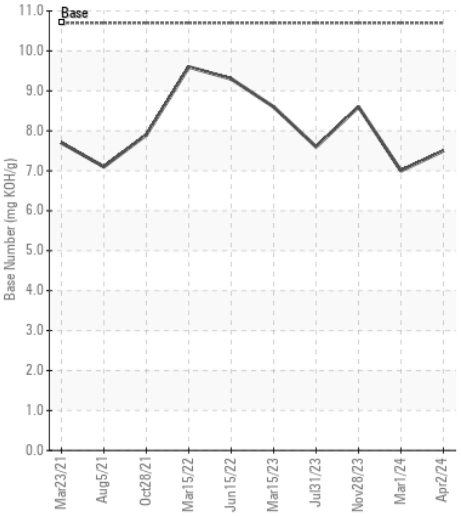

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0104664
Lab Number : 06150951
Unique Number : 10981029
Test Package : FLEET

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 19 Apr 2024 - Don Baldridge

GFL Environmental - 624 - Elmira Hauling
10164 M-32
Elmira, MI
US 49730
Contact: ANDY GROBASKI
andyg@americanwaste.org
T: (989)370-2941
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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)