FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
528009-1133
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

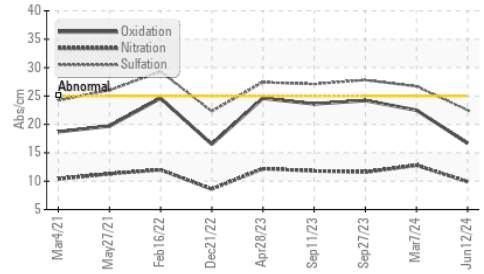
Sodium and/or potassium levels are high.

FLUID CONDITION

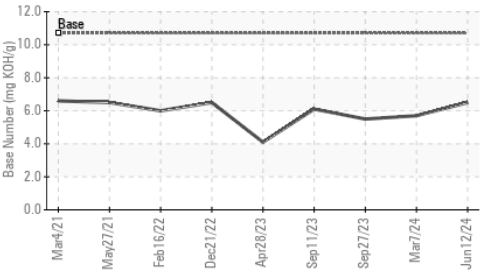
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0104675	GFL0096232	GFL0064413
Sample Date		Client Info		12 Jun 2024	07 Mar 2024	27 Sep 2023
Machine Age	hrs	Client Info		14641	14364	13675
Oil Age	hrs	Client Info		13675	0	612
Filter Age	hrs	Client Info		13675	0	612
Oil Changed		Client Info		Not Changd	N/A	Changed
Filter Changed		Client Info		Not Changd	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	17	42	61
Chromium	ppm	ASTM D5185m	>20	1	3	7
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		6	9	4
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	4
Lead	ppm	ASTM D5185m	>40	4	29	25
Copper	ppm	ASTM D5185m	>330	1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	7	7
Potassium	ppm	ASTM D5185m	>20	▲ 38	▲ 20	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	9.9	12.8	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	26.7	27.8
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		▲ 120	▲ 164	15
Boron	ppm	ASTM D5185m		52	25	50
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		75	93	90
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		518	757	613
Calcium	ppm	ASTM D5185m		1455	1678	1463
Phosphorus	ppm	ASTM D5185m	760	964	792	735
Zinc	ppm	ASTM D5185m	830	1047	922	792
Sulfur	ppm	ASTM D5185m	2770	2998	3254	2820
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	22.5	24.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.5	5.7	5.5
Visc @ 100°C	cSt	ASTM D445	14.9	13.8	14.4	14.7

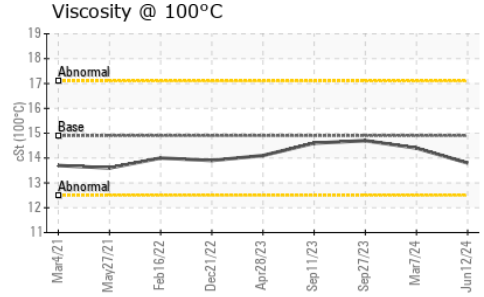
FT-IR (Direct Trend)



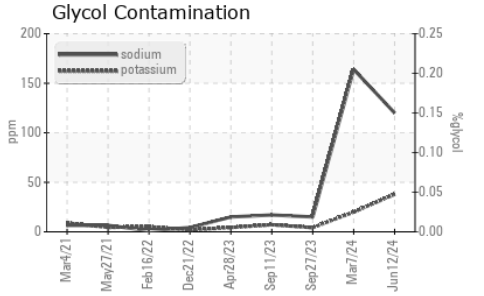
Base Number



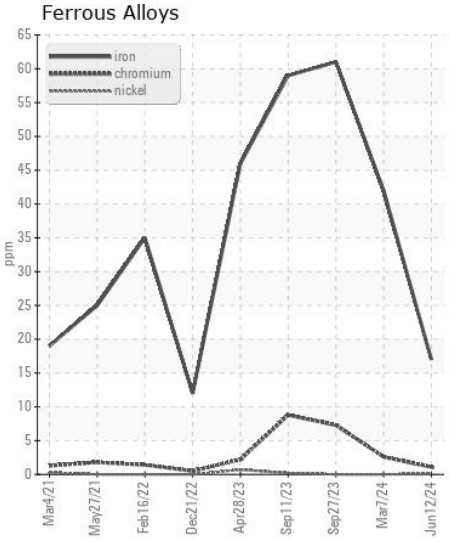
Viscosity @ 100°C



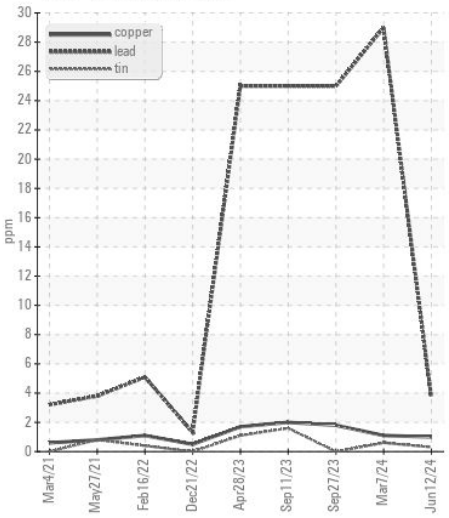
Glycol Contamination



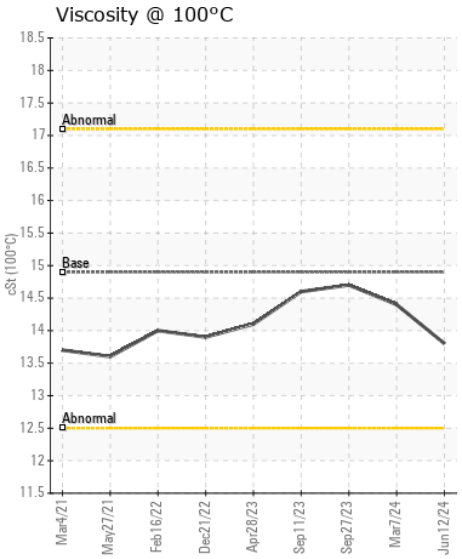
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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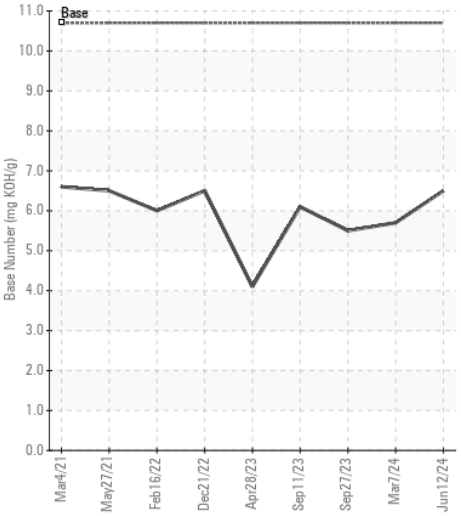

Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0104675	**Received**	: 17 Jun 2024
Lab Number	: 06212919	**Tested**	: 19 Jun 2024
Unique Number	: 11085783	**Diagnosed**	: 19 Jun 2024 - Angela Borella
Test Package	: FLEET (Additional Tests: Glycol)		

GFL Environmental - 624 - Elmira Hauling
10164 M-32
Elmira, MI
US 49730
Contact: KEITH CAMPBELL
kcampbell@gflenv.com
T:
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)