FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
(DQR690)
Machine Id
3702
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

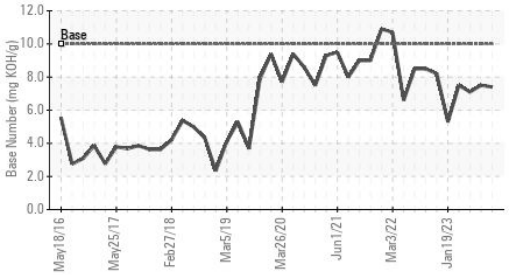
Sodium and/or potassium levels are high.

FLUID CONDITION

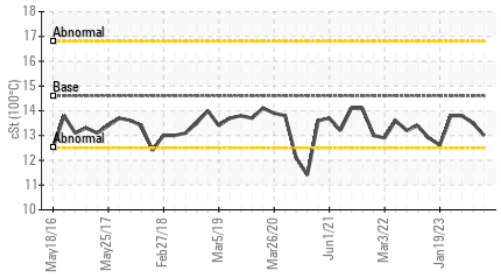
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0072105	GFL0072029	GFL0072154
Sample Date		Client Info		05 Jan 2024	28 Dec 2023	14 Sep 2023
Machine Age	hrs	Client Info		22086	22018	21136
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	22	17	21
Chromium	ppm	ASTM D5185m	>5	1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	3	3	4
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>100	18	16	4
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	9	8	11
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.8	0.7	1
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.6	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	20.9	21.5
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		▲ 140	▲ 135	15
Boron	ppm	ASTM D5185m		3	3	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		62	66	67
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		893	1040	1074
Calcium	ppm	ASTM D5185m		992	1146	1240
Phosphorus	ppm	ASTM D5185m	760	981	1066	1086
Zinc	ppm	ASTM D5185m	800	1152	1336	1371
Sulfur	ppm	ASTM D5185m	3000	2778	3017	3721
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	16.1	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.4	7.5	7.1
Visc @ 100°C	cSt	ASTM D445	14.6	13.0	13.5	13.8

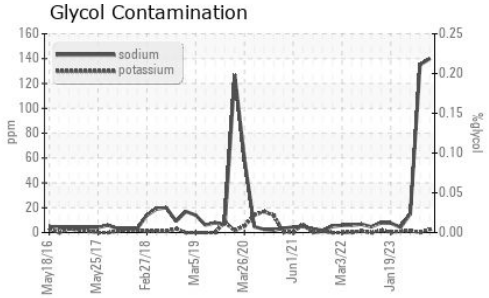
Base Number



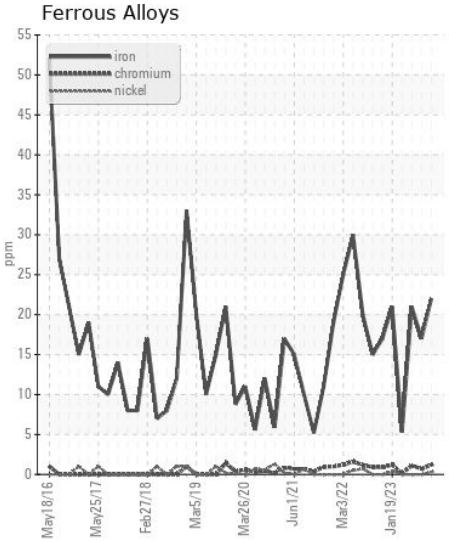
Viscosity @ 100°C



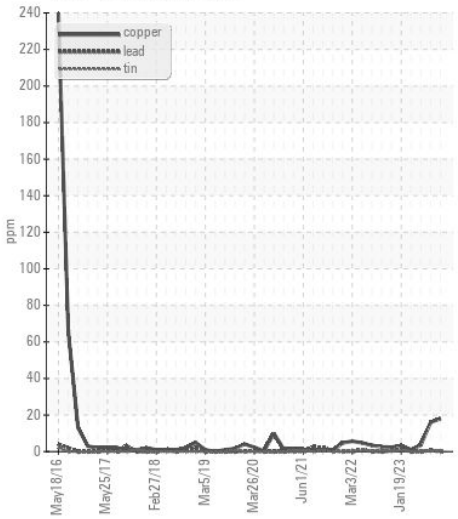
Glycol Contamination



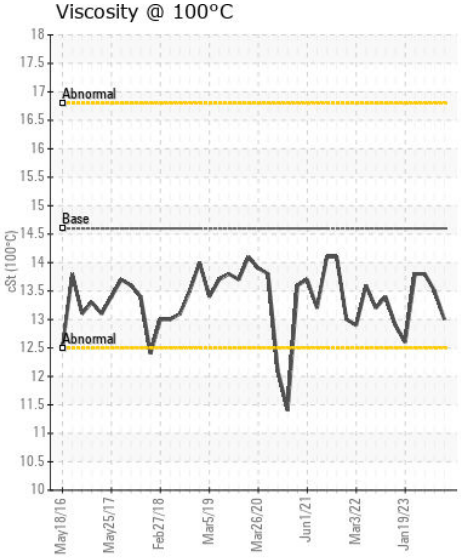
Ferrous Alloys



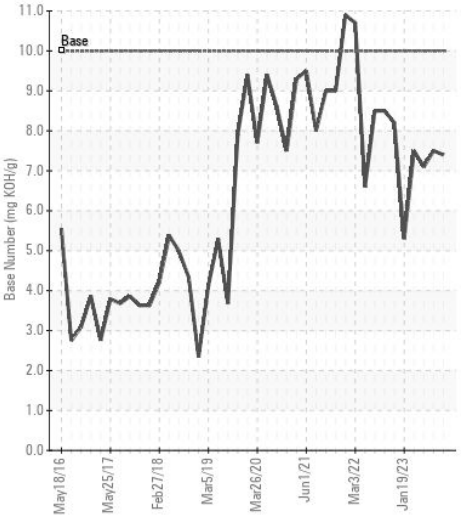
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0072105 **Recieved** : 11 Jan 2024
Lab Number : 06058651 **Diagnosed** : 15 Jan 2024
Unique Number : 10830033 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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)

GFL Environmental - 094 - Cedartown
2097 Buchanan Highway
Cedartown, GA
US 30125
Contact: WILLIAM FOSTER
william.foster@gflenv.com
T: (800)207-6618
F: