FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
(YA110701)
Machine Id
VOLVO 2416
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

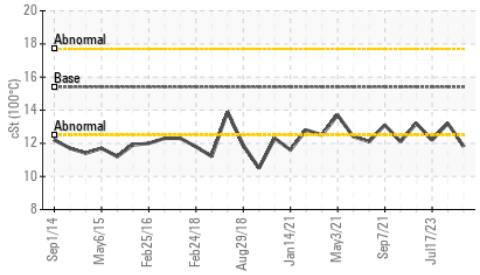
Light fuel dilution occurring.

FLUID CONDITION

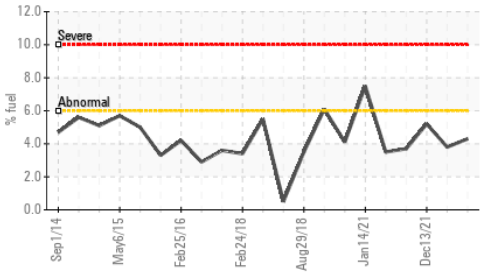
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0128326**	GFL0111383	GFL0072226
Sample Date		Client Info		**11 Jul 2024**	11 Mar 2024	17 Jul 2023
Machine Age	mls	Client Info		**24895**	546906	368117
Oil Age	mls	Client Info		**0**	0	24154
Filter Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Changed
Filter Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	**10**	7	10
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**0**	<1	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**4**	2	5
Lead	ppm	ASTM D5185m	>40	**0**	<1	<1
Copper	ppm	ASTM D5185m	>330	**3**	1	2
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	**8**	5	6
Potassium	ppm	ASTM D5185m	>20	**2**	2	1
Fuel	%	ASTM D3524	>6.0	▲ **4.3**	<1.0	3.8
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**8.1**	5.4	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.1**	17.1	19.4
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		**3**	2	2
Boron	ppm	ASTM D5185m	0	**4**	13	8
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**55**	59	59
Manganese	ppm	ASTM D5185m	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**868**	910	815
Calcium	ppm	ASTM D5185m	1070	**1011**	1043	1048
Phosphorus	ppm	ASTM D5185m	1150	**951**	982	918
Zinc	ppm	ASTM D5185m	1270	**1155**	1167	1109
Sulfur	ppm	ASTM D5185m	2060	**3273**	3103	3103
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.3**	13.5	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.4**	9.0	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.8**	13.2	12.2

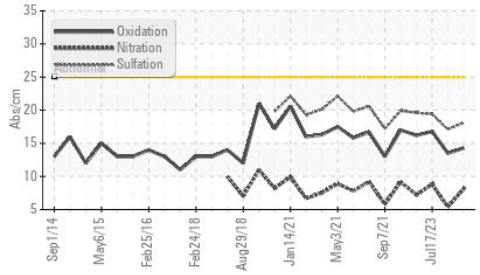
Viscosity @ 100°C



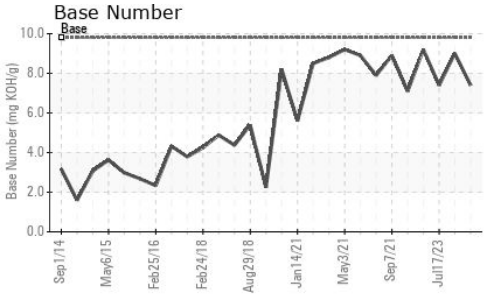
Fuel Dilution



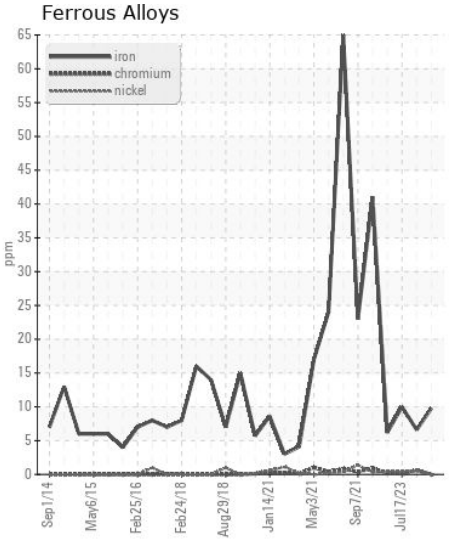
FT-IR (Direct Trend)



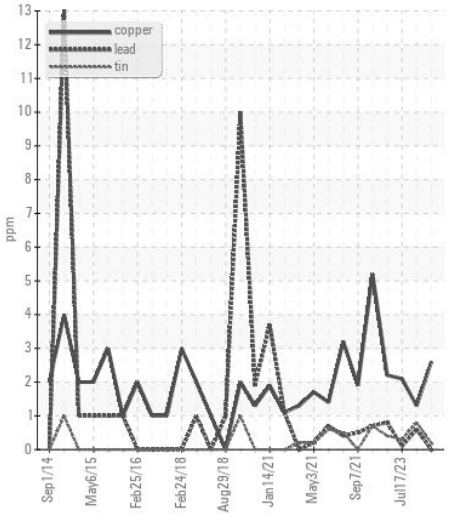
Base Number



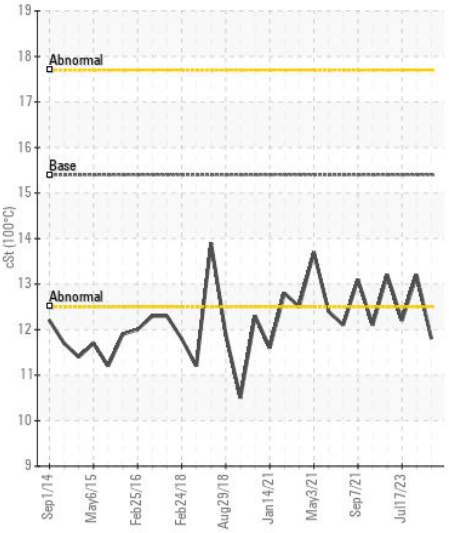
Ferrous Alloys



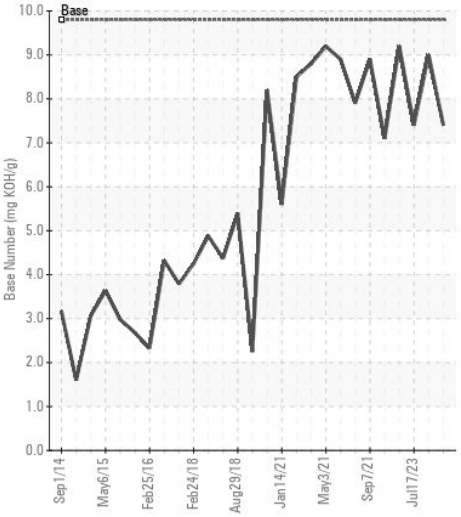
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0128326
Lab Number : 06239796
Unique Number : 11128630
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 17 Jul 2024
Tested : 19 Jul 2024
Diagnosed : 19 Jul 2024 - Sean Felton

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 - 004 - Newport - Central Coast
427 Roberts Road
Newport, NC
US 28570
Contact: Marquis Williams
marquis.williams@gflenv.com
T:
F: (252)223-6010