FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
(YA156337)
Machine Id
830012
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- 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

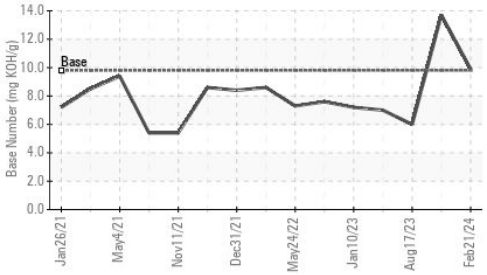
Sodium and/or potassium levels are high.

FLUID CONDITION

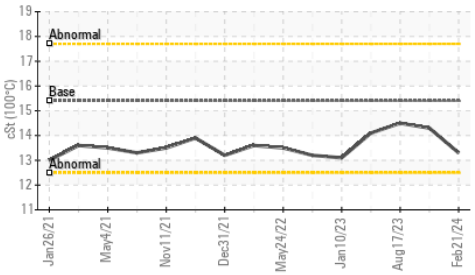
The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111976	GFL0098790	GFL0072383
Sample Date		Client Info		21 Feb 2024	04 Dec 2023	17 Aug 2023
Machine Age	hrs	Client Info		4992	4992	0
Oil Age	hrs	Client Info		4992	4992	252
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>90	24	93	91
Chromium	ppm	ASTM D5185m	>20	2	6	3
Nickel	ppm	ASTM D5185m	>2	2	▲ 10	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	13	6
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	35	45	4
Tin	ppm	ASTM D5185m	>15	0	<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	17	▲ 69	14
Potassium	ppm	ASTM D5185m	>20	5	▲ 25	0
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	0.3	1.1	1.5
Nitration	Abs/cm	*ASTM D7624	>20	8.8	15.8	14.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	26.9	28.0
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		▲ 938	▲ 3264	▲ 227
Boron	ppm	ASTM D5185m	0	22	42	4
Barium	ppm	ASTM D5185m	0	8	0	0
Molybdenum	ppm	ASTM D5185m	60	75	163	76
Manganese	ppm	ASTM D5185m	0	<1	3	1
Magnesium	ppm	ASTM D5185m	1010	781	865	1103
Calcium	ppm	ASTM D5185m	1070	976	1184	1416
Phosphorus	ppm	ASTM D5185m	1150	920	820	1201
Zinc	ppm	ASTM D5185m	1270	1071	1220	1475
Sulfur	ppm	ASTM D5185m	2060	3013	3288	3617
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	18.1	24.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.9	13.7	6.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	14.3	14.5

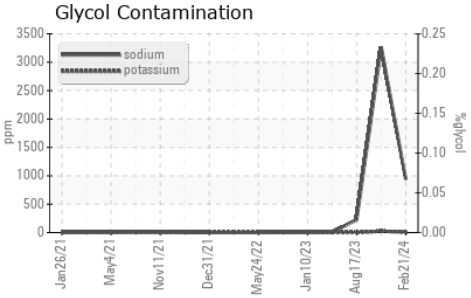
Base Number



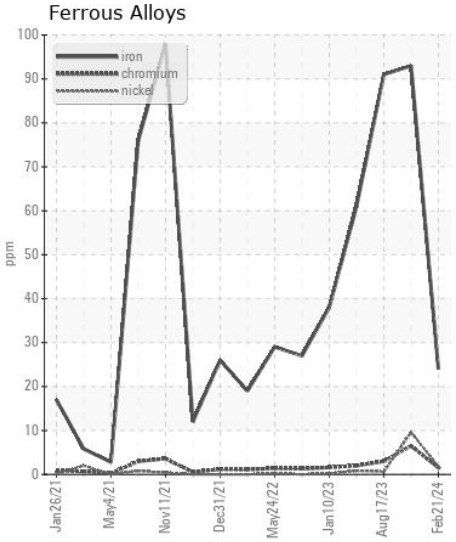
Viscosity @ 100°C



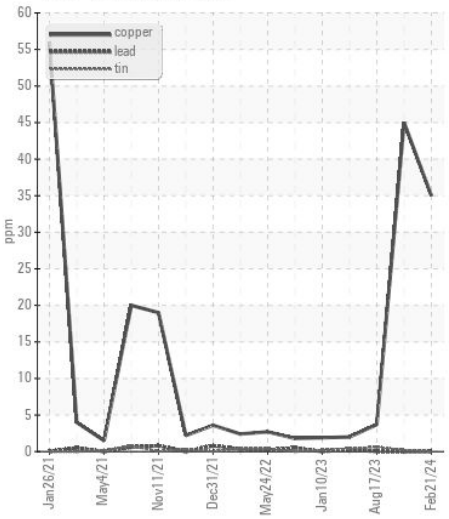
Glycol Contamination



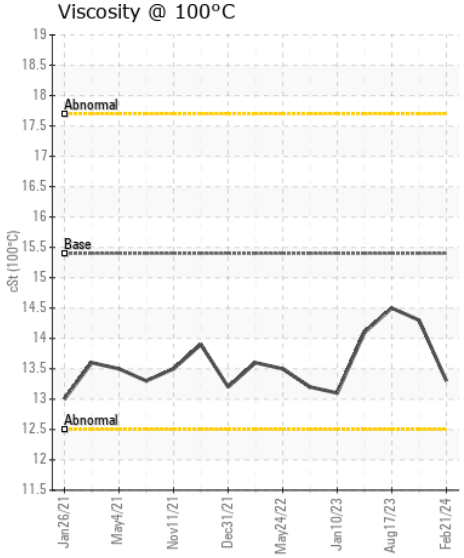
Ferrous Alloys



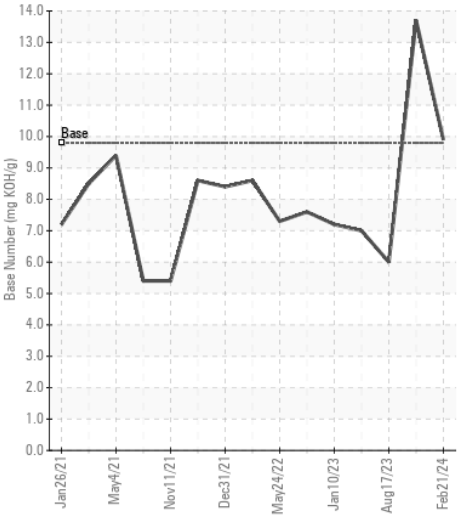
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111976
Lab Number : 06100014
Unique Number : 10898244
Test Package : FLEET (Additional Tests: Glycol)

Received : 26 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Jonathan Hester

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 - 19DR - Deep Run/TriEast
2287 Leslie R Stroud Road
Kinston, NC
US 28504-9477
Contact: Spencer Liggon
spencer.liggon@gflenv.com
T: (800)207-6618
F: