FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
10623
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Recommend drain oil if not already done and flush before refilling with oil. NOTE: High contamination in the sample has limited the accuracy of Infra-Red data including Total Base Number (TBN) value.

WEAR

All component wear rates are normal.

CONTAMINATION

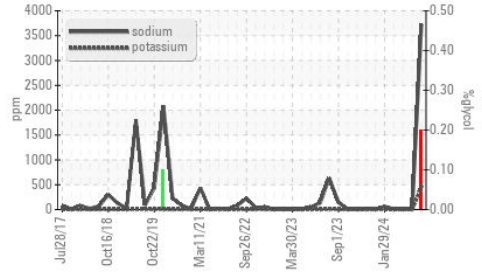
Sodium and/or potassium levels are high. There is a high concentration of water present in the oil. There is a high concentration of glycol present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a moderate amount of fuel present in the oil.

FLUID CONDITION

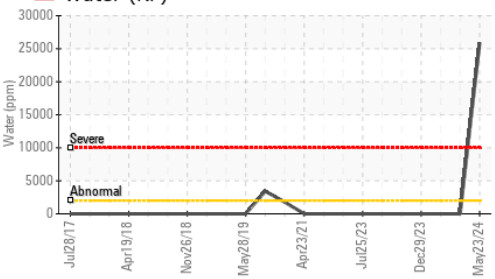
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118090	GFL0118066	GFL0115730
Sample Date		Client Info		23 May 2024	23 Apr 2024	01 Apr 2024
Machine Age	hrs	Client Info		20288	20088	19941
Oil Age	hrs	Client Info		487	287	106
Filter Age	hrs	Client Info		487	287	106
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>75	7	1	5
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	2	0	1
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>100	11	0	<1
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 109	2	5
Potassium	ppm	ASTM D5185m	>20	▲ 458	<1	<1
Fuel	%	ASTM D3524	>3.0	▲ 4.5	▲ 5.2	▲ 7.2
Water	%	ASTM D6304	>0.2	▲ 2.59	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 25900	---	---
Glycol	%	*ASTM D2982		▲ 0.20	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	5.7	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	2.8	16.9	17.3
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	● SOLID	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	NEG	NEG
Sodium	ppm	ASTM D5185m		▲ 3722	2	9
Boron	ppm	ASTM D5185m	0	736	6	11
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	191	61	57
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	1010	582	850	799
Calcium	ppm	ASTM D5185m	1070	696	1092	1052
Phosphorus	ppm	ASTM D5185m	1150	872	989	870
Zinc	ppm	ASTM D5185m	1270	853	1207	1036
Sulfur	ppm	ASTM D5185m	2060	2610	3466	3169
Oxidation	Abs/.1mm	*ASTM D7414	>25	0.0	12.4	13.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	---	7.9	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 51.0	▲ 11.3	▲ 11.1

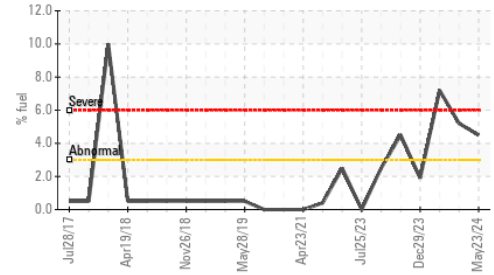
Glycol Contamination



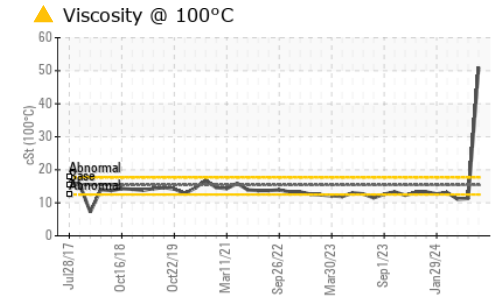
Water (KF)



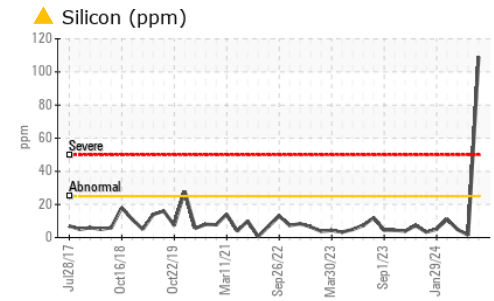
Fuel Dilution



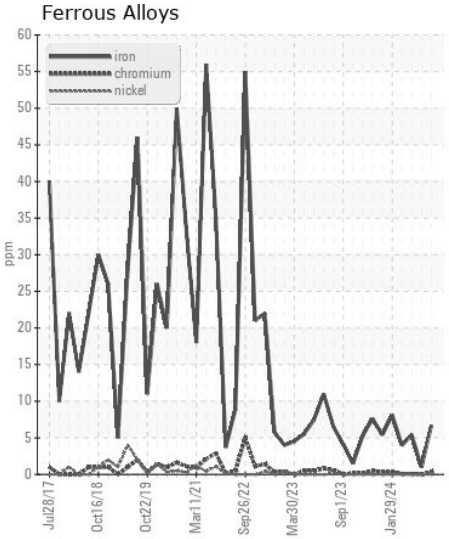
Viscosity @ 100°C



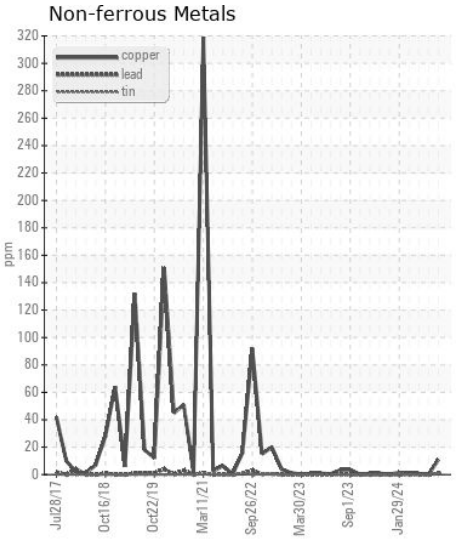
Silicon (ppm)



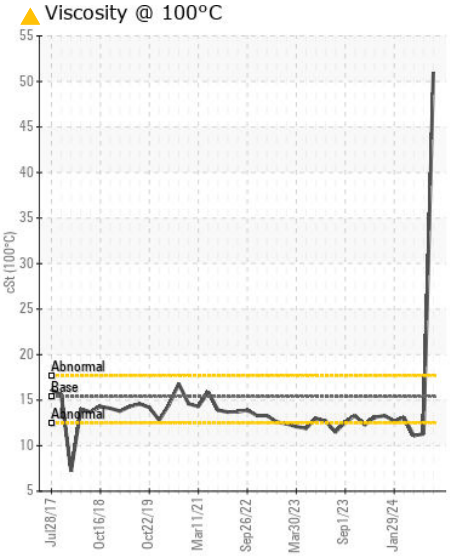
Ferrous Alloys



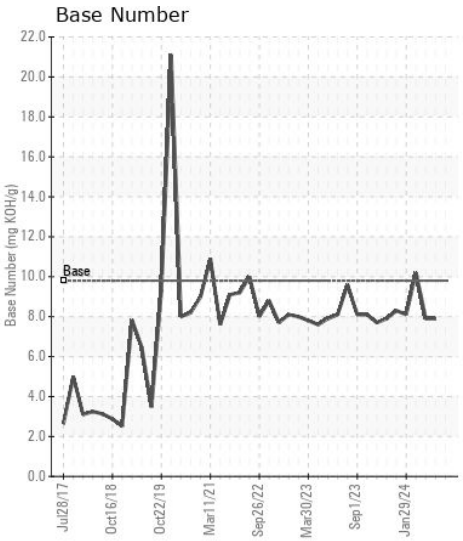
Non-ferrous Metals



Viscosity @ 100°C



Base Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0118090	**Received**	: 24 May 2024
Lab Number	: 06191501	**Tested**	: 30 May 2024
Unique Number	: 11048253	**Diagnosed**	: 30 May 2024 - Doug Bogart
Test Package	: FLEET (Additional Tests: Glycol, KF, PercentFuel)		

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 - 010 - Stockbridge
1280 Rum Creek Parkway
Stockbridge, GA
US 30281
Contact: JOSHUA TINKER
joshuatinker@gflenv.com
T:
F: