



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(99292V)
Machine Id
821039-101122
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0101990	GFL0102562	GFL0100377
Sample Date		Client Info		13 Feb 2024	18 Dec 2023	30 Nov 2023
Machine Age	hrs	Client Info		0	23374	23338
Oil Age	hrs	Client Info		0	0	600
Filter Age	hrs	Client Info		0	0	600
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	8	2	26
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	4	5
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	7	6	1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

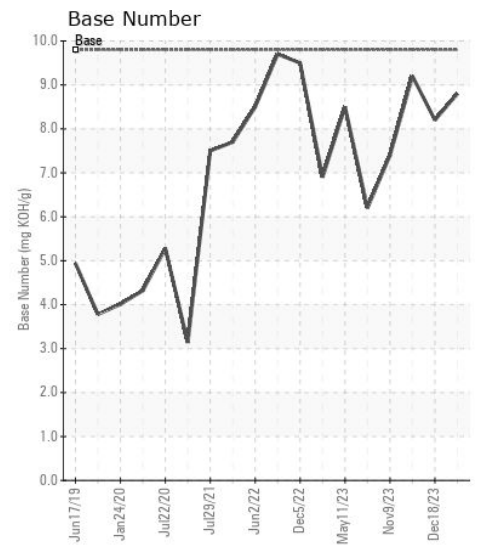
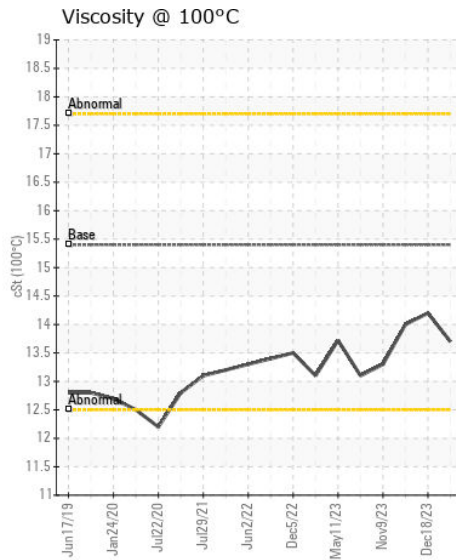
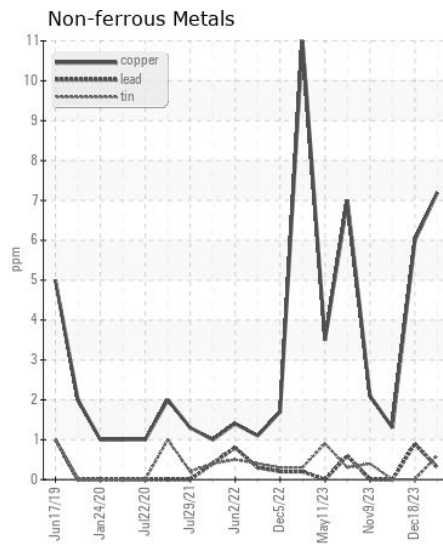
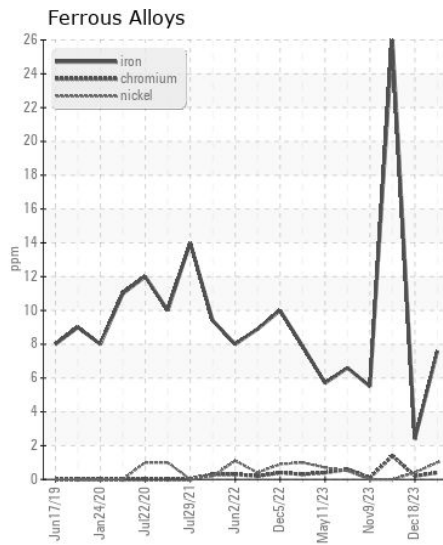
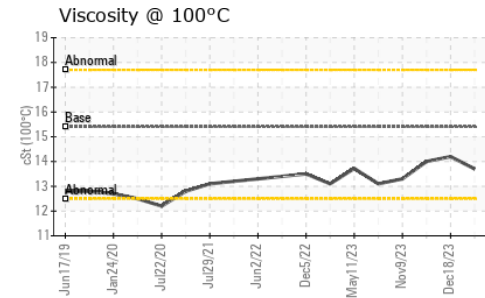
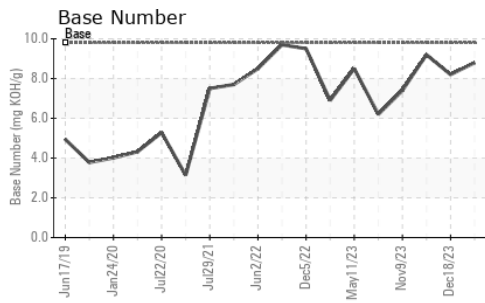
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	3	8
Potassium	ppm	ASTM D5185m	>20	<1	0	6
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.2	4.6	4.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	17.3	17.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	2	▲ 923
Boron	ppm	ASTM D5185m	0	3	3	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	57	56	167
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	945	878	903
Calcium	ppm	ASTM D5185m	1070	1002	973	1050
Phosphorus	ppm	ASTM D5185m	1150	1018	943	987
Zinc	ppm	ASTM D5185m	1270	1202	1126	1230
Sulfur	ppm	ASTM D5185m	2060	3080	2970	2909
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	13.2	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	8.2	9.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	14.2	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101990
Lab Number : 06089411
Unique Number : 10876856
Test Package : FLEET

Received : 14 Feb 2024
Tested : 15 Feb 2024
Diagnosed : 15 Feb 2024 - Wes Davis

GFL Environmental - 894 - Ada Hauling
 1904 North Broadway, Suite D
 Ada, OK
 US 74820
 Contact: Johnny Spurlock
 jspurlock@gflenv.com
 T: (405)664-4476
 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)