



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area
(P500891)
Machine Id
2364
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (60 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0101802	GFL0090105	GFL0070777
Sample Date		Client Info		31 Jan 2024	03 Oct 2023	21 Apr 2023
Machine Age	hrs	Client Info		486489	486245	486136
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	18	3	14
Chromium	ppm	ASTM D5185m	>20	2	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	1
Lead	ppm	ASTM D5185m	>40	2	<1	0
Copper	ppm	ASTM D5185m	>330	18	0	0
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

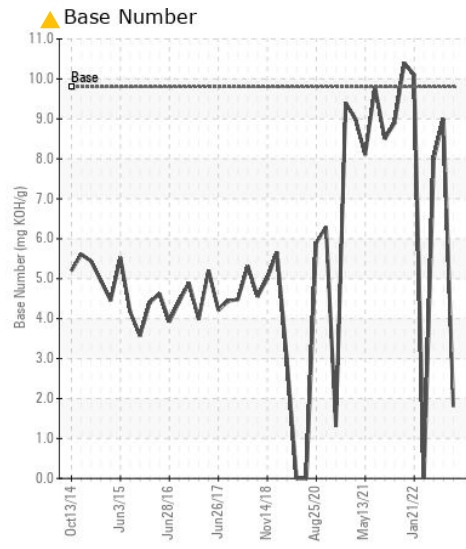
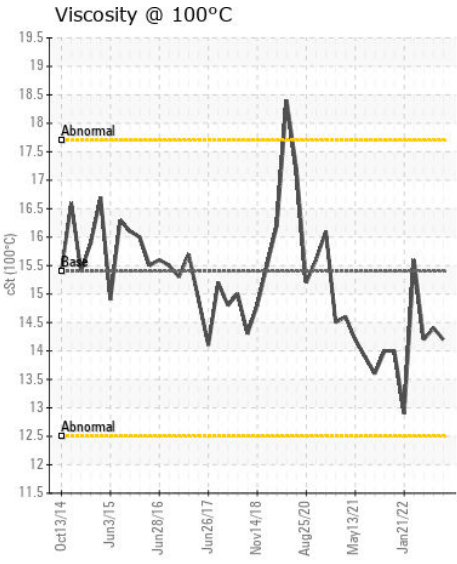
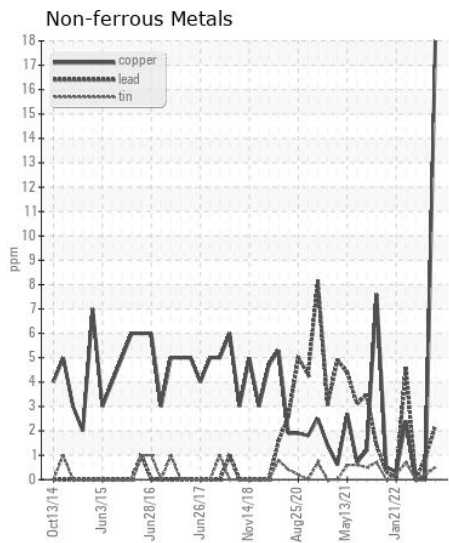
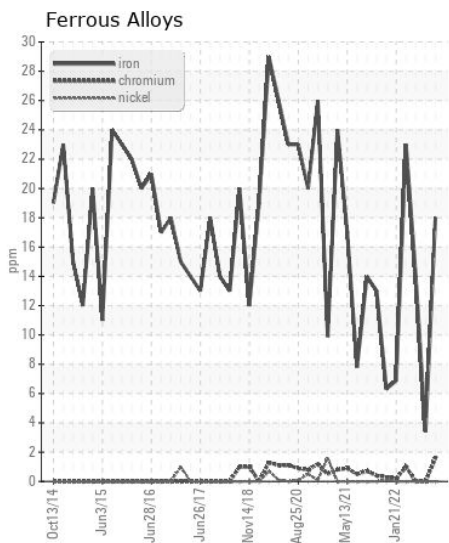
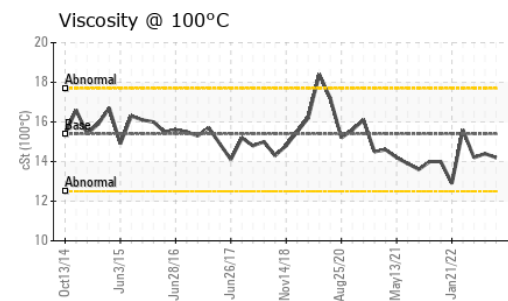
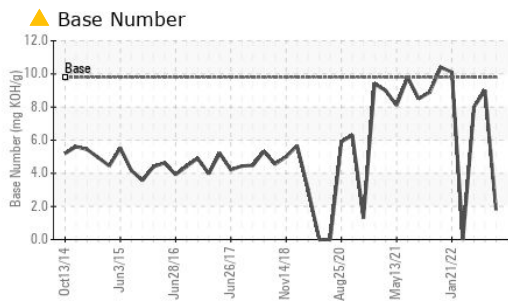
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	2	2	2
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
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	2.1	0.4	3.3
Nitration	Abs/cm	*ASTM D7624	>20	6.2	4.7	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	17.1	23.5
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

FLUID CONDITION

The BN level is low.

Sodium	ppm	ASTM D5185m		0	<1	2
Boron	ppm	ASTM D5185m	0	<1	2	5
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	59	60	59
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	1010	866	985	937
Calcium	ppm	ASTM D5185m	1070	980	1066	1080
Phosphorus	ppm	ASTM D5185m	1150	928	1038	998
Zinc	ppm	ASTM D5185m	1270	1128	1269	1274
Sulfur	ppm	ASTM D5185m	2060	2839	3328	3257
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.0	12.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	▲ 1.8	9.0	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.4	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101802 **Received** : 01 Feb 2024
Lab Number : 06076664 **Diagnosed** : 02 Feb 2024
Unique Number : 10858755 **Diagnostician** : Don Baldridge
Test Package : FLEET

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: ARCILIO RUEZ
 aruiz@gflenv.com

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)