



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
(YA154655)
Machine Id
2856C
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)

RECOMMENDATION

The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116010	GFL0090006	GFL0099838
Sample Date		Client Info		18 Jun 2024	08 Mar 2024	10 Feb 2024
Machine Age	hrs	Client Info		5169	5169	12975
Oil Age	hrs	Client Info		0	0	600
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	6	4	14
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	2
Lead	ppm	ASTM D5185m	>150	3	0	5
Copper	ppm	ASTM D5185m	>90	0	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	0	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

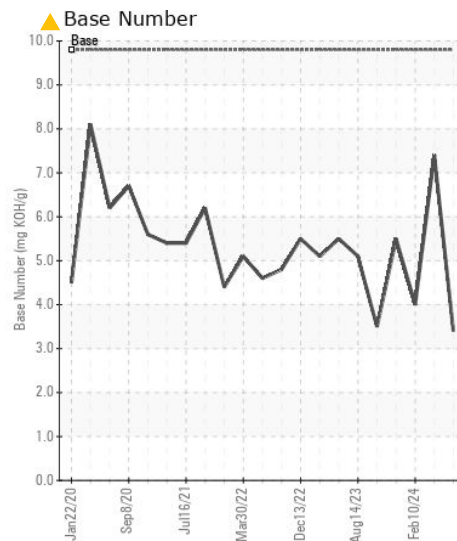
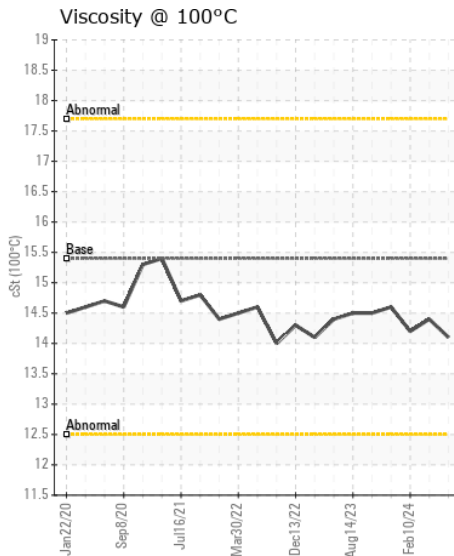
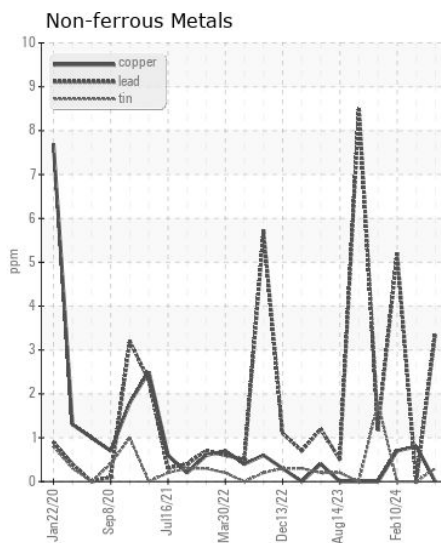
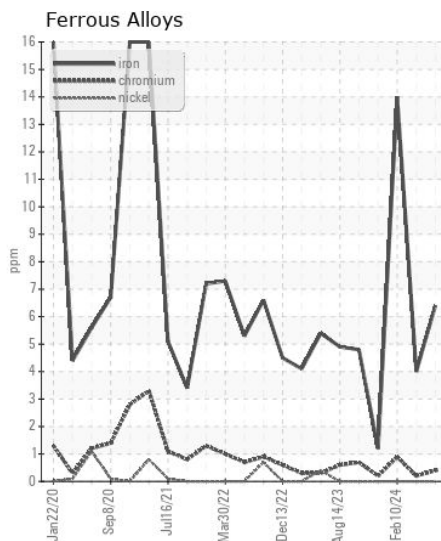
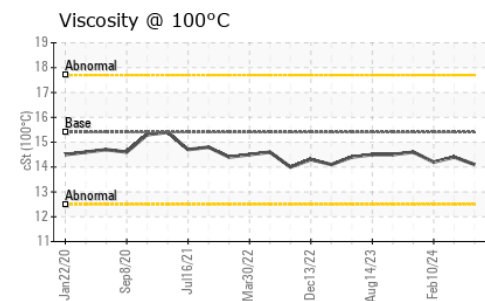
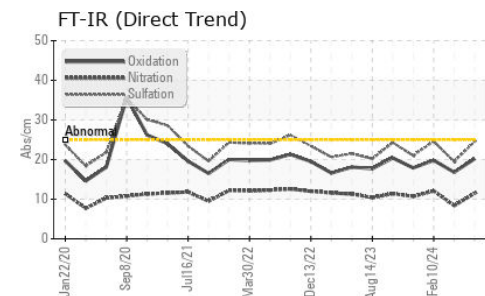
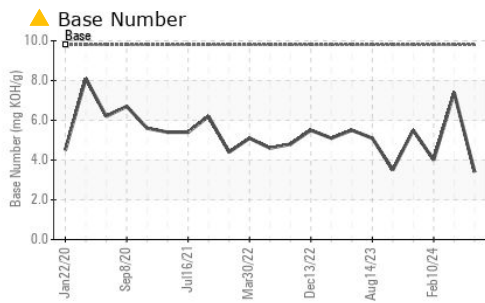
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	5	4	9
Potassium	ppm	ASTM D5185m	>20	3	0	3
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	>7.5	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.5	8.4	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5	19.5	24.6
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. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		7	4	9
Boron	ppm	ASTM D5185m	0	6	28	14
Barium	ppm	ASTM D5185m	0	0	0	9
Molybdenum	ppm	ASTM D5185m	60	50	45	81
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	592	541	851
Calcium	ppm	ASTM D5185m	1070	1629	1476	2326
Phosphorus	ppm	ASTM D5185m	1150	747	739	1004
Zinc	ppm	ASTM D5185m	1270	993	874	1442
Sulfur	ppm	ASTM D5185m	2060	2937	2342	3900
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	16.8	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	▲ 3.4	7.4	4.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.4	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116010 **Received** : 19 Jun 2024
Lab Number : 06214464 **Tested** : 20 Jun 2024
Unique Number : 11087328 **Diagnosed** : 21 Jun 2024 - Don Baldrige
Test Package : FLEET

GFL Environmental - 018 - Fayetteville
 4621 Marracco Drive
 Hope Mills, NC
 US 28348
 Contact: Robert Carter
 robert.carter@gflenv.com
 T: (910)596-1170
 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)