



Area
[1264220]
Machine Id
9137
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (37 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110687	GFL0097550	GFL0082976
Sample Date		Client Info		22 Apr 2024	26 Oct 2023	27 Jul 2023
Machine Age	hrs	Client Info		19990	18903	18466
Oil Age	hrs	Client Info		0	437	0
Filter Age	hrs	Client Info		0	437	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	5	9	15
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	4	4	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	4
Copper	ppm	ASTM D5185(m)	>330	1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

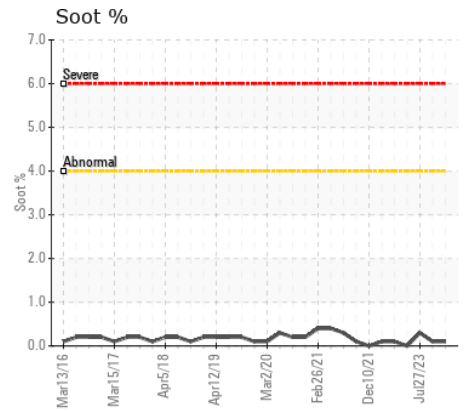
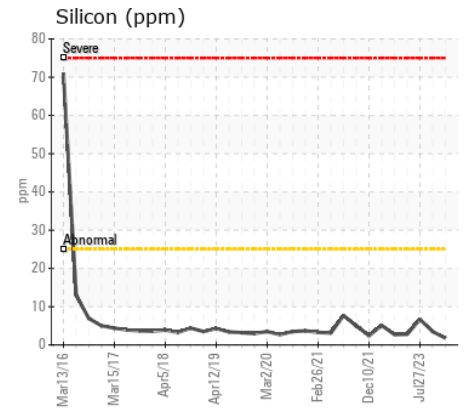
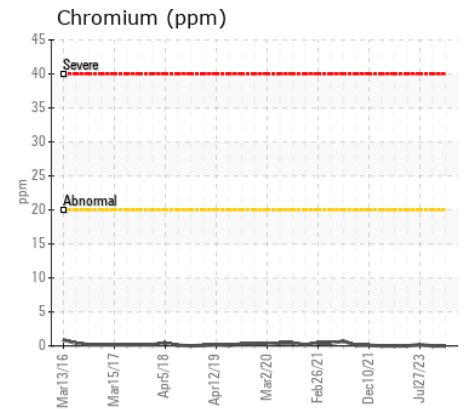
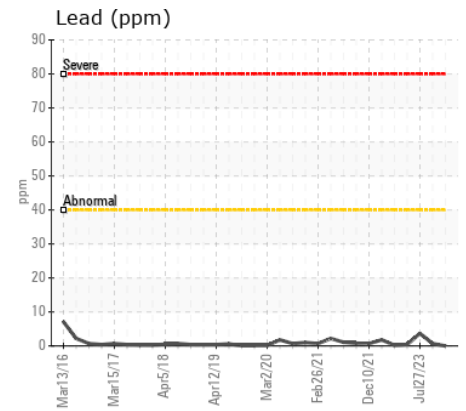
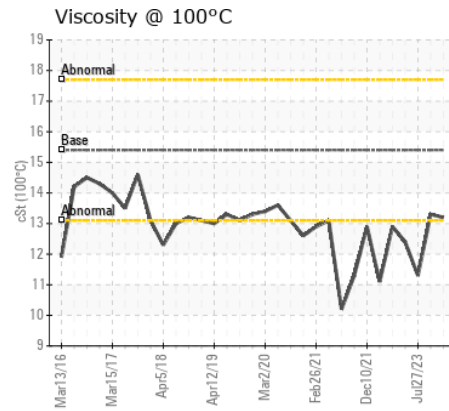
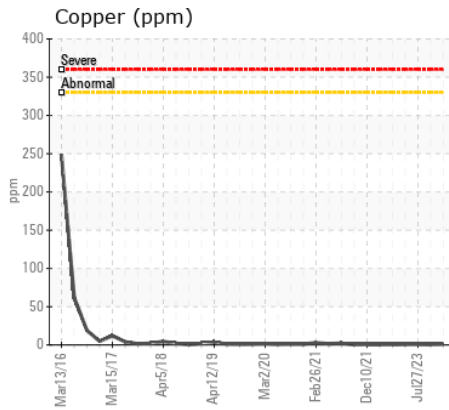
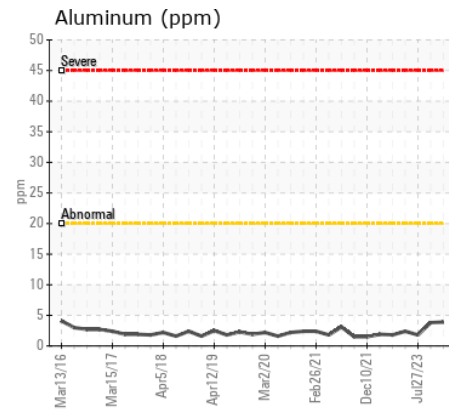
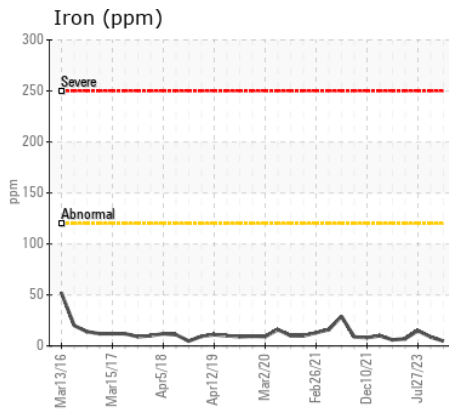
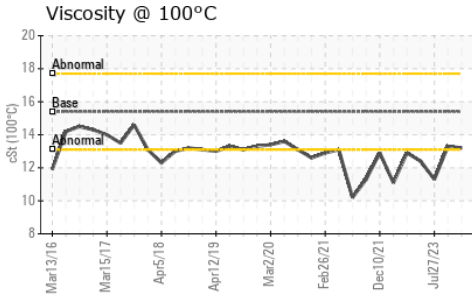
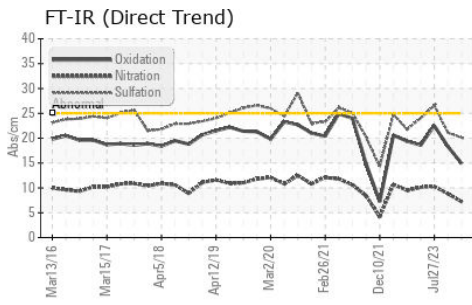
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	7
Potassium	ppm	ASTM D5185(m)	>20	4	0	2
Fuel		WC Method	>3.0	<1.0	<1.0	2.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.1	0.3
Nitration	Abs/cm	ASTM D7624*	>20	7.2	8.8	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	21.1	26.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	5	8
Boron	ppm	ASTM D5185(m)	0	34	4	21
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	44	56	8
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	724	940	747
Calcium	ppm	ASTM D5185(m)	1070	1310	1078	1316
Phosphorus	ppm	ASTM D5185(m)	1150	903	938	756
Zinc	ppm	ASTM D5185(m)	1270	1047	1144	827
Sulfur	ppm	ASTM D5185(m)	2060	2547	2324	2408
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.9	18.3	22.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.2	13.3	▲ 11.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110687
Lab Number : 02631502
Unique Number : 5772655
Test Package : MOB 1

GFL Environmental - 207 - Pickering SW
 1034 TOY AVENUE, PICKERING YARD
 PICKERING, ON
 CA L1W 3P1
 Contact: Ian Patton
 ipatton@gflenv.com
 T: (905)831-6297
 F: (905)426-3577

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.