



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
4507
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100329	GFL0065027	GFL0064968
Sample Date		Client Info		08 Apr 2024	18 May 2023	21 Feb 2023
Machine Age	kms	Client Info		402893	2488	2251
Oil Age	kms	Client Info		0	237	142
Filter Age	kms	Client Info		0	237	142
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	26	13	14
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	1	3
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	7	22	3
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	<1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

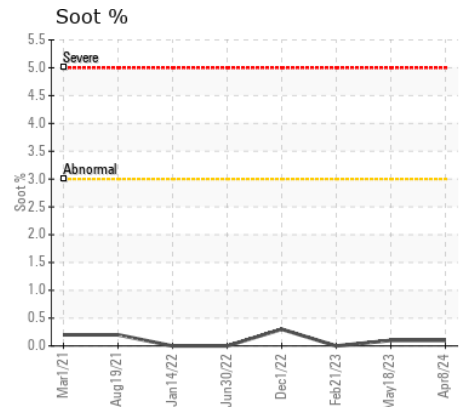
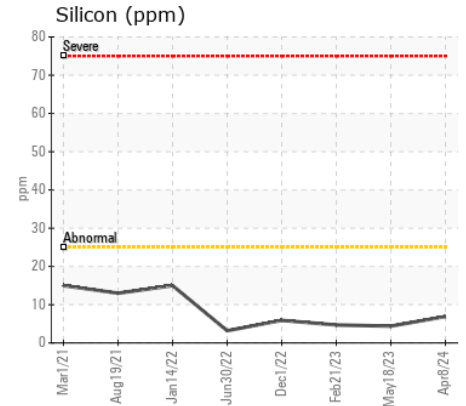
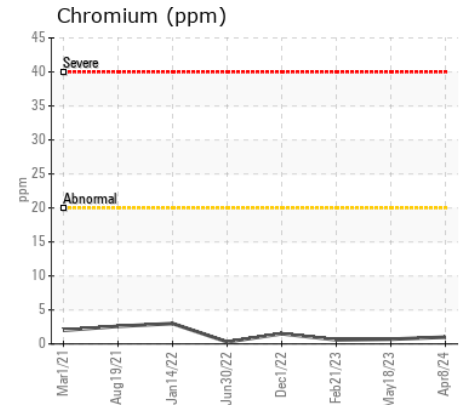
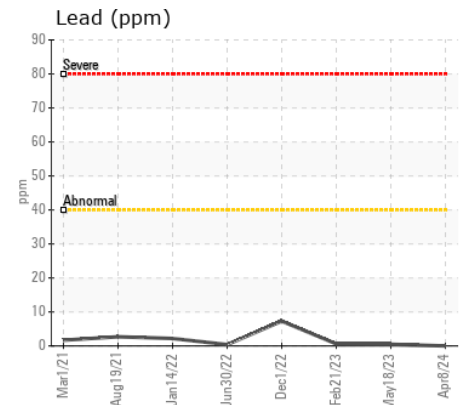
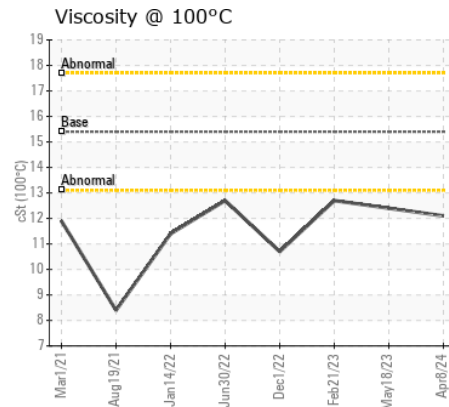
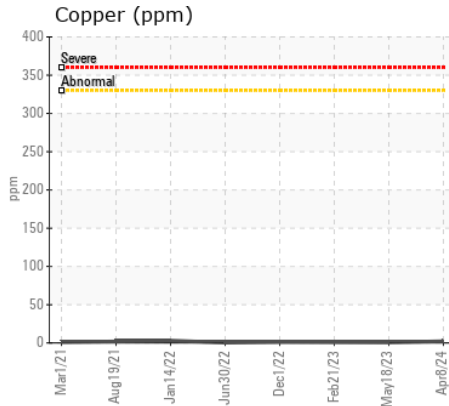
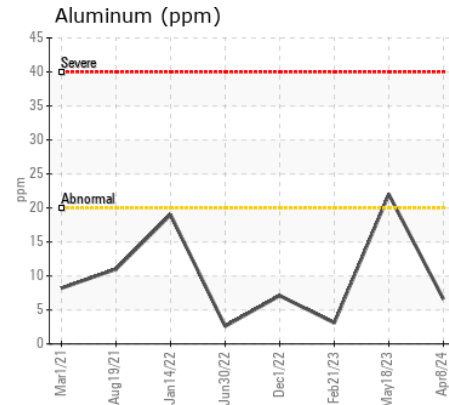
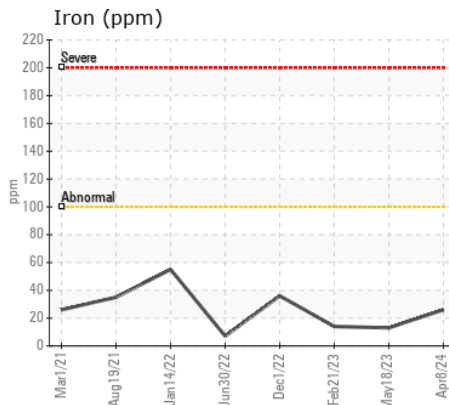
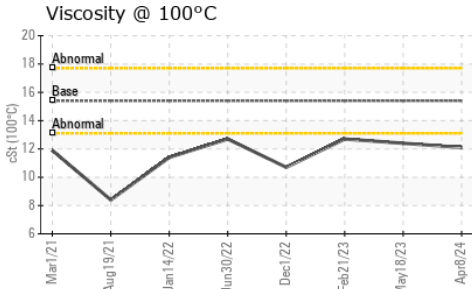
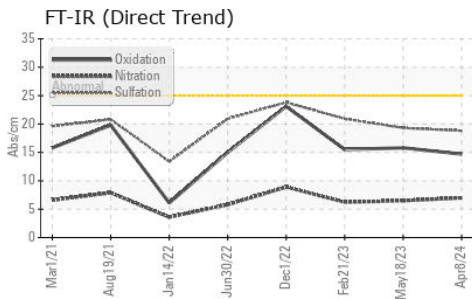
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	4	5
Potassium	ppm	ASTM D5185(m)	>20	5	30	<1
Fuel		WC Method	>2.0	<1.0	1.1	▲ 3.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	7.0	6.5	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.3	20.9
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		13	2	1
Boron	ppm	ASTM D5185(m)	0	3	3	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	54	51	54
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	892	864	902
Calcium	ppm	ASTM D5185(m)	1070	972	1024	1081
Phosphorus	ppm	ASTM D5185(m)	1150	909	962	1029
Zinc	ppm	ASTM D5185(m)	1270	1100	1049	1112
Sulfur	ppm	ASTM D5185(m)	2060	2386	2461	2601
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	15.8	15.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.1	12.4	12.7



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100329
Lab Number : 02627791
Unique Number : 5760923
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 556 - Whitecourt
 4138 - 42 Street,
 Whitecourt, AB
 CA T7S 1P1
 Contact: Kash Wagoner
 kwagoner@gflenv.com
 T: (780)778-4888
 F: (780)778-8707

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.