



Machine Id
201064
Component
Diesel Engine
Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117260	GFL0084301	GFL0084288
Sample Date		Client Info		11 Jun 2024	16 Jan 2024	20 Jul 2023
Machine Age	kms	Client Info		242767	9993	207140
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	282	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	23	12	7
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	5	3	2
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>150	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

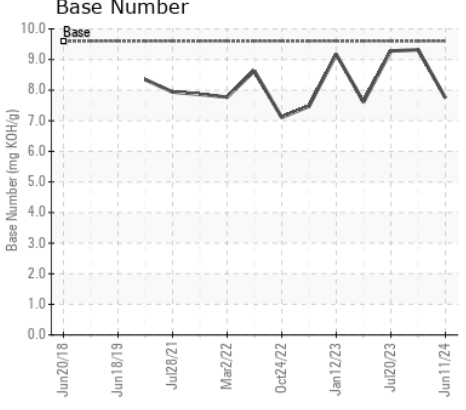
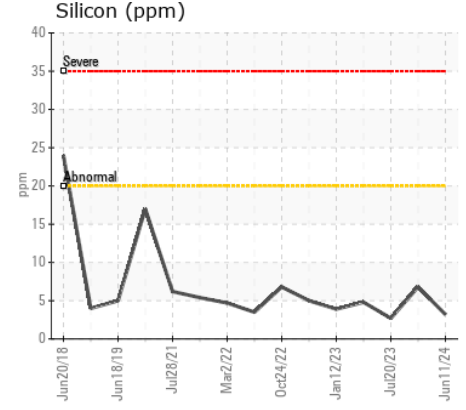
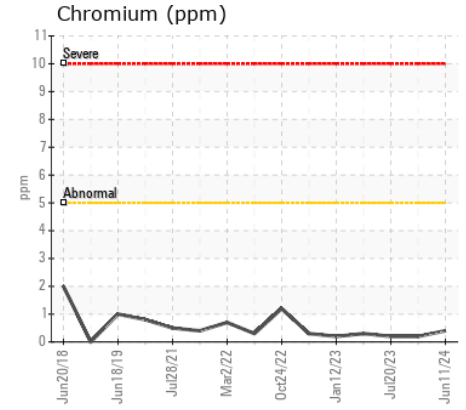
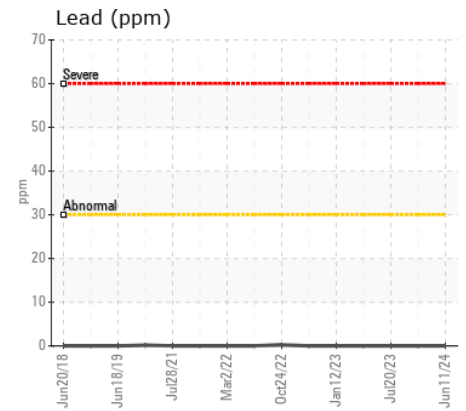
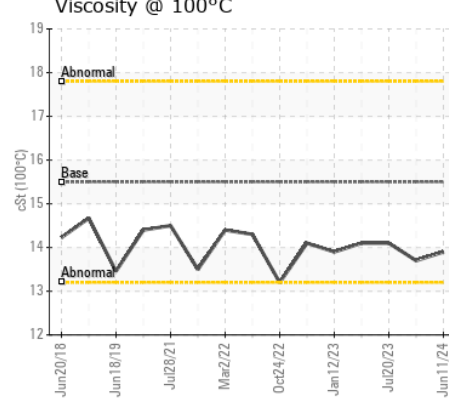
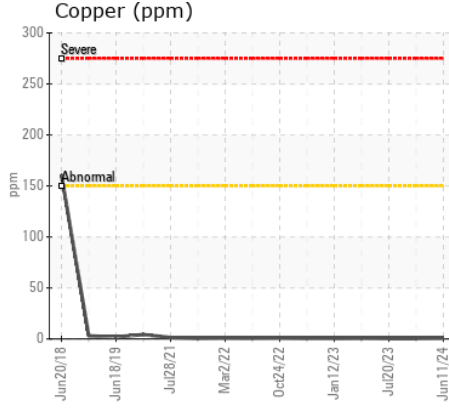
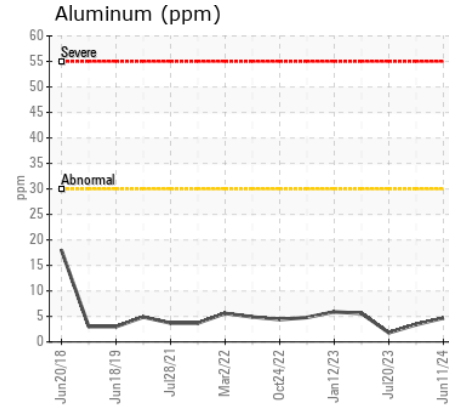
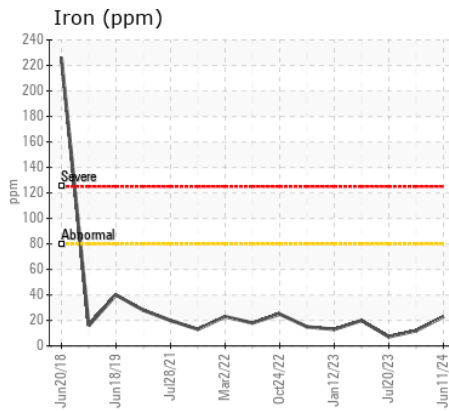
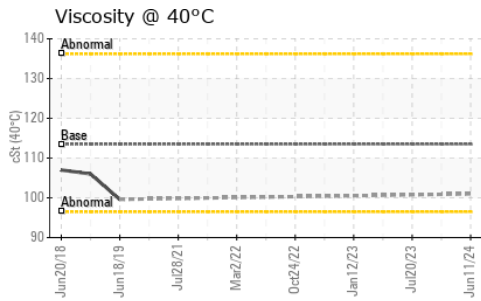
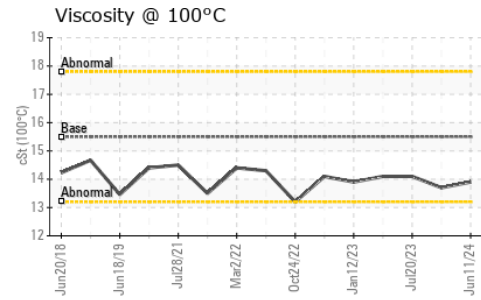
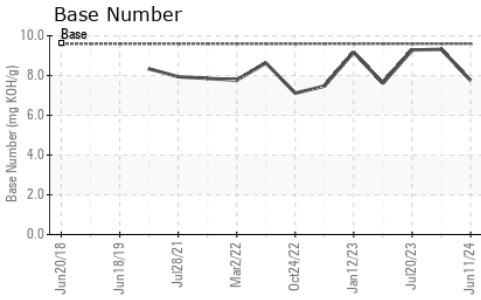
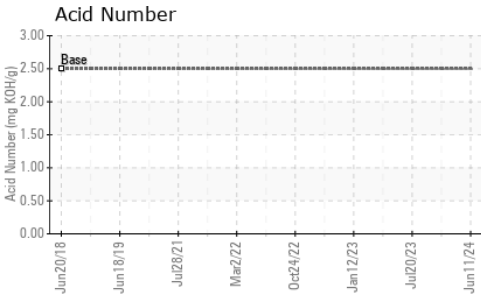
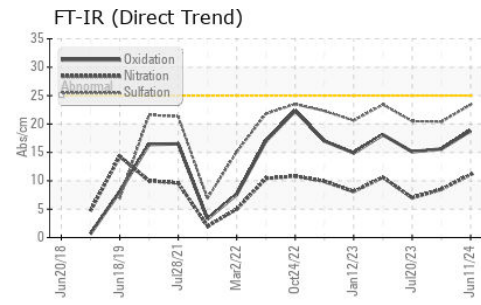
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	3	7	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1.6	1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	11.1	8.5	7.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.4	20.4	20.5
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		1	<1	1
Boron	ppm	ASTM D5185(m)	1	3	3	2
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	56	57	55
Manganese	ppm	ASTM D5185(m)	1	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	884	906	914
Calcium	ppm	ASTM D5185(m)	1070	1014	1023	989
Phosphorus	ppm	ASTM D5185(m)	1150	943	991	1025
Zinc	ppm	ASTM D5185(m)	1270	1151	1162	1139
Sulfur	ppm	ASTM D5185(m)	2060	2354	2690	2499
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	15.6	15.1
Acid Number (AN)	mg KOH/g	ASTM D974*	2.5	2.64	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	7.75	9.32	9.28
Visc @ 40°C	cSt	ASTM D7279(m)	113.5	101	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	13.9	13.7	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	144	139	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117260
Lab Number : 02642292
Unique Number : 5799831
Test Package : MOB 2 (Additional Tests: KV40, TAN Auto, TAN Man, VI, Visual)

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com

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.

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