

Machine Id
201042
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		GFL0117274	GFL0099553	GFL0084348
Sample Date		Client Info		24 Apr 2024	16 Jan 2024	17 Aug 2023
Machine Age	kms	Client Info		415957	402088	392291
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	18	24	10
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	1	▲ 3	<1
Aluminum	ppm	ASTM D5185(m)	>20	8	6	2
Lead	ppm	ASTM D5185(m)	>40	<1	2	<1
Copper	ppm	ASTM D5185(m)	>330	5	8	4
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

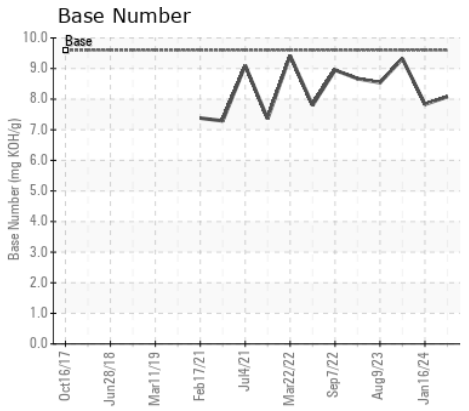
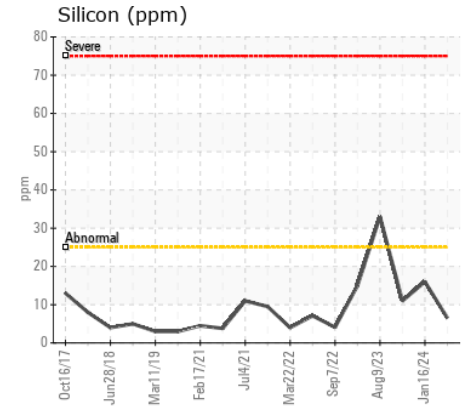
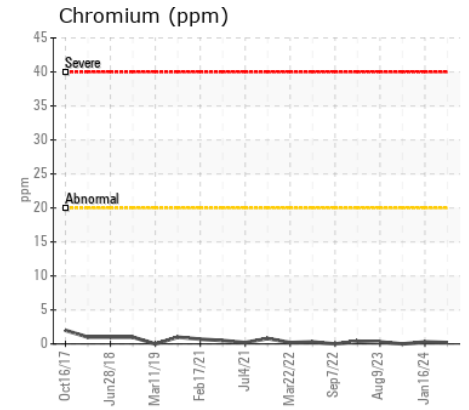
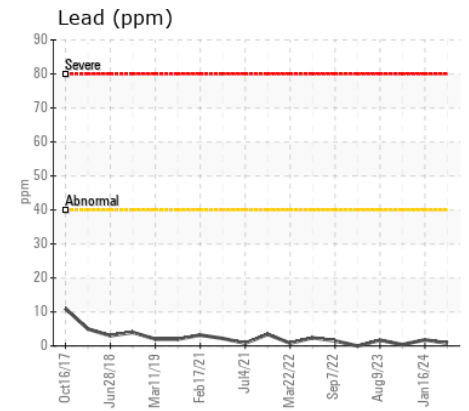
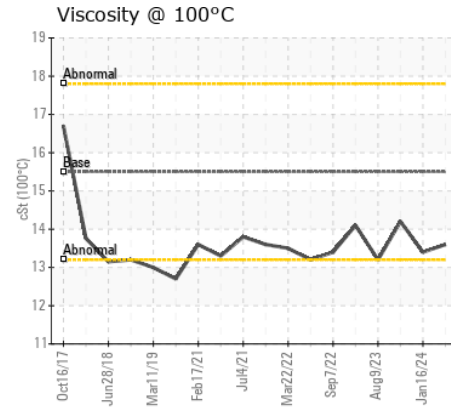
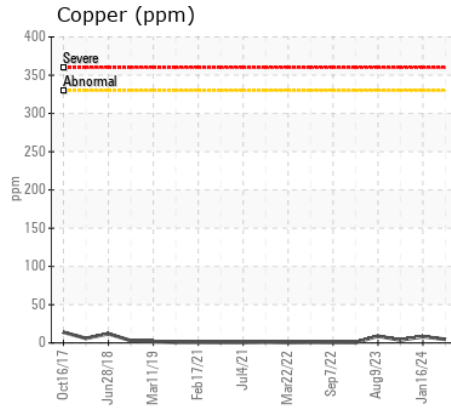
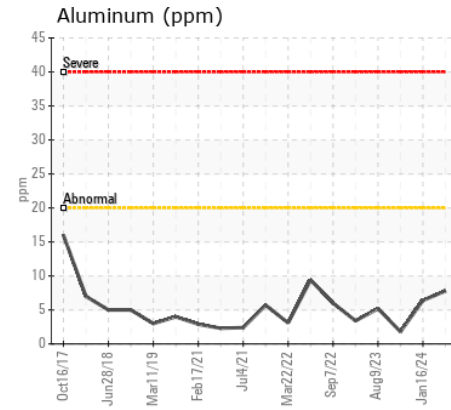
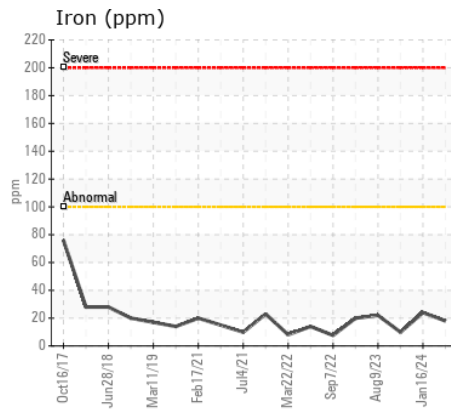
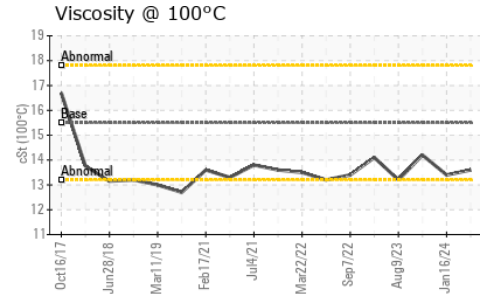
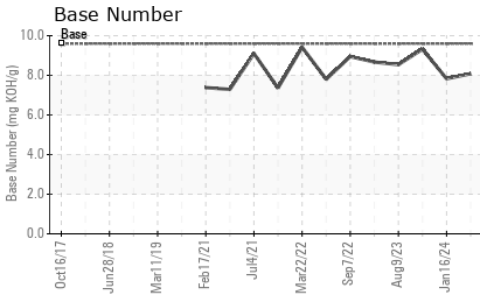
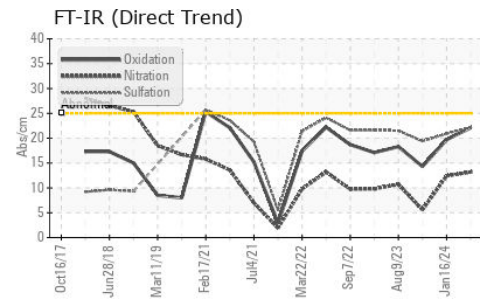
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	16	11
Potassium	ppm	ASTM D5185(m)	>20	5	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.6	0.5	0
Nitration	Abs/cm	ASTM D7624*	>20	13.2	12.4	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.2	20.9	19.4
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		17	50	42
Boron	ppm	ASTM D5185(m)	1	3	2	3
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	56	55
Manganese	ppm	ASTM D5185(m)	1	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	941	870	909
Calcium	ppm	ASTM D5185(m)	1070	1050	1072	1042
Phosphorus	ppm	ASTM D5185(m)	1150	945	937	1023
Zinc	ppm	ASTM D5185(m)	1270	1163	1138	1113
Sulfur	ppm	ASTM D5185(m)	2060	2396	2553	2555
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1	19.7	14.3
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	8.08	7.83	9.32
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	13.6	13.4	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117274
Lab Number : 02632473
Unique Number : 5773626
Test Package : MOB 2

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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