



Machine Id
801109
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		GFL0117273	GFL0099556	GFL0091599
Sample Date		Client Info		30 Apr 2024	18 Jan 2024	08 Nov 2023
Machine Age	hrs	Client Info		11960	247185	241633
Oil Age	hrs	Client Info		588	0	0
Filter Age	hrs	Client Info		588	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	33	36	65
Chromium	ppm	ASTM D5185(m)	>5	2	1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	5	6	6
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>150	2	2	3
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

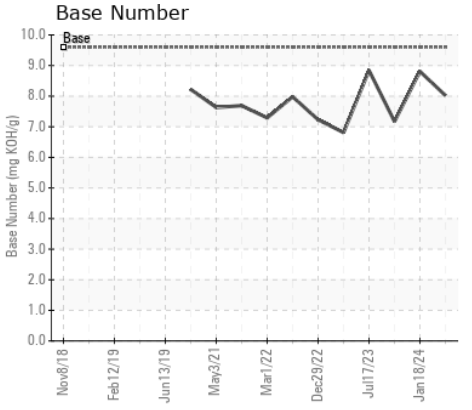
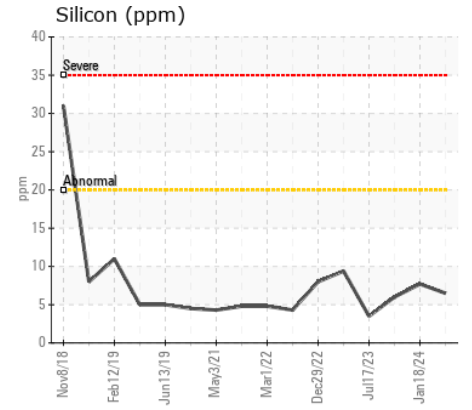
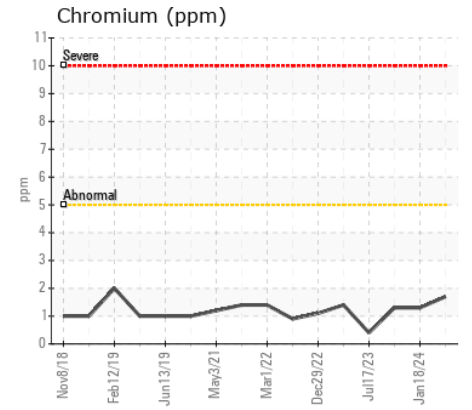
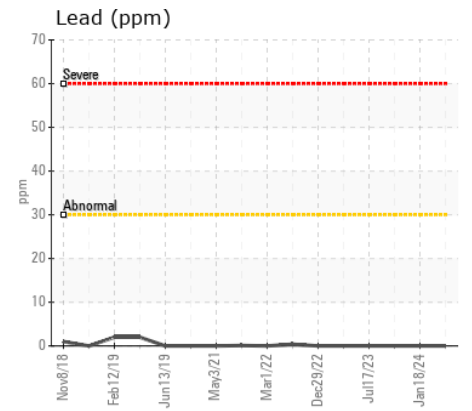
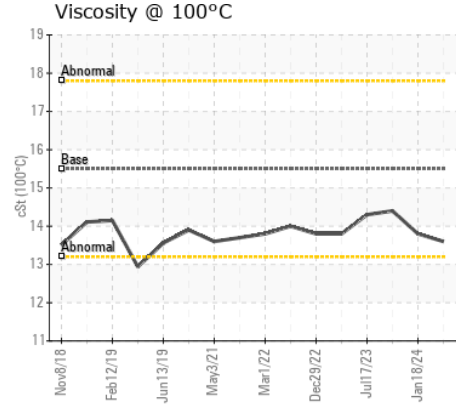
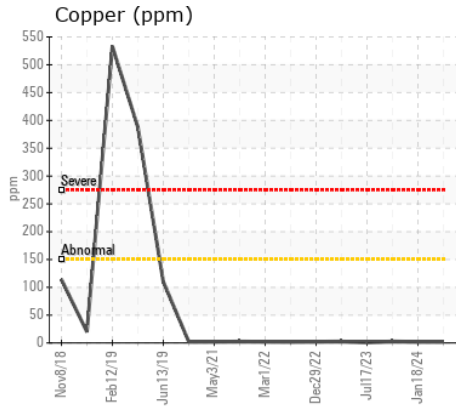
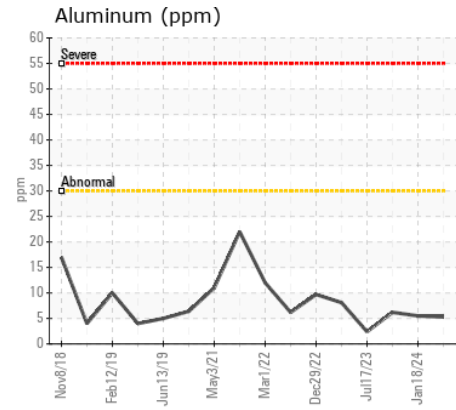
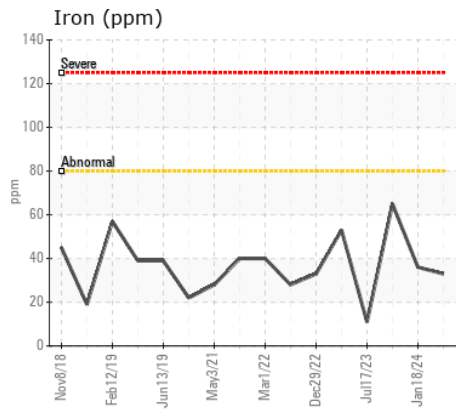
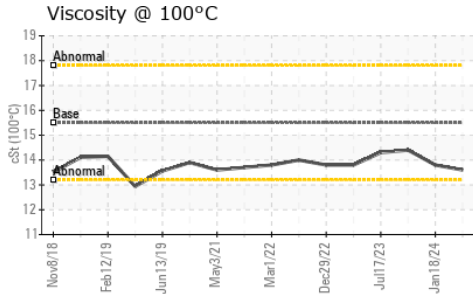
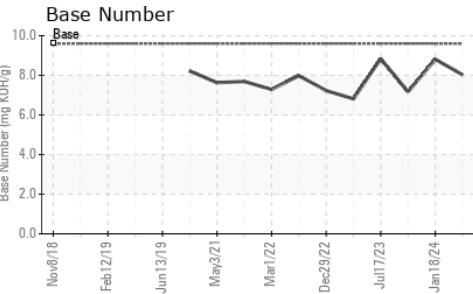
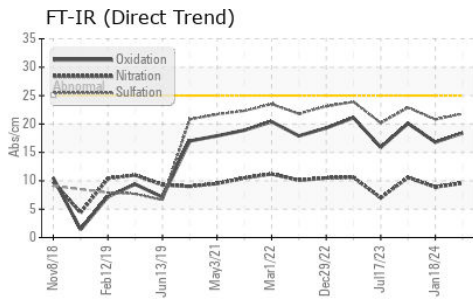
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	6	8	6
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	0.8	0.6	0.8
Nitration	Abs/cm	ASTM D7624*	>20	9.6	8.9	10.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	20.8	22.9
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)		9	7	10
Boron	ppm	ASTM D5185(m)	1	2	2	2
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	61	58	60
Manganese	ppm	ASTM D5185(m)	1	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	988	922	964
Calcium	ppm	ASTM D5185(m)	1070	1089	1055	1071
Phosphorus	ppm	ASTM D5185(m)	1150	981	987	989
Zinc	ppm	ASTM D5185(m)	1270	1220	1189	1205
Sulfur	ppm	ASTM D5185(m)	2060	2214	2553	2328
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.4	16.8	20.1
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	8.02	8.81	7.17
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	13.6	13.8	14.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117273
Lab Number : 02633820
Unique Number : 5774973
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
 T: (403)369-6163

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.