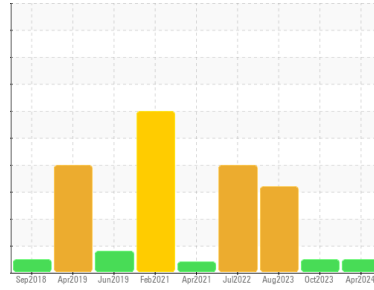




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

801187

Component

Diesel Engine

Fluid

PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0117308	GFL0084280	GFL0084362	
Sample Date	Client Info	16 Apr 2024	18 Oct 2023	29 Aug 2023	
Machine Age	hrs	Client Info	1766	18893	272163
Oil Age	hrs	Client Info	1766	346	0
Oil Changed	Client Info	N/A	Changed	Changed	
Sample Status		NORMAL	NORMAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>100	25	34	▲ 135
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	3
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	7
Lead	ppm	ASTM D5185(m)	>40	<1	2	13
Copper	ppm	ASTM D5185(m)	>330	2	2	6
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	1	3	4	2
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	59	61
Manganese	ppm	ASTM D5185(m)	1	<1	0	1
Magnesium	ppm	ASTM D5185(m)	1010	962	942	889
Calcium	ppm	ASTM D5185(m)	1070	1062	1076	961
Phosphorus	ppm	ASTM D5185(m)	1150	996	1011	945
Zinc	ppm	ASTM D5185(m)	1270	1169	1182	1114
Sulfur	ppm	ASTM D5185(m)	2060	2461	2518	2093
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

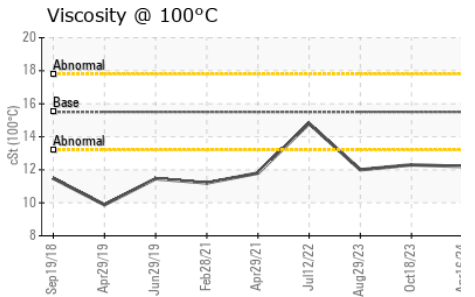
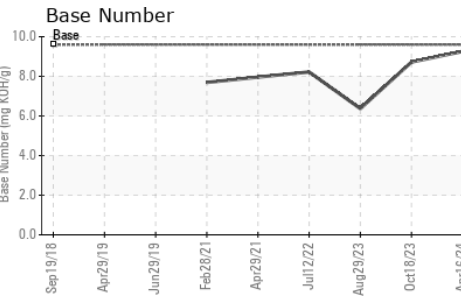
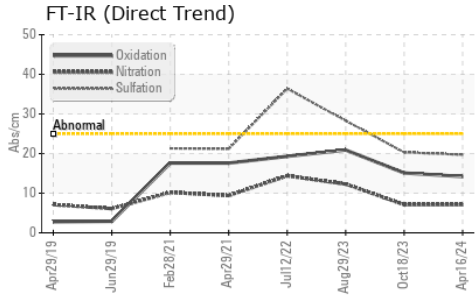
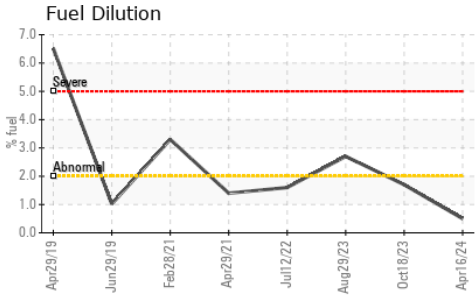
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>25	2	3	6
Sodium	ppm	ASTM D5185(m)		26	29	● 204
Potassium	ppm	ASTM D5185(m)	>20	1	1	6
Fuel	%	ASTM D7593*	>2.0	0.5	1.7	▲ 2.7

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	>3	0.7	0.8	2.4
Nitration	Abs/cm	ASTM D7624*	>20	7.1	7.1	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	20.3	28.3



OIL ANALYSIS REPORT

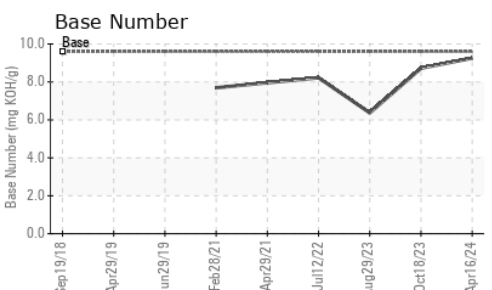
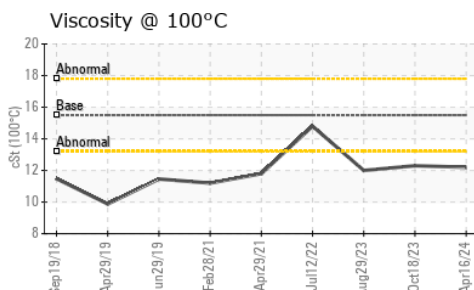
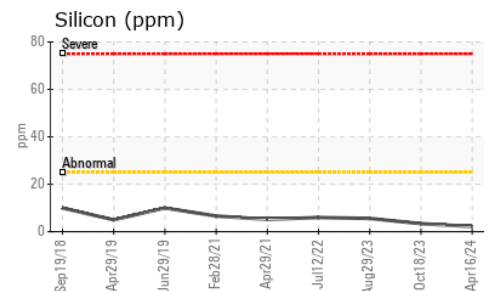
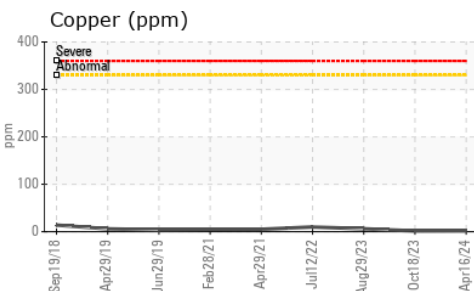
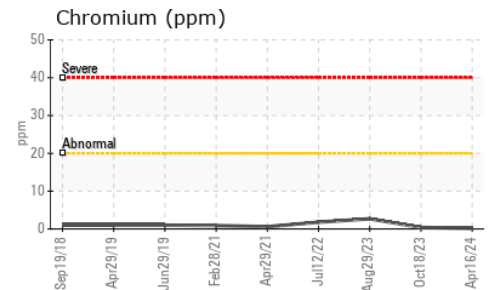
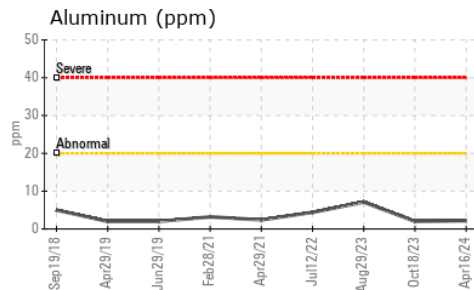
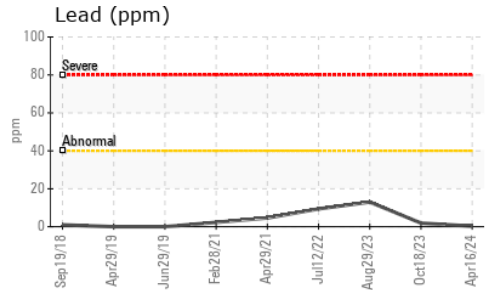
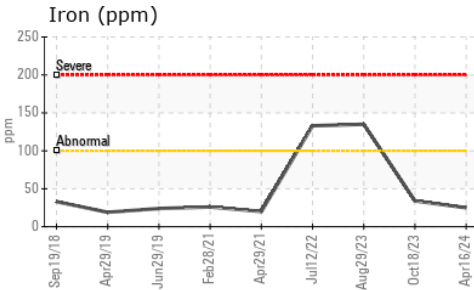


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.2	15.1	20.9
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	9.26	8.72	6.37

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	12.2	12.3	▲ 12.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117308
Lab Number : 02630893
Unique Number : 5772046
Test Package : MOB 2 (Additional Tests: FUELDILUTION, PercentFuel)

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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