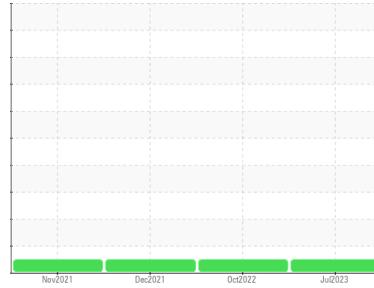




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
7104
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		GFL0074288	GFL0054534	GFL0041380
Sample Date	Client Info		11 Jul 2023	05 Oct 2022	16 Dec 2021
Machine Age	hrs	Client Info	15017	13411	0
Oil Age	hrs	Client Info	1606	1135	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185(m)	>50	11	24	18
Chromium	ppm	ASTM D5185(m)	>4	<1	2	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	2	3	2
Lead	ppm	ASTM D5185(m)	>30	<1	5	<1
Copper	ppm	ASTM D5185(m)	>35	4	9	11
Tin	ppm	ASTM D5185(m)	>4	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	history 1	history 2	
Boron	ppm	ASTM D5185(m)	50	13	6	8
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	51	58	57
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	593	624	679
Calcium	ppm	ASTM D5185(m)	1510	1583	1876	1497
Phosphorus	ppm	ASTM D5185(m)	780	774	829	778
Zinc	ppm	ASTM D5185(m)	870	904	1023	1043
Sulfur	ppm	ASTM D5185(m)	2040	1944	2108	2060
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185(m)	>+100	3	4	4
Sodium	ppm	ASTM D5185(m)		7	12	7
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1

INFRA-RED

	method	limit/base	current	history 1	history 2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.3	14.1	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	27.8	23.0

FLUID DEGRADATION

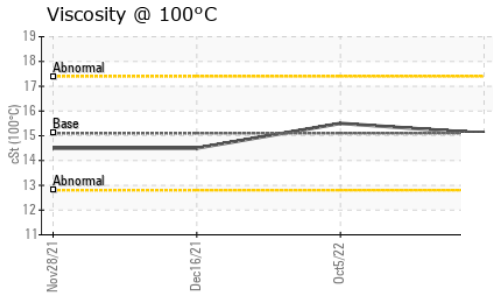
	method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.1	24.5	18.4

VISUAL

	method	limit/base	current	history 1	history 2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

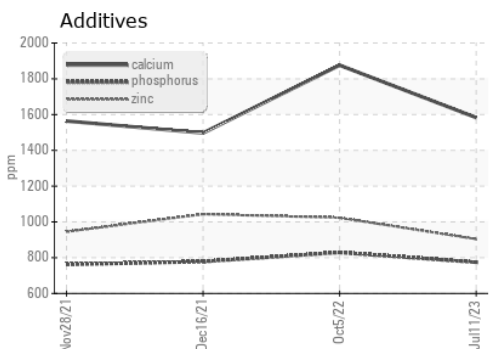
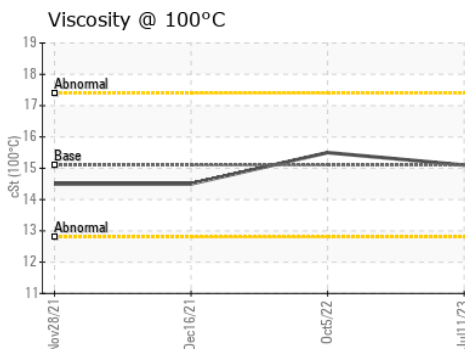
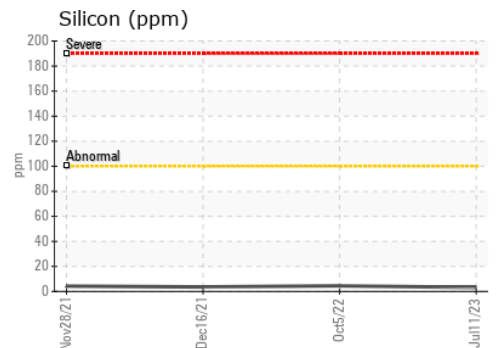
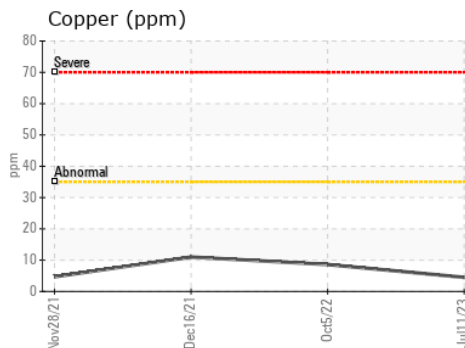
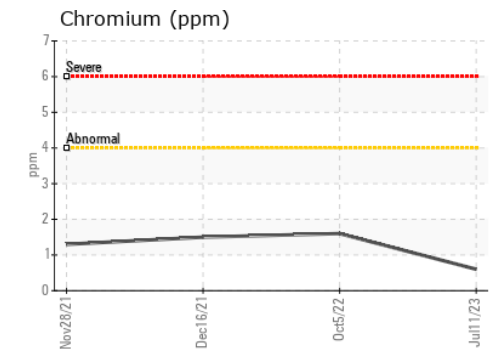
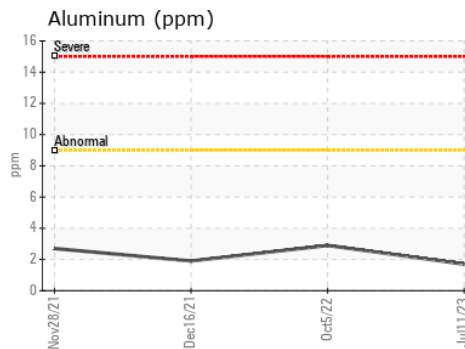
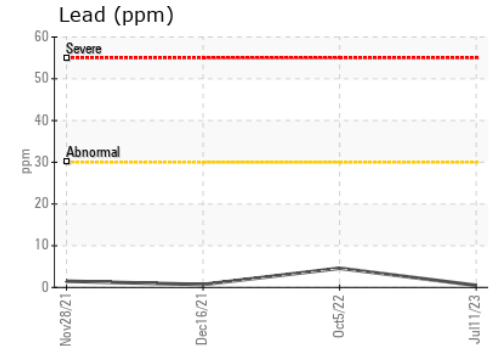
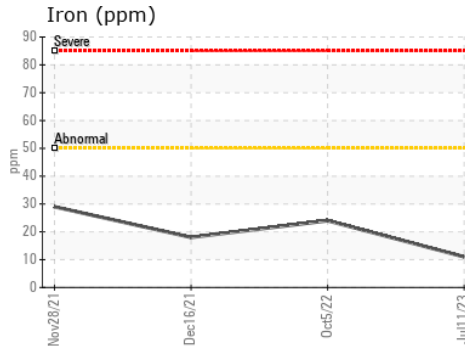


OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	15.1	15.5	14.5

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : GFL0074288 Received : 12 Jul 2023
 Lab Number : 02569317 Diagnosed : 12 Jul 2023
 Unique Number : 5606363 Diagnostician : Wes Davis
 Test Package : MOB 1

GFL Environmental - 216
 15 Bermondsey Road
 Toronto, ON
 CA M4B 0A6
 Contact: Tom Hatzioannidis
 thatzioannidis@gflenv.com
 T: (416)678-9340
 F:

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.