



OIL ANALYSIS REPORT

Sample Rating Trend

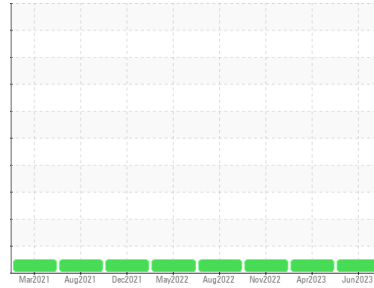
NORMAL



Machine Id
901076

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- 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			GFL0085947	GFL0077946	GFL0059955
Sample Date	Client Info			21 Jun 2023	11 Apr 2023	20 Nov 2022
Machine Age	hrs	Client Info		9899	9413	8384
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel	WC Method		>3.0	<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>90	12	10	12
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	5	6	4
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	1	<1	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)	2	2	6	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	57	58	56
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	935	932	913
Calcium	ppm	ASTM D5185(m)	1050	998	1074	1012
Phosphorus	ppm	ASTM D5185(m)	995	1028	1050	1035
Zinc	ppm	ASTM D5185(m)	1180	1140	1130	1123
Sulfur	ppm	ASTM D5185(m)	2600	2451	2619	2483
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

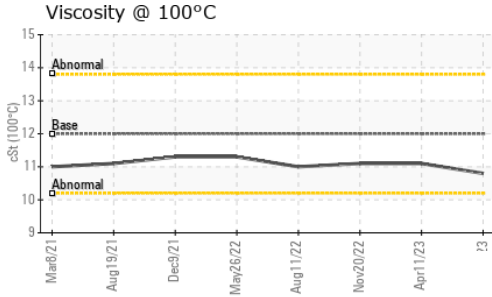
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>25	5	3	4
Sodium	ppm	ASTM D5185(m)		3	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>6	0.2	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.1	6.9	8.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	18.6	20.7

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.9	14.1	18.0



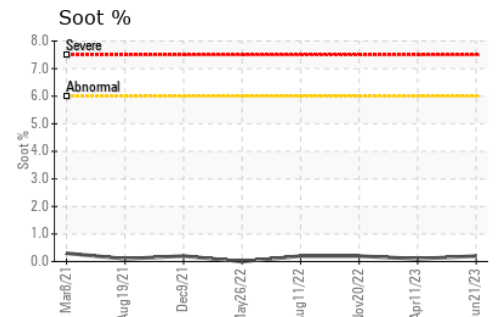
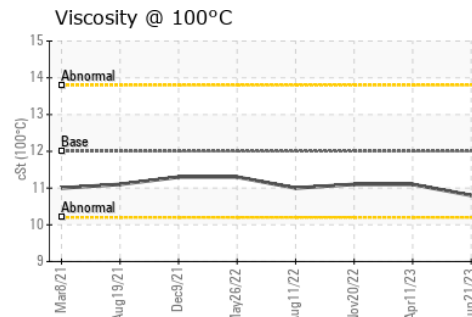
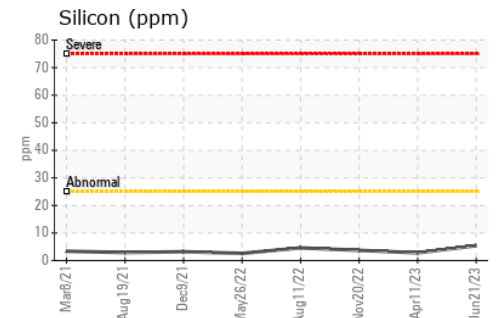
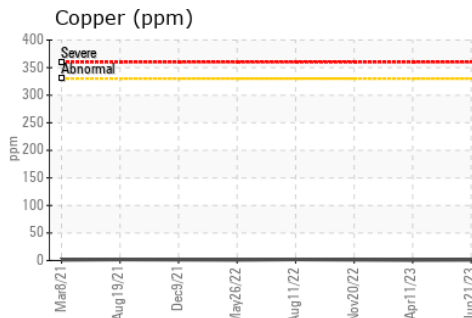
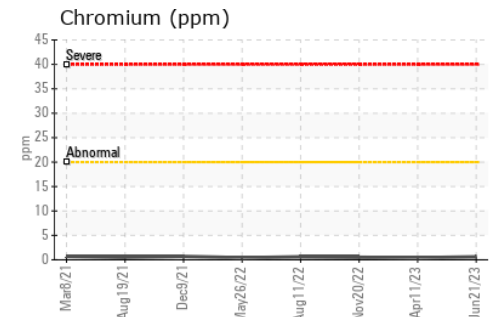
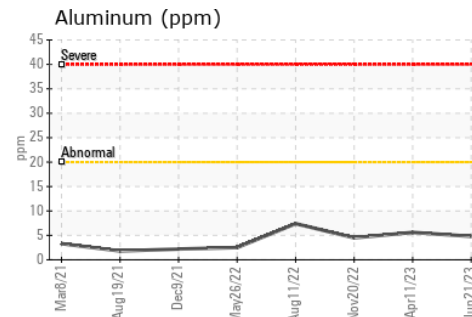
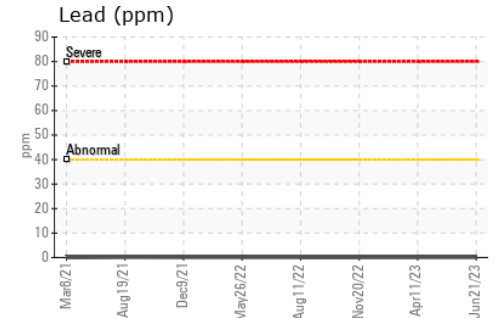
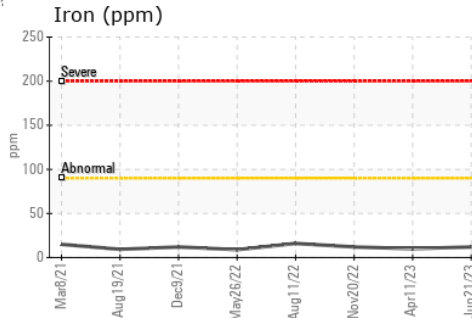
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.8	11.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**
Sample No. : GFL0085947 **Received** : 04 Jul 2023 **8409 -15th Street NW**
Lab Number : 02567701 **Diagnosed** : 04 Jul 2023 **Edmonton, AB**
Unique Number : 5604747 **Diagnostician** : Wes Davis **CA T6P 0B8**
Test Package : MOB 1 **Contact:** Tim Greig **tgreig@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.