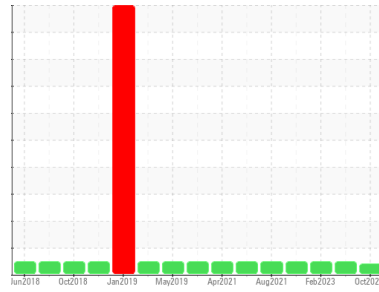




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
401111
 Component
Diesel Engine
 Fluid
SAE 10W40 (--- 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

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0093875	GFL0085948	GFL0072836	
Sample Date	Client Info	29 Oct 2023	03 Jul 2023	16 Feb 2023	
Machine Age	hrs	Client Info	0	23462	22464
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		ABNORMAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >100	22	20	18
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >4	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	<1	0	0
Aluminum	ppm	ASTM D5185(m) >20	2	2	2
Lead	ppm	ASTM D5185(m) >40	2	2	1
Copper	ppm	ASTM D5185(m) >330	<1	<1	<1
Tin	ppm	ASTM D5185(m) >15	0	0	<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)	2	2	2
Barium	ppm	ASTM D5185(m)	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	61	59	60
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	970	975	976
Calcium	ppm	ASTM D5185(m)	1069	1035	1114
Phosphorus	ppm	ASTM D5185(m)	992	1051	1096
Zinc	ppm	ASTM D5185(m)	1206	1171	1213
Sulfur	ppm	ASTM D5185(m)	2455	2474	2660
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	6	6	7
Sodium	ppm	ASTM D5185(m) >401	5	5	7
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1
Fuel	%	ASTM D7593* >5	0.5	<1.0	<1.0

INFRA-RED

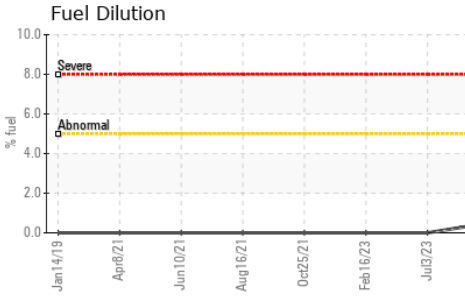
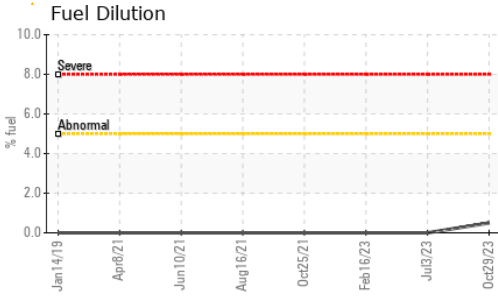
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	1.2	1	0.6
Nitration	Abs/cm	ASTM D7624* >20	9.6	8.8	8.5
Sulfation	Abs/.1mm	ASTM D7415* >30	21.5	21.4	21.5

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	16.2	15.8	15.4



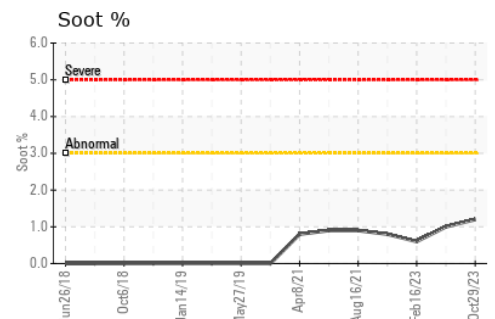
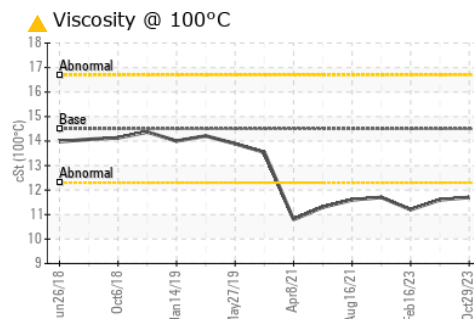
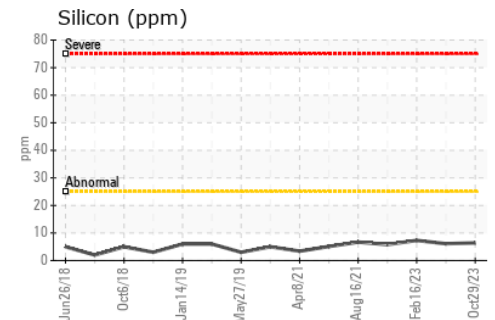
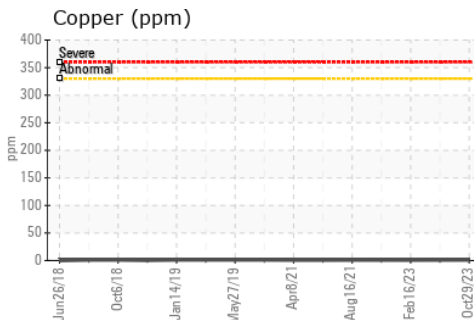
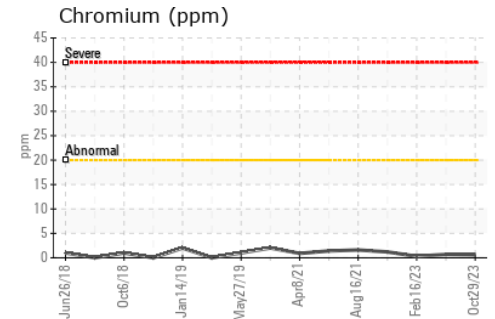
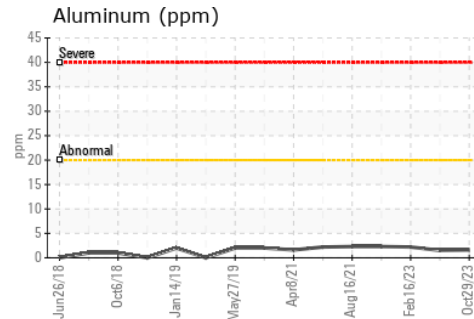
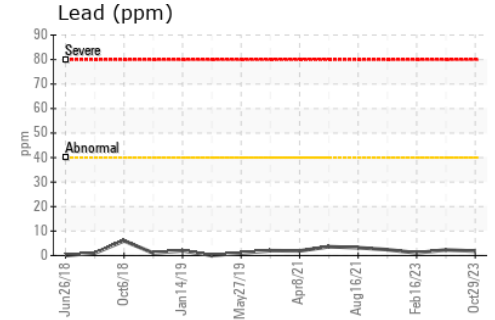
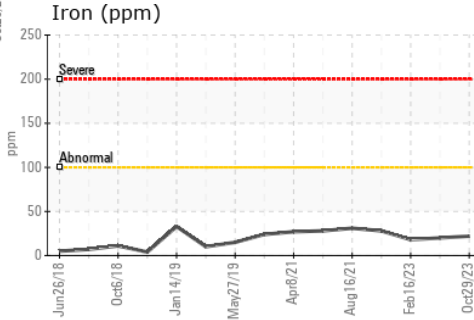
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	▲ 11.7	11.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0093875 **Received** : 30 Oct 2023 8409 -15th Street NW
Lab Number : 02592535 **Diagnosed** : 31 Oct 2023 Edmonton, AB
Unique Number : 5669614 **Diagnostician** : Kevin Marson CA T6P 0B8
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) 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.