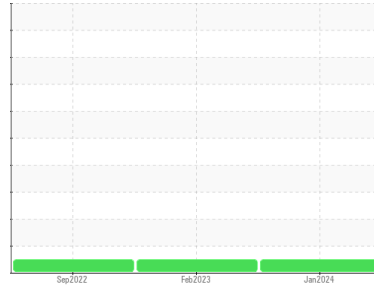




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
831048
 Component
Transmission (Auto)
 Fluid
PETRO CANADA DuraDrive HD Synthetic 668 (--- GAL)

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 fluid.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0099621	GFL0070719	GFL0060190
Sample Date	Client Info		29 Jan 2024	22 Feb 2023	29 Sep 2022
Machine Age	kms	Client Info	53225	1901	1053
Oil Age	kms	Client Info	0	852	1053
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>220	75	73	58
Chromium	ppm	ASTM D5185(m)	>2	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>75	15	13	7
Lead	ppm	ASTM D5185(m)	>95	12	14	11
Copper	ppm	ASTM D5185(m)	>60	27	28	23
Tin	ppm	ASTM D5185(m)	>10	2	2	<1
Antimony	ppm	ASTM D5185(m)	>2	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)	78	98	128	143
Barium	ppm	ASTM D5185(m)		<1	<1	1
Molybdenum	ppm	ASTM D5185(m)	0	<1	<1	1
Manganese	ppm	ASTM D5185(m)		2	3	3
Magnesium	ppm	ASTM D5185(m)	0	2	1	1
Calcium	ppm	ASTM D5185(m)	113	139	153	155
Phosphorus	ppm	ASTM D5185(m)	222	313	407	443
Zinc	ppm	ASTM D5185(m)		44	48	41
Sulfur	ppm	ASTM D5185(m)	1326	1931	2238	2391
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	5	6	6
Sodium	ppm	ASTM D5185(m)		11	14	13
Potassium	ppm	ASTM D5185(m)	>20	3	4	3

INFRA-RED

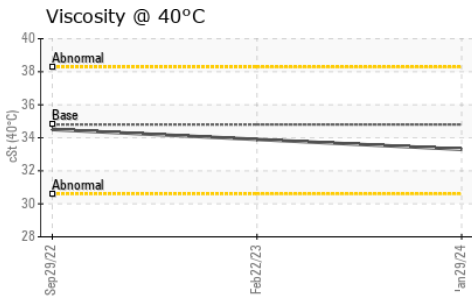
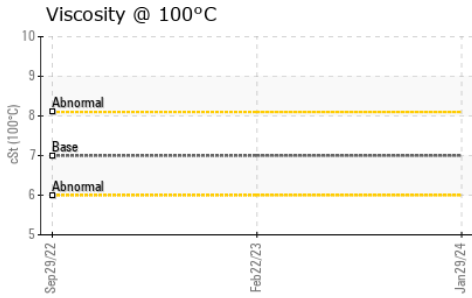
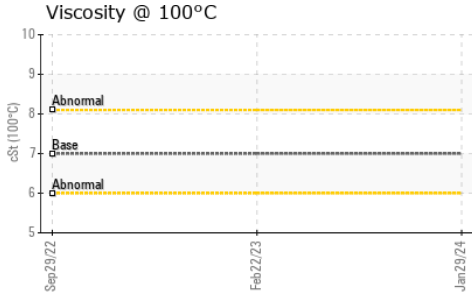
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		4.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*		54.1	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*		69.8	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	1.53	1.38	1.97



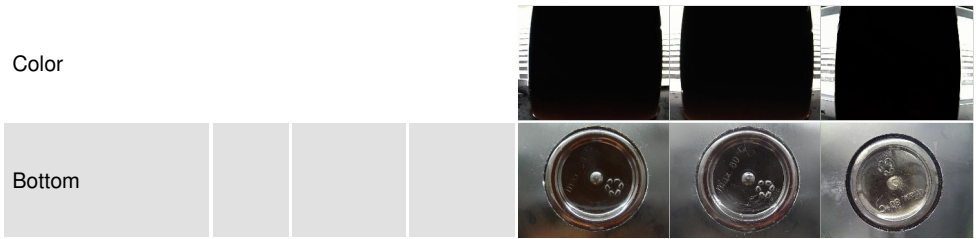
OIL ANALYSIS REPORT



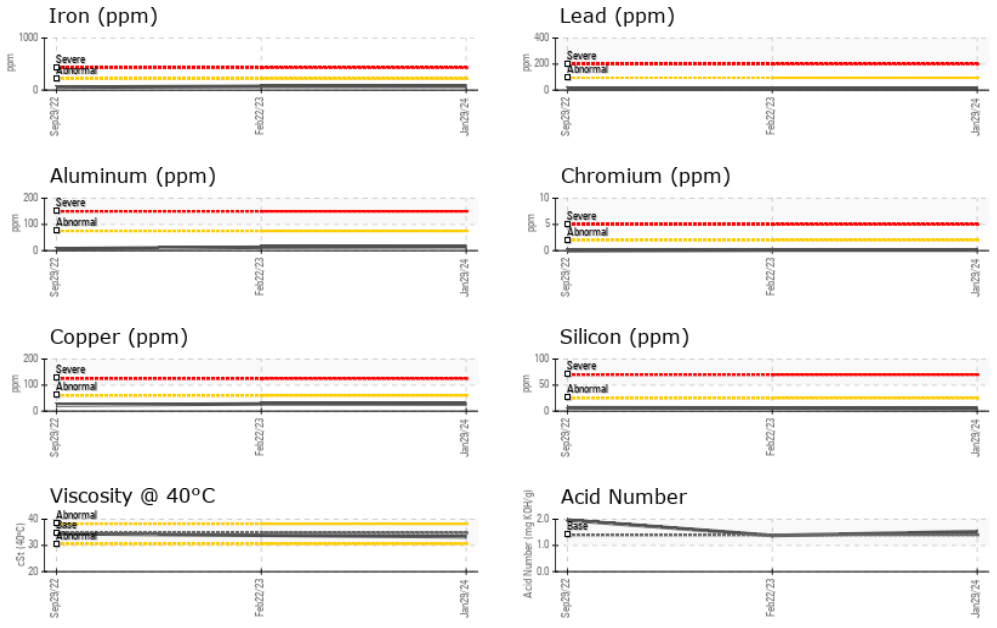
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	34.8	33.3	33.9	34.5
Visc @ 100°C	cSt	ASTM D7279(m)	7.0	6.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	167	152	---	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0099621
Lab Number : 02614202
Unique Number : 5723297
Test Package : MOB 2 (Additional Tests: FT-IR, KV100, TAN Man, VI)
Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Kevin Marson

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com
 T:
 F: (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.