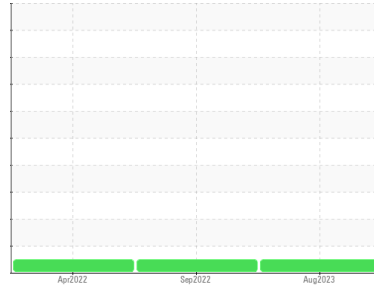




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
901050
 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 BN result indicates that there is suitable alkalinity remaining in the fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0084337	GFL0057764	GFL0049106
Sample Date	Client Info		31 Aug 2023	15 Sep 2022	12 Apr 2022
Machine Age	kms	Client Info	425219	17571	16510
Oil Age	kms	Client Info	0	1065	2224
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>220	155	140	133
Chromium	ppm	ASTM D5185(m)	>2	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>75	40	36	33
Lead	ppm	ASTM D5185(m)	>95	54	51	50
Copper	ppm	ASTM D5185(m)	>60	53	53	50
Tin	ppm	ASTM D5185(m)	>10	6	6	6
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	166	180	189
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		1	1	1
Magnesium	ppm	ASTM D5185(m)	0	3	<1	<1
Calcium	ppm	ASTM D5185(m)	113	136	134	134
Phosphorus	ppm	ASTM D5185(m)	222	447	465	470
Zinc	ppm	ASTM D5185(m)		7	3	4
Sulfur	ppm	ASTM D5185(m)	1326	2278	2298	2587
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	8	8	8
Sodium	ppm	ASTM D5185(m)		14	12	12
Potassium	ppm	ASTM D5185(m)	>20	4	2	2

INFRA-RED

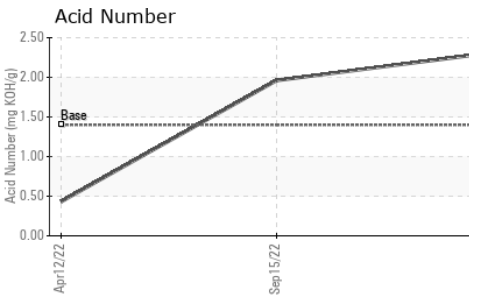
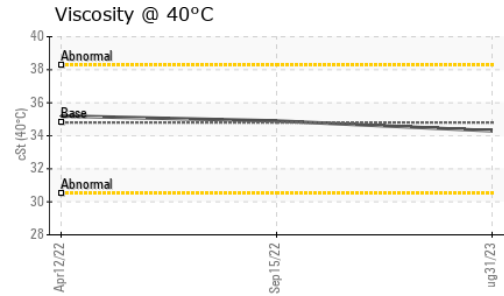
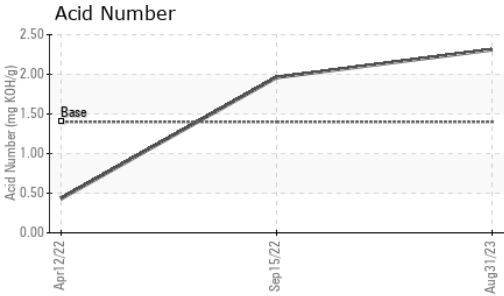
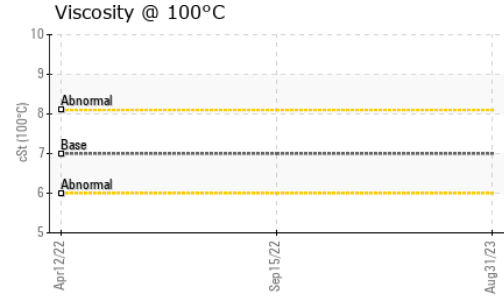
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		5.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*		79.7	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*		96.8	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	2.31	1.96	0.43
Base Number (BN)	mg KOH/g	ASTM D2896*	2.7	1.74	---	---



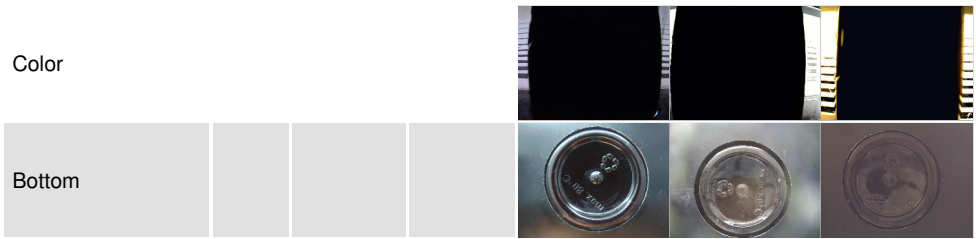
OIL ANALYSIS REPORT



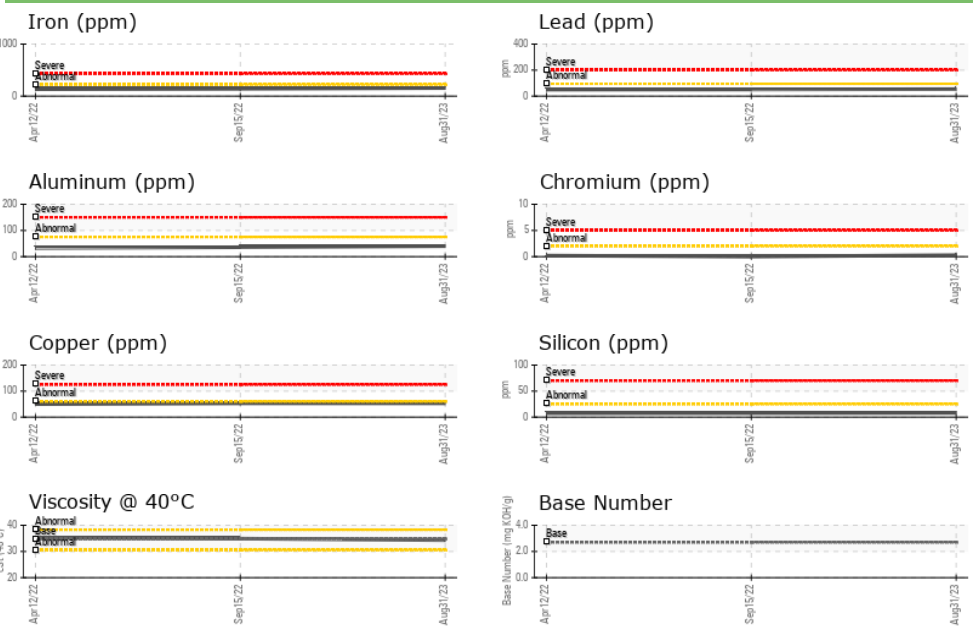
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	34.9	35.2
Visc @ 100°C	cSt	ASTM D7279(m)	7.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	167	---	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County
Sample No. : GFL0084337 **Received** : 12 Sep 2023
Lab Number : 02581705 **Diagnosed** : 14 Sep 2023
Unique Number : 5642770 **Diagnostician** : Kevin Marson
Test Package : MOB 2 (Additional Tests: FT-IR, KV100, TAN Man, TBN, VI)

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.