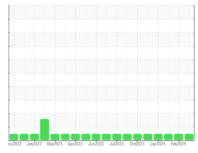


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Machine Id 724001

Component
Transmission (Auto)

PETRO CANADA DuraDrive HD Synthetic 668 (--- QTS)

# DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the fluid.

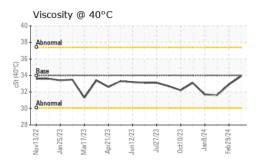
# **Fluid Condition**

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

Sample Number   Client Info   GFL0115743   GFL0112368   GFL010717   Sample Date   Client Info   04 Apr 2024   29 Feb 2024   30 Jan 2024   30 Jan 2025   30	68 ( Q1S)		lov2022 Jan20	23 Mar2023 Apr2023 Jui	n2023 Jul2023 Oct2023 Jan2024	Feb 2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date   Client Info   04 Apr 2024   29 Feb 2024   30 Jan 2024   Machine Age   hrs   Client Info   13134   13109   13007     Dil Age   hrs   Client Info   25   951   849   Not Changed   Not Changed   Not Changed   Not Changed   NORMAL   NO	Sample Number		Client Info		GFL0115743	GFL0112368	GFL0107177
Machine Age   hrs   Client Info   13134   13109   13007     Dil Age   hrs   Client Info   25   951   849     Client Info   Not Changd   Northand   North			Client Info		04 Apr 2024	29 Feb 2024	30 Jan 2024
Dil Age	Machine Age	hrs	Client Info		13134	13109	13007
Not Changed   Client Info   Not Changed   NORMAL   NORM	Oil Age	hrs	Client Info		25	951	
NORMAL   NORMAL   NORMAL   NORMAL   CONTAMINATION   method   limit/base   current   history1   history2   history2   history2   history2   history2   history2   history2   history2   history3   history2   history3   hi			Client Info		Not Changd	Changed	Not Changd
Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >160         2         23         58           Chromium         ppm         ASTM D5185m         >5         0         0         <1           Nickel         ppm         ASTM D5185m         >5         0         0         <1           Silver         ppm         ASTM D5185m         >5         0         0         <1           Aluminum         ppm         ASTM D5185m         >50         1         10         23           ALead         ppm         ASTM D5185m         >50         0         0         2           Copper         ppm         ASTM D5185m         >50         0         0         2           Copper         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         1	Sample Status					Ü	Ü
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >160         2         23         58           Chromium         ppm         ASTM D5185m         >5         0         0         <1	CONTAMINATI	ON	method	limit/base	current	history1	history2
Chromium	Water		WC Method	>0.1	NEG	NEG	NEG
Chromium         ppm         ASTM D5185m         >5         0         0         <1         <1              <1         <1          <1         <1          <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <2         3         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1 </td <td>WEAR METALS</td> <td>S</td> <td>method</td> <td>limit/base</td> <td>current</td> <td>history1</td> <td>history2</td>	WEAR METALS	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>160	2	23	58
Titanium         ppm         ASTM D5185m         0         0         <1           Silver         ppm         ASTM D5185m         >5         0         0         0           Aluminum         ppm         ASTM D5185m         >50         1         10         23           Lead         ppm         ASTM D5185m         >50         0         0         2           Copper         ppm         ASTM D5185m         >50         0         0         2           Vanadium         ppm         ASTM D5185m         >10         0         <1	Chromium	ppm	ASTM D5185m	>5	0	0	<1
Silver	Nickel	ppm	ASTM D5185m	>5	0	<1	<1
ASTM D5185m   S50	Titanium	ppm	ASTM D5185m		0	0	<1
Aluminum	Silver	ppm	ASTM D5185m	>5	0	0	0
Lead	Aluminum		ASTM D5185m	>50	1	10	23
Description					0	0	2
Tin							
Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         <1           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         1         0           Manganese         ppm         ASTM D5185m         0         -1         4         1         -1           Magnesium         ppm         ASTM D5185m         2         11         4         -1 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
Cadmium         ppm         ASTM D5185m         0         0         <1           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         76         71         57           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         1           Manganese         ppm         ASTM D5185m         2         11         4           Magnesium         ppm         ASTM D5185m         175         120         116           Phosphorus         ppm         ASTM D5185m         242         209         215           Zinc         ppm         ASTM D5185m         18         14         0           Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         20         4         5         9           Sodium         ppm         ASTM D5185m         20         4							
Soron   ppm   ASTM D5185m   76					-		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         0         1           Manganese         ppm         ASTM D5185m         0         <1	Boron	ppm	ASTM D5185m		76	71	57
Manganese         ppm         ASTM D5185m         0         <1         <1           Magnesium         ppm         ASTM D5185m         2         11         4           Calcium         ppm         ASTM D5185m         175         120         116           Phosphorus         ppm         ASTM D5185m         242         209         215           Zinc         ppm         ASTM D5185m         18         14         0           Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Gilicon         ppm         ASTM D5185m         >20         4         5         9           Godium         ppm         ASTM D5185m         >20         0         <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium         ppm         ASTM D5185m         2         11         4           Calcium         ppm         ASTM D5185m         175         120         116           Phosphorus         ppm         ASTM D5185m         242         209         215           Zinc         ppm         ASTM D5185m         18         14         0           Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         4         5         9           Sodium         ppm         ASTM D5185m         >20         0         <1	Molybdenum	ppm	ASTM D5185m		0	0	1
Calcium         ppm         ASTM D5185m         175         120         116           Phosphorus         ppm         ASTM D5185m         242         209         215           Zinc         ppm         ASTM D5185m         18         14         0           Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         4         5         9           Sodium         ppm         ASTM D5185m         >20         0         <1	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus         ppm         ASTM D5185m         242         209         215           Zinc         ppm         ASTM D5185m         18         14         0           Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         4         5         9           Sodium         ppm         ASTM D5185m         >20         0         <1	Magnesium	ppm	ASTM D5185m		2	11	4
Transport   Tran	Calcium	ppm	ASTM D5185m		175	120	116
Sulfur         ppm         ASTM D5185m         1991         1409         1457           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         4         5         9           Sodium         ppm         ASTM D5185m         2         6         5           Potassium         ppm         ASTM D5185m         20         0         <1         2           VISUAL         method         limit/base         current         history1         history2           White Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Wellow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           Precipitate         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE           Appearance         scalar         *Visual         NORML	Phosphorus	ppm	ASTM D5185m		242	209	215
CONTAMINANTS method limit/base current history1 history2  Silicon ppm ASTM D5185m >20 4 5 9  Sodium ppm ASTM D5185m 2 6 5  Potassium ppm ASTM D5185m >20 0 <1 2  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE  Yellow Metal scalar *Visual NONE NONE NONE NONE NONE  Precipitate scalar *Visual NONE NONE NONE NONE NONE  Silt scalar *Visual NONE NONE NONE NONE NONE  Debris scalar *Visual NONE NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Dodor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual NORML NORML NORML  NORML NORML  NORML NORML NORML NORML NORML  NORML NORML NORML NORML NORML  NORML NORML  NORML	Zinc	ppm	ASTM D5185m		18	14	0
Solition	Sulfur	ppm	ASTM D5185m		1991	1409	1457
Sodium         ppm         ASTM D5185m         2         6         5           Potassium         ppm         ASTM D5185m         >20         0         <1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <b>0</b> <1 2  VISUAL method limit/base current history1 history2  White Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	Silicon	ppm	ASTM D5185m	>20	4	5	9
White Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Sodium	ppm	ASTM D5185m		2	6	5
White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	Potassium	ppm	ASTM D5185m	>20	0	<1	2
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Ddor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NEG NEG	Appearance	scalar	*Visual	NORML		NORML	NORML
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	• •			NORML	NORML		
	Emulsified Water						
	Free Water	scalar			NEG		

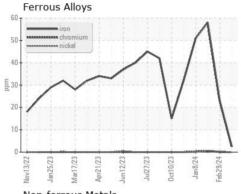


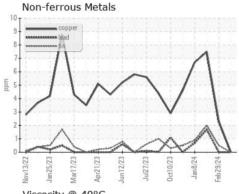
# **OIL ANALYSIS REPORT**

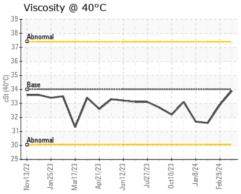


FLUID PROPI	ERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	34	33.9	32.9	31.6
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image

#### **GRAPHS**









Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: GFL0115743 Lab Number : 06140332 Unique Number : 10965140

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 05 Apr 2024

**Tested** : 08 Apr 2024

: 08 Apr 2024 - Wes Davis Diagnosed

GFL Environmental - 010 - Stockbridge

1280 Rum Creek Parkway Stockbridge, GA

US 30281

T: F:

Contact: JOSHUA TINKER joshuatinker@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)