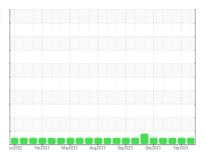


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 812090

Component
Transmission (Auto)

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

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.

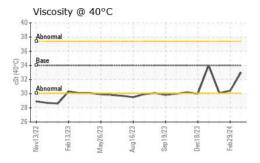
Fluid Condition

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

Sample Date	000 (GAL)		0VZUZZ Fe	162023 May2023 Au	lg2023 Sep2023 Dec2023	Feb 2024		
Sample Date	SAMPLE INFORM	OITAN	method	limit/base	current	history1	history2	
Machine Age hrs Client Info 3738 3470 3329 Oil Age hrs Client Info 409 141 935 Oil Changed Client Info Not Changed Not Changed Changed Sample Status Image: Contract Info NoRMAL NORMAL NORMAL VCONTAMINATION method Imitibase current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method limitbase current history1 history2 Iron ppm ASTM D5185m >160 32 45 45 Ohickel ppm ASTM D5185m >5 0 0 0 Nickel ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Acted ppm ASTM D5185m >50 2 22 22 20 <	Sample Number		Client Info		GFL0115756	GFL0112358	GFL0109876	
Oil Age hrs Client Info 409 141 935 Oil Changed Client Info Not Changd Not Changed Changed Changed Sample Status Normal Normal Normal Normal Normal CONTAMINATION method Imitibase current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method Imitibase current history1 history2 Iron ppm ASTM D5185m 5 0 0 <1 0 Iron ppm ASTM D5185m >5 0 0 <1 0 Silver ppm ASTM D5185m >5 0 0 0 0 Silver ppm ASTM D5185m >50 2 2 22 20 Lead ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >20 0			Client Info		04 Apr 2024	29 Feb 2024	19 Jan 2024	
Oil Age hrs Client Info 409 141 935 Oil Changed Client Info Not Changd Not Changed Changed Changed Sample Status Normal Normal Normal Normal Normal CONTAMINATION method Imitibase current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method Imitibase current history1 history2 Iron ppm ASTM D5185m 5 0 0 <1 0 Iron ppm ASTM D5185m >5 0 0 <1 0 Silver ppm ASTM D5185m >5 0 0 0 0 Silver ppm ASTM D5185m >50 2 2 22 20 Lead ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >20 0	Machine Age	hrs	Client Info		3738	3470	3329	
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2		hrs	Client Info		409	141	935	
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Not Changd	Not Changd	Changed	
Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >160 32 45 45 Chromium ppm ASTM D5185m >5 0 0 <1 Nickel ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >50 2 22 22 20 Aluminum ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >50 0 5 4 Capper ppm ASTM D5185m 0 0 0 <1 Capper ppm ASTM D5185m 0 0 0						NORMAL		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >160 32 45 45 Chromium ppm ASTM D5185m >5 0 0 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2	
Iron	Water		WC Method	>0.1	NEG	NEG	NEG	
Chromium ppm ASTM D5185m >5 0 0 <1 Nickel ppm ASTM D5185m >5 0 <1	WEAR METAL	S	method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>160	32	45	45	
Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >50 2 22 22 20 Lead ppm ASTM D5185m >50 0 5 4 4 Copper ppm ASTM D5185m >50 0 4 4 4 Vanadium ppm ASTM D5185m 10 0 4 4 4 Vanadium ppm ASTM D5185m 0 0 0 -1 0 0 -1 0 -1 4 5 6 6 6<	Chromium	ppm	ASTM D5185m	>5	0	0	<1	
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Aluminum ppm ASTM D5185m >50 2 22 22 20 Lead ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >225 1 12 13 Tin ppm ASTM D5185m 0 0 4 4 Vanadium ppm ASTM D5185m 0 0 0 <1	Titanium	ppm	ASTM D5185m		0	0	0	
Aluminum ppm ASTM D5185m >50 2 22 20 Lead ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >10 0 4 4 Vanadium ppm ASTM D5185m 0 0 0 <1	Silver		ASTM D5185m	>5	0	0	0	
Lead ppm ASTM D5185m >50 0 5 4 Copper ppm ASTM D5185m >225 1 12 13 Tin ppm ASTM D5185m >10 0 4 4 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 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 1 <1 1 Magnesium ppm ASTM D5185m 0 1 <1 1 Calcium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186	Aluminum	• •	ASTM D5185m	>50	2	22	20	
Copper ppm ASTM D5185m >2225 1 12 13 Tin ppm ASTM D5185m >10 0 4 4 Vanadium ppm ASTM D5185m 0 0 <1	Lead		ASTM D5185m	>50	0	5	4	
Tin ppm ASTM D5185m >10 0 4 4 Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 76 66 58 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 <1 <1 Manganese ppm ASTM D5185m 0 1 <1 <1 Magnesium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Sulfur ppm ASTM D5185m 20 4 4 CONTAMINANTS method limit/base current	Copper	ppm	ASTM D5185m	>225	1	12	13	
Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 76 66 58 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 <1 Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m 21 3 0 Sulfur ppm ASTM D5185m 20 6 4 4 Sodium ppm ASTM D5185m 20 6 4 4 <td></td> <td></td> <td>ASTM D5185m</td> <td>>10</td> <th>0</th> <td>4</td> <td>4</td>			ASTM D5185m	>10	0	4	4	
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Boron			ASTM D5185m		0			
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 0 0 <1 Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 1 2 1 Calcium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m 21 3 0 Sulfur ppm ASTM D5185m 41 3 0 Sulfur ppm ASTM D5185m 1959 1245 1328 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base curren	Boron	ppm	ASTM D5185m		76	66	58	
Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 1 2 1 Calcium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0	0	0	
Magnesium ppm ASTM D5185m 1 2 1 Calcium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m 21 3 0 Sulfur ppm ASTM D5185m 1959 1245 1328 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE NONE <	Molybdenum	ppm	ASTM D5185m		0	0	<1	
Calcium ppm ASTM D5185m 129 102 91 Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m <1	Manganese	ppm	ASTM D5185m		0	1	<1	
Phosphorus ppm ASTM D5185m 223 202 186 Zinc ppm ASTM D5185m <1	Magnesium	ppm	ASTM D5185m		1	2	1	
Zinc ppm ASTM D5185m <1 3 0 Sulfur ppm ASTM D5185m 1959 1245 1328 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m 2 6 5 Potassium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE N	Calcium	ppm	ASTM D5185m		129	102	91	
Sulfur ppm ASTM D5185m 1959 1245 1328 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m 2 6 5 Potassium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual 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 NON	Phosphorus	ppm	ASTM D5185m		223	202	186	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m 2 6 5 Potassium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual 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 Sand/Dirt scalar *Visual NORML NORML NORML NORML NORML </td <td>Zinc</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th><1</th> <td>3</td> <td>0</td>	Zinc	ppm	ASTM D5185m		<1	3	0	
Silicon ppm ASTM D5185m >20 6 4 4 Sodium ppm ASTM D5185m 2 6 5 Potassium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual 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 NORML NORML NORML NORML Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual<	Sulfur	ppm	ASTM D5185m		1959	1245	1328	
Sodium ppm ASTM D5185m 2 6 5 Potassium ppm ASTM D5185m >20 0 3 3 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE <td colsp<="" td=""><td>CONTAMINAN</td><td>TS</td><td>method</td><td>limit/base</td><th>current</th><td>history1</td><td>history2</td></td>	<td>CONTAMINAN</td> <td>TS</td> <td>method</td> <td>limit/base</td> <th>current</th> <td>history1</td> <td>history2</td>	CONTAMINAN	TS	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20033VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Silicon	ppm	ASTM D5185m	>20	6	4	4	
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 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	Sodium	ppm	ASTM D5185m		2	6	5	
White Metal scalar *Visual 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	3	3	
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 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	
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Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Appearance	scalar		NORML	NORML	NORML	NORML	
Emulsified Water scalar *Visual >0.1 NEG NEG NEG		scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water			>0.1		NEG	NEG	
NEG VValor NEG NEG	Free Water	scalar	*Visual		NEG	NEG	NEG	

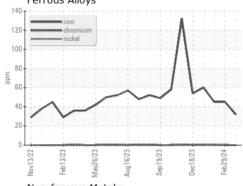


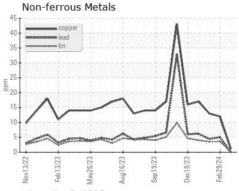
OIL ANALYSIS REPORT

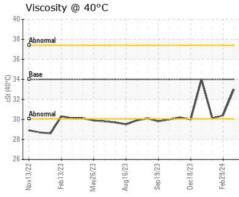


FLUID PROP	PERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	34	33.0	30.4	30.1
SAMPLE IMA	AGES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						

Ferrous Alloys











Certificate 12367

Laboratory Sample No.

: GFL0115756 Lab Number : 06140333

Unique Number : 10965141 Test Package : FLEET

: 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 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)

Report Id: GFL010 [WUSCAR] 06140333 (Generated: 04/08/2024 10:16:15) Rev: 1

Submitted By: JOSHUA TINKER

T: F: