

## **OIL ANALYSIS REPORT**

Sample Rating Trend





Component

Transmission (Auto)

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.

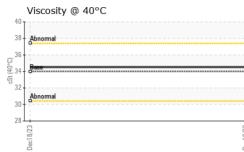
### Fluid Condition

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

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SAMPLE INFOF			limit/base	current	history1	history2
Sample Number		Client Info		GFL0092082		
Sample Date		Client Info		18 Dec 2023		
Machine Age	hrs	Client Info		2881		
Oil Age	hrs	Client Info		600		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINA	TION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METAI	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	14		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>5	0		
Aluminum	ppm	ASTM D5185m	>50	3		
Lead	ppm	ASTM D5185m	>50	2		
Copper	ppm	ASTM D5185m	>225	3		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		47		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		<1		
Calcium	ppm	ASTM D5185m		102		
Phosphorus	ppm	ASTM D5185m		222		
Zinc						
	maa	ASTM D5185m		31		
Sulfur	ppm ppm	ASTM D5185m ASTM D5185m		31 1228		
Sulfur CONTAMINAI	ppm		limit/base	-		
	ppm NTS	ASTM D5185m		1228		
CONTAMINAN	ppm NTS ppm	ASTM D5185m method ASTM D5185m	>20	1228 current		
CONTAMINAN Silicon	ppm NTS	ASTM D5185m method	>20	1228 current 3		
CONTAMINAN Silicon Sodium	ppm NTS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	>20	1228 current 3 4		
CONTAMINAN Silicon Sodium Potassium VISUAL	ppm NTS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20	1228 current 3 4 0	 history1  	 history2  
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm NTS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	>20 >20 limit/base	1228 current 3 4 0 current	 history1  	 history2   history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm NTS ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>20 >20 limit/base NONE	1228 current 3 4 0 current NONE	 history1   history1 	history2   history2 
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm VTS ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>20 >20 limit/base NONE NONE	1228 current 3 4 0 current NONE NONE	 history1   history1 	 history2   history2 
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm VTS ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	1228 current 3 4 0 current NONE NONE NONE	 history1   history1  	+ history2   history2  
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm VTS ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	1228 current 3 4 0 current NONE NONE NONE NONE	 history1   history1  	 history2  history2  
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm VTS ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	1228 current 3 4 0 current NONE NONE NONE NONE NONE	 history1   history1   	 history2  history2   
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm VTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Iimit/base NONE NONE NONE NONE NONE	1228 current 3 4 0 current NONE NONE NONE NONE NONE NONE NONE	 history1   history1    	 history2   history2     
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm VTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NONE	1228 current 3 4 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1   history1      	 history2   history2      
CONTAMINAN Silicon Sodium Potassium	ppm VTS ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NORML NORML	1228 current 3 4 0 current NONE NONE NONE NONE NONE NONE NONE NON	 history1   history1        -	history2 i i i history2 i



# **OIL ANALYSIS REPORT**



	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2	
	Visc @ 40°C	cSt	ASTM D445	34	34.5			
	SAMPLE IMAG	GES	method	limit/base	current	history1	history2	
23	Color				no image	no image	no image	
Dec18/23	Bottom				no image	no image	no image	
	GRAPHS							
udd	Non-ferrous Meta	als		Dect 8/23				
cst (40°C)	Viscosity @ 40°C			Dec18/23				
	31- <b>Abnormal</b> 30- 29 50 50 50 50 50 50 50 50 50 50			Dec18/23				
Sample No. Lab Number Unique Number Test Package this sample report, co test methods that are	: GFL0092082 : 06044233 : 10804841 : FLEET ontact Customer Serve e outside of the ISO	D44233Diagnosed: 27 Dec 2023804841Diagnostician: Don Baldridge				GFL Environmental - 856 - Houston Souti 8515 Highway 6 Souti Houston, T2 US 7708 Contact: Apolinar Zacaria: pzacariascano@gflenv.com T CGM 106:2012)		

Submitted By: Apolinar Zacarias Page 2 of 2