

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# 741005-310096

Component Transmission (Auto)

Fluid PETRO CANADA DuraDrive HD Synthetic 668 (28 QTS)

#### 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.

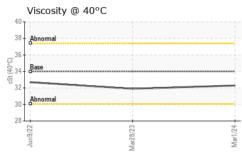
#### Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0106783	GFL0073771	GFL0048609
Sample Date		Client Info		01 Mar 2024	28 Mar 2023	09 Jun 2022
Machine Age	hrs	Client Info		9566	82709	4838
Oil Age	hrs	Client Info		5240	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
•		and the set	11.0011/10.000	-	-	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water	_	WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	34	74	59
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>50	10	15	10
Lead	ppm	ASTM D5185m	>50	<1	3	3
Copper	ppm	ASTM D5185m	>225	5	10	6
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		66	60	73
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
morybaonann	ppin					
Manganese	ppm	ASTM D5185m		0	2	1
Manganese				0 7		1 2
Manganese	ppm	ASTM D5185m		-	2	
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		7	2 1	2
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		7 105	2 1 103	2 89
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		7 105 240	2 1 103 218	2 89 197
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 105 240 10	2 1 103 218 5	2 89 197 4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		7 105 240 10 1700	2 1 103 218 5 1612	2 89 197 4 1160
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>Method</b>		7 105 240 10 1700 current	2 1 103 218 5 1612 history1	2 89 197 4 1160 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>20	7 105 240 10 1700 current 4	2 1 103 218 5 1612 history1 5	2 89 197 4 1160 history2 6
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	>20	7 105 240 10 1700 current 4 7	2 1 103 218 5 1612 history1 5 6	2 89 197 4 1160 history2 6 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base NONE	7 105 240 10 1700 current 4 7 4 current NONE	2 1 103 218 5 1612 history1 5 6 1 1 history1 NONE	2 89 197 4 1160 history2 6 2 3 3 history2 LIGHT
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m Yisual	>20 >20 limit/base NONE NONE	7 105 240 10 1700 current 4 7 4 current NONE NONE	2 1 103 218 5 1612 <u>history1</u> 5 6 1 1 <u>history1</u> NONE NONE	2 89 197 4 1160 history2 6 2 3 3 history2 LIGHT NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base NONE	7 105 240 10 1700 current 4 7 4 current NONE	2 1 103 218 5 1612 history1 5 6 1 1 history1 NONE	2 89 197 4 1160 history2 6 2 3 3 history2 LIGHT
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m Yisual	>20 >20 limit/base NONE NONE	7 105 240 10 1700 current 4 7 4 current NONE NONE	2 1 103 218 5 1612 <u>history1</u> 5 6 1 1 <u>history1</u> NONE NONE	2 89 197 4 1160 history2 6 2 3 3 history2 LIGHT NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>20 >20 limit/base NONE NONE NONE	7 105 240 10 1700 current 4 7 4 2 4 <i>current</i> NONE NONE NONE	2 1 103 218 5 1612 history1 5 6 1 1 <u>history1</u> NONE NONE NONE	2 89 197 4 1160 history2 6 2 3 history2 LIGHT NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	7 105 240 10 1700 current 4 7 4 7 4 <i>current</i> NONE NONE NONE NONE	2 1 103 218 5 1612 history1 5 6 1 1 <u>history1</u> NONE NONE NONE NONE NONE	2 89 197 4 1160 history2 6 2 3 history2 LIGHT NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	7 105 240 10 1700 current 4 7 4 7 4 <i>current</i> NONE NONE NONE NONE NONE NONE	2 1 103 218 5 1612 history1 5 6 1 1 history1 NONE NONE NONE NONE NONE NONE	2 89 197 4 1160 <b>history2</b> 6 2 3 <b>history2</b> LIGHT NONE NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	7 105 240 10 1700 current 4 7 4 <i>current</i> 8 NONE NONE NONE NONE NONE NONE NONE	2 1 103 218 5 1612 history1 5 6 1 1 NONE NONE NONE NONE NONE NONE NONE	2 89 197 4 1160 <b>history2</b> 6 2 3 <b>history2</b> LIGHT NONE NONE NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XaSTM D5185m XaSTM D5185m Xisual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Iimit/base NONE NONE NONE NONE NONE NONE NONE	7 105 240 10 1700 <i>current</i> 4 7 4 <i>current</i> NONE NONE NONE NONE NONE NONE NONE NON	2 1 103 218 5 1612 history1 5 6 1 NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	2 89 197 4 1160 <b>history2</b> 6 2 3 <b>history2</b> LIGHT NONE NONE NONE NONE NONE NONE NONE
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D	>20 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	7 105 240 10 1700 current 4 7 4 7 4 Current NONE NONE NONE NONE NONE NONE NONE NON	2 1 103 218 5 1612 history1 5 6 1 NONE	2 89 197 4 1160 <b>history2</b> 6 2 2 3 <b>history2</b> LIGHT NONE NONE NONE NONE NONE NONE NONE NON



## **OIL ANALYSIS REPORT**



Visc @ 40°C	- 0+						
	cSt	ASTM D445		32.3	31.9	32.7	
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							
70 - iron chromium	$\frown$	<hr/>					
60-							
틆 40 -							
30-							
20							
	53						
Jun9/2	Mar28/2		Mar1/2				
	tals						
9- copper	$\wedge$						
8 tin 7							
6							
4-							
2 -	a hard been blacked black of	and a state ball ball ball ball					
Jun9/22	lar28/23		Mar1/24				
			_				
39 38 Abnormal							
37							
€ 34 Base 33							
32							
31 30 Abnormal							
29	23		24				
Jun9/	Mar28/		Mar1/				
: WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 856 - Houston							
		8515 H	ighway 6 So Houston,				
: 10911346				es Davis	Operator - 1	US 770	
		800-237-136			Contact: Ap pzacariascar	olinar Zacar	
	Color Bottom GRAPHS Ferrous Alloys Copper Non-ferrous Mer Copper	Bottom GRAPHS Ferrous Alloys 70 10 10 10 10 10 10 10 10 10 1	Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Non-ferrous Metals Viscosity @ 40°C Viscosity @ 40°C Janonal GEL0106783 Exercised : 04 Color Second Second S	Color Bottom CRAPHS Ferrous Alloys	Color no image Bottom no image CRAPHS Ferrous Alloys 0 0 0 0 0 0 0 0 0 0 0 0 0	Color no image no image Bottom no image no image CERPPLS Ferrous Alloys 0 0 0 0 0 0 0 0 0 0 0 0 0	