

## **OIL ANALYSIS REPORT**

Sample Rating Trend



# Machine Id 728051-361690

Component Transmission (Auto)

Fluid

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

### DIAGNOSIS

#### A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### 🔺 Wear

The iron level is abnormal. All other 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.

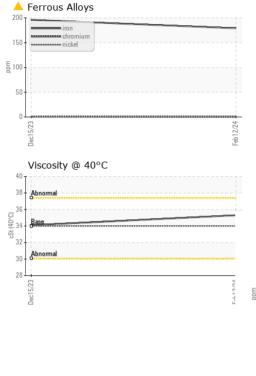
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0107995	GFL0065688	
Sample Date		Client Info		12 Feb 2024	15 Dec 2023	
Machine Age	mls	Client Info		0	0	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				ABNORMAL	ABNORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	<b>1</b> 79	<b>1</b> 96	
Chromium	ppm	ASTM D5185m	>5	<1	<1	
Nickel	ppm	ASTM D5185m	>5	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>5	0	0	
Aluminum	ppm	ASTM D5185m	>50	35	39	
Lead	ppm	ASTM D5185m	>50	22	27	
Copper	ppm	ASTM D5185m		42	43	
Tin	ppm	ASTM D5185m	>10	4	5	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		166	157	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	0	
Manganese	ppm	ASTM D5185m		3	3	
-		ASTM D5185m		0	2	
Magnesium	ppm	ACTIVI DOTODITI			2	
•	ppm ppm			144	2 129	
Calcium	ppm	ASTM D5185m		144	129	
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m		144 444	129 434	
Calcium	ppm	ASTM D5185m		144	129	
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	144 444 0	129 434 9	
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	144 444 0 1469	129 434 9 1680	
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		144 444 0 1469 current	129 434 9 1680 history1	
Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	>20	144 444 0 1469 current 6	129 434 9 1680 history1 6	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20	144 444 0 1469 current 6 13	129 434 9 1680 history1 6 15	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20	144 444 0 1469 current 6 13 <1	129 434 9 1680 history1 6 15 3	  history2 
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base	144 444 0 1469 current 6 13 <1 current	129 434 9 1680 history1 6 15 3 history1	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm TS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m *Visual	>20 >20 limit/base NONE	144 444 0 1469 current 6 13 <1 current NONE	129 434 9 1680 history1 6 15 3 history1 NONE	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual	>20 >20 limit/base NONE NONE	144 444 0 1469 current 6 13 <1 current NONE NONE	129 434 9 1680 history1 6 15 3 history1 NONE NONE	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	144 444 0 1469 current 6 13 <1 current NONE NONE NONE NONE	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	144 444 0 1469 current 6 13 <1 current NONE NONE NONE NONE NONE	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE NONE	  history2   history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	144 444 0 1469 current 6 13 <1 <1 current NONE NONE NONE NONE NONE NONE	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE NONE NONE	  history2   history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	144 444 0 1469 current 6 13 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE NONE NONE NONE	  history2    history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m Method 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 NONE	144 444 0 1469 current 6 13 <1 current NONE NONE NONE NONE NONE NONE NONE NON	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE NONE NONE NONE NON	  history2    history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	144 444 0 1469 current 6 13 <1 <1 current NONE NONE NONE NONE NONE NONE NONE NON	129 434 9 1680 history1 6 15 3 history1 NONE NONE NONE NONE NONE NONE NONE NON	  history2    history2        -

Report Id: GFL823 [WUSCAR] 06118733 (Generated: 03/18/2024 13:35:32) Rev: 1

Contact/Location: Terry Randolph - GFL823



## **OIL ANALYSIS REPORT**



	Visc @ 40°C		1 D115 21	35.3	34.1	
			/ D445 34			history
	SAMPLE IMA	GES me	thod limit/base	current	history1	history2
	Color			no image	no image	no image
24						
Feb12/24						
	Bottom			no image	no image	no image
	GRAPHS					
	Ferrous Alloys					
	180 - iron iron					
	160 - nickel					
V CI C	120 -					
Each 1.	톱 100 - 80 -					
	60-					
	40					
	2/5	****	2/24			
	Dec15/23		Feb 12/24			
	Non-ferrous Met	als				
	40 - copper					
	35 tin					
	25 E 20					
	<sup>2</sup> 20-					
	10					
	5 -		-			
	Dec15/23		Feb12/24 -			
			Feb1			
	Viscosity @ 40°C					
	38 Abnormal 37					
	51					
	36 -					
	G 35					
	36 35 4 34 33 33					
	G 35 ⊕ 34 g 33 33 32					
	235 234 33 32 31 30 Abnormal					
	Base 34 33 32 31 30 Abnomal		224			
	235 234 33 32 31 30 Abnormal		Feb12/24			
oratory	33 33 32 31 4bnomal 29 5 5 5 6 7 8 7 8 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7		., Cary, NC 27513	GFL Envi	ronmental - 823 - Ceni	
oratory pple No.	33 33 33 32 31 4bnomal 29 5 6 6 6 6 6 6 6 6 6 6 6 6 6	01 Madison Ave Received Tested		GFL Envi		<b>ral Missouri Hau</b> l Dak Grove La Sedalia, M
oratory pple No. Number	: WearCheck USA - 5 : GFL0107995 : 06118733 : 10927566	Received	., Cary, NC 27513 : 14 Mar 2024 : 15 Mar 2024		24461 C	ak Grove La

FLUID PROPERTIES method limit/base current history1 history2