

## **OIL ANALYSIS REPORT**

Sample Rating Trend





PETRO CANADA DuraDrive HD Synthetic 668 (24 LTR)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: New transmission installed 6000 km ago. )

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the fluid.

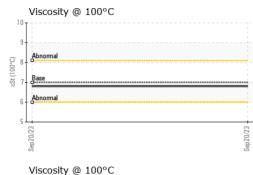
#### Fluid Condition

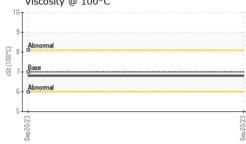
The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

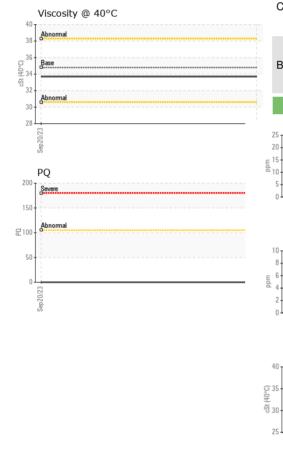
,				Sep 2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0061540		
Sample Date		Client Info		20 Sep 2023		
Machine Age	kms	Client Info		611754		
Oil Age	kms	Client Info		6000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
WEAR METAL	S	method	limit/base	current	history1	history2
PQ		ASTM D8184*	>105	0		
Iron	ppm	ASTM D5185(m)	>230	24		
Chromium	ppm	ASTM D5185(m)	>2	0		
Nickel	ppm	ASTM D5185(m)	>5	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>5	<1		
Aluminum	ppm	ASTM D5185(m)	>65	5		
Lead	ppm	ASTM D5185(m)	>55	1		
Copper	ppm	ASTM D5185(m)	>85	6		
Tin	ppm	ASTM D5185(m)	>5	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	78	37		
Barium						
	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	<1 0		
Molybdenum Manganese			0			
	ppm	ASTM D5185(m)	0	0		
Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0 0		
Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0 0 2		
Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113	0 0 2 125		
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113	0 0 2 125 204	  	
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222	0 0 2 125 204 10	  	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222	0 0 2 125 204 10 1455	   	   
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222 1326	0 0 2 125 204 10 1455 <1	   	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222 1326 Jimit/base	0 0 2 125 204 10 1455 <1 current	     history1	     history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m)	0 113 222 1326 Jimit/base	0 0 2 125 204 10 1455 <1 current 6	     history1 	     history2 
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222 1326 limit/base >20	0 0 2 125 204 10 1455 <1 <i>current</i> 6 6	     history1	    history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 113 222 1326 <b>limit/base</b> >20	0 0 2 125 204 10 1455 <1 <i>current</i> 6 6 0	     history1  	    history2  



# **OIL ANALYSIS REPORT**







	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
	Silt	scalar	Visual*	NONE	NONE		
-	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
Sep 20/23	Appearance	scalar	Visual*	NORML	NORML		
Sep	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	34.8	33.7		
	Visc @ 100°C	cSt	ASTM D7279(m)	7.0	6.8		
_	Viscosity Index (VI)	Scale	ASTM D2270*	167	165		
	SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Sep 20/23	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				PQ		
	25 20 iron			20			
E	sessessesses chromium			18	0 - Severe		_
2	<sup>2</sup> 10-			16	0		
	5			14	0-		
	sep20/23			210 Sep 20/23			
	Sep2			Zdas Z10	Abnormal		
	Non-ferrous Metal	s		8	0-		
	10 8 copper ]			6	0		
1	E 6 -						
	4			2			
	2						
	sep20/23			Sep 20/23 -	Sep 20/23		Sep20/23 -
	ى Viscosity @ 40°C			Se			Sep
	<sup>40</sup> Abnormal			(®1.	Acid Number		
Ē				a KOH			
10001	5 35 - Base Abnormal			.1. .1. .0. .0. .0.	0+		
č	3 30 - 9			μΩ.	5		
	25						
	Sep 20/23			Sep 20/23	Sep 20/23		Sep 20/23
	9 <u>9</u>			S.	S.		Set
Laboratory Sample No. Lab Number Unique Number Test Package	: 02590688 I : 5659754 I : IND 2 ( Additional To	Received Diagnos Diagnosi ests: KV	d : 20 ( ed : 23 ( tician : Kev	Oct 2023 Oct 2023 rin Marson	_7L 5H9	25 M Con	etrobus Transit lessenger Drive St. John`s, NL CA A1B 0H6 tact: Dan Finlay

Test Package : IND 2 (Additional Tests: KV100, VI) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Report Id: STJNEW [WCAMIS] 02590688 (Generated: 10/23/2023 19:07:23) Rev: 1

CALA

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Submitted By: Dan Finlay Page 2 of 2

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