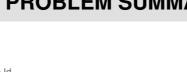


PROBLEM SUMMARY





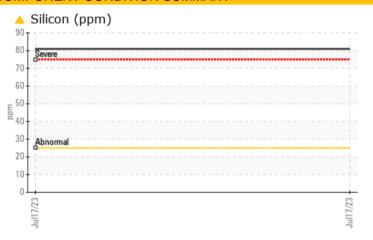


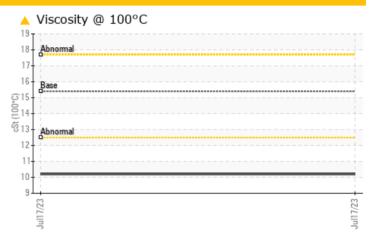


Machine Id
713009
Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	
Silicon	ppm	ASTM D5185m	>25	<u> </u>	
Visc @ 100°C	cSt	ASTM D445	15.4	10.2	

Customer Id: GFL028 Sample No.: GFL0068134 Lab Number: 05903082 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Fluid			?	Oil and filter change at the time of sampling has been noted.		
Change Filter			?	Oil and filter change at the time of sampling has been noted.		

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT





Machine Id 713009 Component **Diesel Engine PETRO CANADA DURO**

Sample Rating Trend



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

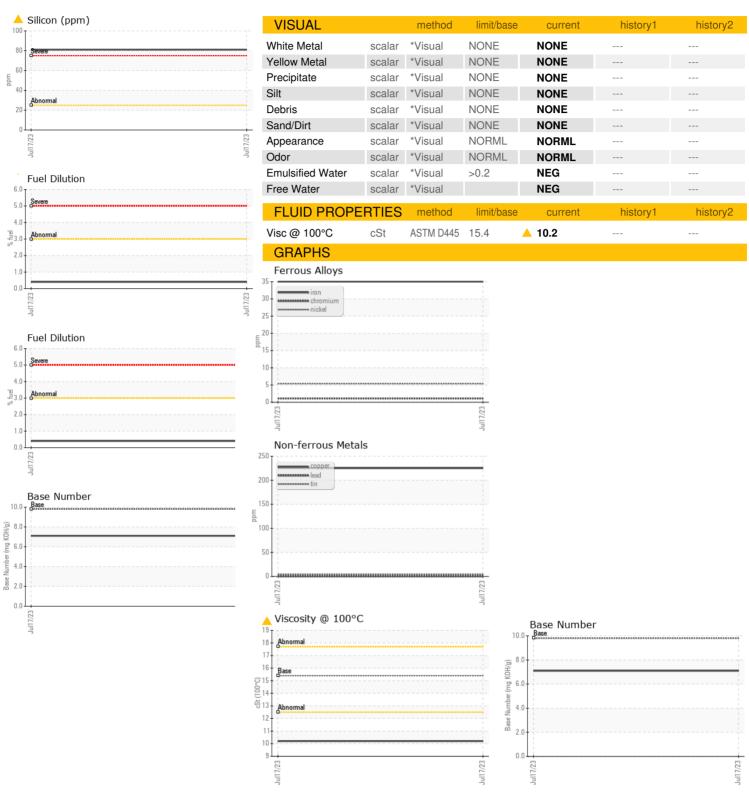
▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

N SHP 15W40 (- GAL)			Jul2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0068134		
Sample Date		Client Info		17 Jul 2023		
Machine Age	hrs	Client Info		738		
Oil Age	hrs	Client Info		600		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>120	35		
Chromium	ppm	ASTM D5185m	>20	1		
Vickel	ppm	ASTM D5185m	>5	5		
Titanium	ppm	ASTM D5185m	>2	<1		
Silver	ppm	ASTM D5185m	>2	<1		
Aluminum	ppm	ASTM D5185m		11		
Lead	ppm	ASTM D5185m	>40	0		
		ASTM D5185m		225		
Copper	ppm			4		
Tin	ppm	ASTM D5185m	>15	-		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	211		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	nnm	ASTM D5185m	00			
	ppm	ASTIVI DOTOSIII	60	116		
Manganese	ppm	ASTM D5185m		116 5		
-						
Magnesium	ppm	ASTM D5185m	0	5		
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	0 1010	5 779		
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 1010 1070	5 779 1535		
Magnesium Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 1010 1070 1150	5 779 1535 745		
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 1010 1070 1150 1270	5 779 1535 745 908		
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 1010 1070 1150 1270 2060	5 779 1535 745 908 2763	 	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 1010 1070 1150 1270 2060	5 779 1535 745 908 2763 current	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 1010 1070 1150 1270 2060	5 779 1535 745 908 2763 current 81	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 1010 1070 1150 1270 2060 limit/base >25	5 779 1535 745 908 2763	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 1010 1070 1150 1270 2060 limit/base >25	5 779 1535 745 908 2763 current 81 2 19	 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0	5 779 1535 745 908 2763 current 81 2 19 0.4	 history1	history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MEthod ASTM D5185m	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4	5 779 1535 745 908 2763 current ▲ 81 2 19 0.4	 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20	5 779 1535 745 908 2763 current	history1 history1 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7624 *ASTM D76145	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20	5 779 1535 745 908 2763 current ▲ 81 2 19 0.4 current 0.3 10.6	history1 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 method	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20 >30	5 779 1535 745 908 2763	history1 history1	history2 history2
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7624 *ASTM D76145	0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >4 >20 >30 limit/base >25	5 779 1535 745 908 2763 current ▲ 81 2 19 0.4 current 0.3 10.6 23.6	history1 history1 history1 history1	history2 history2 history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number**

: 05903082 : 10564438

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0068134 Received : 20 Jul 2023 Diagnosed

: 21 Jul 2023 Diagnostician : Don Baldridge **Test Package**: FLEET (Additional Tests: FuelDilution, PercentFuel)

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)

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