

OIL ANALYSIS REPORT

Sample Rating Trend



AGLL0755CNSSD1023

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

S)			Nov2022	May2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0081079	PCA0053901	
Sample Date		Client Info		16 May 2023	16 Nov 2022	
Vachine Age	hrs	Client Info		14889	14638	
Oil Age	hrs	Client Info		251	260	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	6	10	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	5	<1	
_ead	ppm	ASTM D5185m	>40	2	4	
Copper	ppm	ASTM D5185m	>330	0	<1	
Tin	ppm	ASTM D5185m	>15	0	<1	
1 11 1	ppiii					
	ppm	ASTM D5185m		0	0	
Vanadium		ASTM D5185m ASTM D5185m		0 0	0 0	
Vanadium	ppm		limit/base			
Vanadium Cadmium ADDITIVES	ppm	ASTM D5185m	limit/base	0	0	
Vanadium Cadmium ADDITIVES Boron	ppm ppm	ASTM D5185m method	limit/base	0 current	0 history1	 history2
Vanadium Cadmium ADDITIVES Boron Barium	ppm ppm	ASTM D5185m method ASTM D5185m	limit/base	0 current 27	0 history1 81	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	0 current 27 0	0 history1 81 0	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69	0 history1 81 0 88	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0	0 history1 81 0 88 <1	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995	0 history1 81 0 88 <1 948	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185	0 history1 81 0 88 <1 948 1395	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185 1023	0 history1 81 0 88 <1 948 1395 1019	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185 1023 1242	0 history1 81 0 88 <1 948 1395 1019 1288	 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 current 27 0 69 0 995 1185 1023 1242 3635	0 history1 81 0 88 <1 948 1395 1019 1288 3564	 history2 -
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185 1023 1242 3635 current	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1	history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6	 history2 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3	+ history2 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2 0	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3 0	 history2 history2 history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2 0 current	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3 0 0	history2 i i i i i i i i i i history2 i i i history2 i history2
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2 0 current 0.2	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3 0 history1 0.3	history2 i i i i i i i history2 i i i history2 i
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2 0 current 0.2 8.1	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3 3 0 history1 0.3 9.5	 history2 history2 history2 history2 -
Vanadium Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM	Imit/base >25 >20 Imit/base >20 >3 >20 >30	0 current 27 0 69 0 995 1185 1023 1242 3635 current 2 2 0 current 0.2 8.1 21.3	0 history1 81 0 88 <1 948 1395 1019 1288 3564 history1 6 3 0 history1 0.3 9.5 23.3	history2 i i i i i i i i i i history2 i



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OIL ANALYSIS REPORT

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NONE

VISUAL

White Metal

Yellow Metal

Precipitate

Silt



