

OIL ANALYSIS REPORT

Sample Rating Trend





Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

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

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

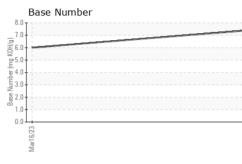
Fluid Condition

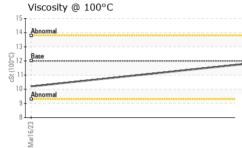
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

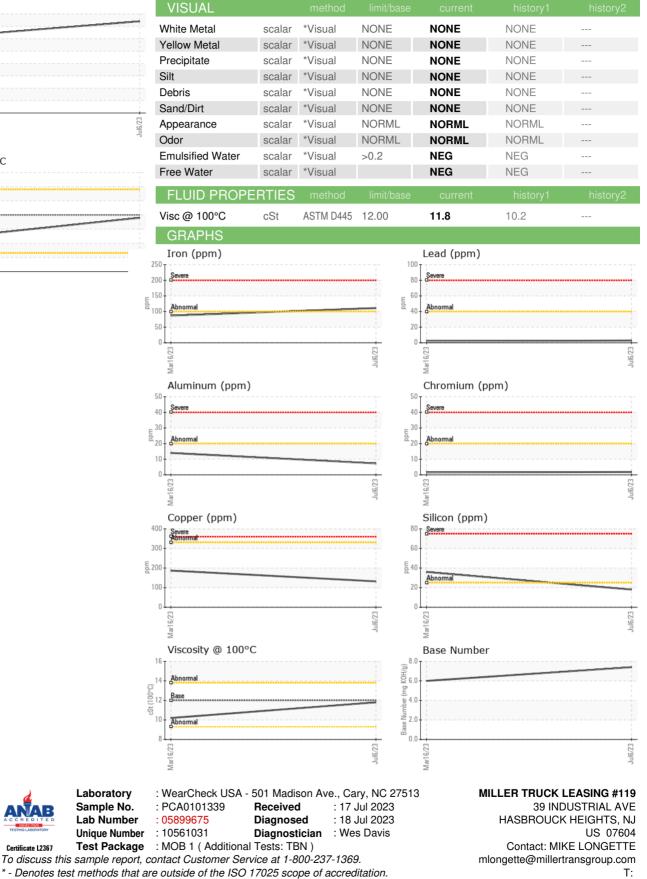
15)			Mar2023	Jul2023		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101339	PCA0094256	
Sample Date		Client Info		06 Jul 2023	16 Mar 2023	
Machine Age	mls	Client Info		39501	18134	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	FION	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
Iron	ppm	ASTM D5185m	>100	111	87	
Chromium	ppm	ASTM D5185m	>20	2	2	
Nickel	ppm	ASTM D5185m	>4	- <1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	7	14	
Lead	ppm	ASTM D5185m	>40	3	2	
Copper	ppm	ASTM D5185m	>330	132	187	
Tin	ppm	ASTM D5185m	>15	5	5	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	11	67	
Barium	ppm	ASTM D5185m	0	0	<1	
Molybdenum	ppm	ASTM D5185m	50	64	21	
Manganese	ppm	ASTM D5185m	0	2	2	
Magnesium						
	ppm	ASTM D5185m	950	787	193	
Calcium	ppm ppm	ASTM D5185m ASTM D5185m	950 1050	787 1238	193 1059	
Phosphorus	ppm	ASTM D5185m	1050	1238	1059	
Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1238 1009	1059 796	
Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1238 1009 1286	1059 796 1022	
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base	1238 1009 1286 2682	1059 796 1022 2906	
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1238 1009 1286 2682 current	1059 796 1022 2906 history1	 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1050 995 1180 2600 limit/base >25	1238 1009 1286 2682 current 18	1059 796 1022 2906 history1 36	 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25	1238 1009 1286 2682 current 18 <1	1059 796 1022 2906 history1 36 3	 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20	1238 1009 1286 2682 current 18 <1 3	1059 796 1022 2906 history1 36 3 3 3	 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm vTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 limit/base >3	1238 1009 1286 2682 current 18 <1 3 current	1059 796 1022 2906 history1 36 3 3 3 history1	 history2 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm vTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 limit/base >3	1238 1009 1286 2682 <u>current</u> 18 <1 3 <u>current</u> 1.7	1059 796 1022 2906 history1 36 3 3 3 history1 1	 history2 history2
Silicon Sodium Potassium	ppm ppm ppm ppm vTS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	1238 1009 1286 2682 <u>current</u> 18 <1 3 <u>current</u> 1.7 1.7 13.7	1059 796 1022 2906 history1 36 3 3 3 history1 1 10.8	 history2 history2 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm vTS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	1238 1009 1286 2682 current 18 <1 3 current 1.7 13.7 25.5	1059 796 1022 2906 history1 36 3 3 3 history1 1 10.8 23.3	 history2 history2 history2



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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

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