

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (89627X) Walgreens Machine Id [Walgreens] 136A68015 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

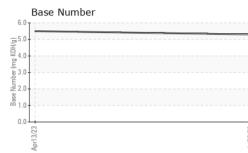
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093486	PCA0096561	
Sample Date		Client Info		28 Jul 2023	13 Apr 2023	
Machine Age	mls	Client Info		198500	188583	
Oil Age	mls	Client Info		9917	188583	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method	20	NEG	NEG	
,						
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	23	26	
Chromium	ppm	ASTM D5185m	>5	<1	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		14	8	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	2	0	
Lead	ppm	ASTM D5185m	>30	<1	0	
Copper	ppm	ASTM D5185m	>150	2	3	
Tin	ppm	ASTM D5185m	>5	0	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	10	8	
Barium	ppm	ASTM D5185m	0	1	0	
Molybdenum				40		
	ppm	ASTM D5185m	50	42	48	
Manganese	ppm ppm	ASTM D5185m ASTM D5185m	50 0	42 <1	48 <1	
0						
0	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	0 950	<1 686	<1 748	
Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050	<1 686 1206	<1 748 1309	
Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995	<1 686 1206 886	<1 748 1309 974	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180	<1 686 1206 886 1101	<1 748 1309 974 1178	
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base	<1 686 1206 886 1101 2918	<1 748 1309 974 1178 3404	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base	<1 686 1206 886 1101 2918 current	<1 748 1309 974 1178 3404 history1	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 950 1050 995 1180 2600 limit/base >20	<1 686 1206 886 1101 2918 current 8	<1 748 1309 974 1178 3404 history1 7	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base >20	<1 686 1206 886 1101 2918 current 8 6	<1 748 1309 974 1178 3404 history1 7 1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 imit/base >20 imit/base	<1 686 1206 886 1101 2918 current 8 6 3 3 current	<1 748 1309 974 1178 3404 history1 7 1 2 kistory1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 imit/base >20 imit/base >3	<1 686 1206 886 1101 2918 current 8 6 3 2 current 0.5	<1 748 1309 974 1178 3404 history1 7 1 2 history1 0.6	 history2 history2
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base >20 limit/base >20 limit/base	<1 686 1206 886 1101 2918 current 8 6 3 Current 0.5 11.1	<1 748 1309 974 1178 3404 history1 7 1 2 history1 0.6 10.5	 history2 history2
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	<1 686 1206 886 1101 2918 <u>current</u> 8 6 3 <u>current</u> 0.5 11.1 22.9	<1 748 1309 974 1178 3404 history1 7 1 2 history1 0.6 10.5 22.4	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm 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 *ASTM D7624	0 950 1050 995 1180 2600 imit/base >20 20 imit/base >3 >20 30 imit/base	<1 686 1206 886 1101 2918 current 8 6 3 Current 0.5 111.1 22.9 current	<1 748 1309 974 1178 3404 history1 7 1 2 history1 0.6 10.5 22.4 history1	 history2 history2
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	0 950 1050 995 1180 2600 imit/base >20 20 imit/base >3 >20 30 imit/base	<1 686 1206 886 1101 2918 <u>current</u> 8 6 3 <u>current</u> 0.5 11.1 22.9	<1 748 1309 974 1178 3404 history1 7 1 2 history1 0.6 10.5 22.4	 history2 history2 history2

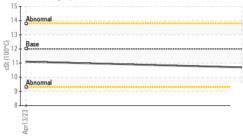


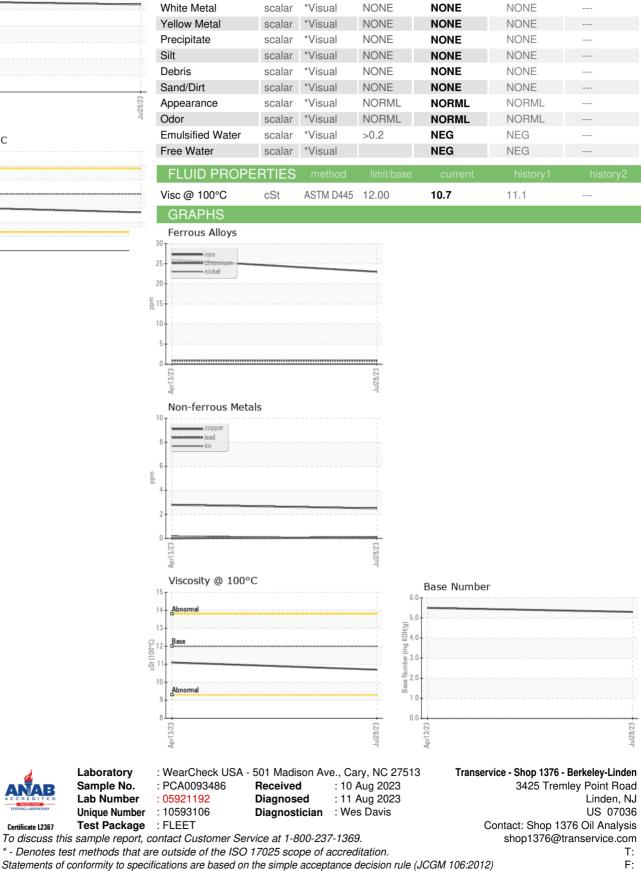
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VISUAL









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