

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 726271 Component

Diesel Engine

Fluid 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

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.

TS)		Ma	Mar2022 Apr/023 Aurg2023			
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103078	PCA0095922	PCA0067964
Sample Date		Client Info		11 Aug 2023	11 Apr 2023	07 Mar 2022
Machine Age	mls	Client Info		141861	128793	99143
Oil Age	mls	Client Info		0	0	50000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAI	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	9	24	29
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	1	6	8
Lead	ppm	ASTM D5185m	>40	<1	0	3
Copper	ppm	ASTM D5185m	>330	1	<1	2
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	9	2	9
Barium	ppm	ASTM D5185m	0	0	1	0
		AOTH DELOS	50	60	57	59
Molybdenum	ppm	ASTM D5185m	50		57	00
-	ppm ppm	ASTM D5185m ASTM D5185m		<1	<1	<1
Manganese	ppm					
Manganese Magnesium	ppm ppm	ASTM D5185m	0	<1	<1	<1
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m	0 950	<1 910	<1 912	<1 951
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995	<1 910 1124 983	<1 912 1010	<1 951 1208
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 950 1050 995	<1 910 1124	<1 912 1010 950	<1 951 1208 1039
Manganese 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	<1 910 1124 983 1276	<1 912 1010 950 1189	<1 951 1208 1039 1141
Manganese 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	<1 910 1124 983 1276 3561	<1 912 1010 950 1189 3123	<1 951 1208 1039 1141 2468
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 950 1050 995 1180 2600 limit/base	<1 910 1124 983 1276 3561 current	<1 912 1010 950 1189 3123 history1	<1 951 1208 1039 1141 2468 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 950 1050 995 1180 2600 limit/base >25	<1 910 1124 983 1276 3561 current 4	<1 912 1010 950 1189 3123 history1 5	<1 951 1208 1039 1141 2468 history2 7
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 950 1050 995 1180 2600 limit/base >25	<1 910 1124 983 1276 3561 current 4 2	<1 912 1010 950 1189 3123 history1 5 1	<1 951 1208 1039 1141 2468 history2 7 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm VTS	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 >25 >20 limit/base	<1 910 1124 983 1276 3561 current 4 2 5	<1 912 1010 950 1189 3123 history1 5 1 12	<1 951 1208 1039 1141 2468 history2 7 2 15
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm vTS	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 >25 >20 limit/base >3	<1 910 1124 983 1276 3561 <u>current</u> 4 2 5 5	<1 912 1010 950 1189 3123 history1 5 1 12 history1	<1 951 1208 1039 1141 2468 history2 7 2 15 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI 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 >25 	<1 910 1124 983 1276 3561 current 4 2 5 current 0.2	<1 912 1010 950 1189 3123 history1 5 1 12 history1 0.2	<1 951 1208 1039 1141 2468 history2 7 2 15 history2 0.4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAI 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 D7844 *ASTM D7624	0 950 1050 995 1180 2600 limit/base >25 	<1 910 1124 983 1276 3561 current 4 2 5 current 0.2 7.5	<1 912 1010 950 1189 3123 history1 5 1 12 history1 0.2 7.6	<1 951 1208 1039 1141 2468 history2 7 2 15 history2 0.4 11.3
CONTAMINAL 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 D7624	0 950 1050 995 1180 2600 limit/base >25 	<1 910 1124 983 1276 3561 current 4 2 5 current 0.2 7.5 18.3	<1 912 1010 950 1189 3123 history1 5 1 12 history1 0.2 7.6 17.3	<1 951 1208 1039 1141 2468 history2 7 2 15 history2 0.4 11.3 23.7

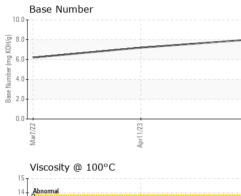


cSt (100°C) Ba

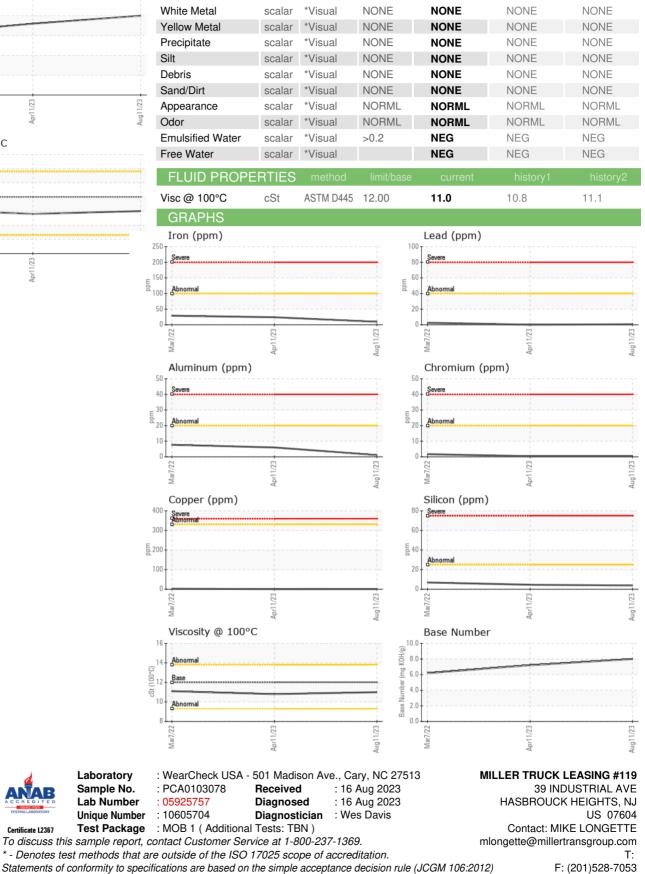
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OIL ANALYSIS REPORT

VISUAL



Apr11/23





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