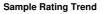


OIL ANALYSIS REPORT



DIRT

Machine Id 131674

Elui

Component Diesel Engine

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

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

🔺 Wear

All component wear rates are normal.

Contamination

Fuel content negligible. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

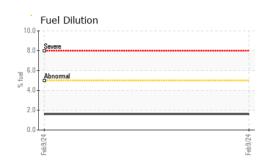
Fluid Condition

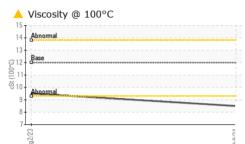
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

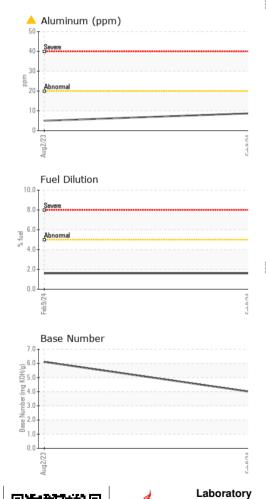
TS)			Aug2023	Feb2024		
SAMPLE INFOR		method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0118836	PCA0103040	
Sample Date		Client Info		09 Feb 2024	02 Aug 2023	
Machine Age	mls	Client Info		0	235	
Dil Age	mls	Client Info		0	0	
Dil Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	
CONTAMINAT	TION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	19	6	
Chromium	ppm		>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	0	0	
Fitanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m		▲ 9	5	
ead	ppm	ASTM D5185m	>40	 <1	1	
Copper	ppm	ASTM D5185m	>330	53	31	
Tin	ppm		>15	<1	<1	
/anadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	40	168	
Barium	ppm	ASTM D5185m	0	1	0	
Nolybdenum	ppm	ASTM D5185m	50	129	125	
Manganese	ppm	ASTM D5185m	0	11	6	
<i>I</i> agnesium	ppm	ASTM D5185m	950	357	393	
Calcium	ppm					
	ppin	ASTM D5185m	1050	1238	1269	
Phosphorus	ppm	ASTM D5185m ASTM D5185m	1050 995	616	1269 646	
Phosphorus Zinc		ASTM D5185m				
Zinc	ppm	ASTM D5185m	995	616	646	
Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m	995 1180	616 701	646 793	
Zinc Sulfur CONTAMINAN	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base	616 701 2538	646 793 3475	
Zinc Gulfur CONTAMINAN Silicon Sodium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	616 701 2538 current	646 793 3475 history1 33 4	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm VTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	616 701 2538 current ▲ 39 9 1	646 793 3475 history1 33 4 6	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm vTS ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	616 701 2538 current ▲ 39 9	646 793 3475 history1 33 4	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm VTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	616 701 2538 current ▲ 39 9 1	646 793 3475 history1 33 4 6	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm VTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20 >5	616 701 2538 current ▲ 39 9 1 1.6	646 793 3475 history1 33 4 6 <1.0 history1 0.1	 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm VTS ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 Method	995 1180 2600 limit/base >25 >20 >5 limit/base	616 701 2538 current ▲ 39 9 1 1.6 current	646 793 3475 history1 33 4 6 <1.0 history1	 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Vitration	ppm ppm ppm vTS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	995 1180 2600 limit/base >25 >20 >5 limit/base >3 >20	616 701 2538	646 793 3475 history1 33 4 6 <1.0 history1 0.1	 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Vitration	ppm ppm ppm VTS ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7824	995 1180 2600 limit/base >25 >20 >5 limit/base >3 >20	616 701 2538	646 793 3475 history1 33 4 6 <1.0 history1 0.1 4.4	 history2 history2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm VTS ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7824	995 1180 2600 >25 >20 >5 limit/base >3 >20 >30	616 701 2538 current ▲ 39 9 1 1.6 current 0.1 10.0 21.5	646 793 3475 history1 33 4 6 <1.0 history1 0.1 4.4 13.8	 history2 history2 history2



OIL ANALYSIS REPORT









Certificate L2367

Sample No.

Lab Number

Contact/Location: MIKE LONGETTE - MILRUT