

OIL ANALYSIS REPORT

Sample Rating Trend





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.

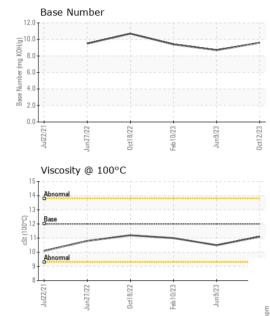
Fluid Condition

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

TS)		Jul2021	Jun2022 Oct2022	Feb2023 Jun2023	Oct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106307	PCA0098013	PCA0089655
Sample Date		Client Info		12 Oct 2023	09 Jun 2023	10 Feb 2023
Machine Age	mls	Client Info		0	0	159731
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2	0	7
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		0	2	<1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m		1	2	<1
Tin	ppm	ASTM D5185m	>15	0	1	0
Vanadium	ppm	ASTM D5185m	>10	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	21	25
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	56	58	66
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	950	843	915	890
Calcium	ppm	ASTM D5185m	1050			
Phosphorus				958	1096	1117
1 neepherde	ppm	ASTM D5185m	995	958 896		1117 998
Zinc	ppm ppm				1096	
Zinc Sulfur	ppm ppm	ASTM D5185m	995	896	1096 1027	998
Zinc	ppm ppm	ASTM D5185m ASTM D5185m	995 1180	896 1066	1096 1027 1247	998 1239
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600	896 1066 2698	1096 1027 1247 3865	998 1239 3789
Zinc Sulfur CONTAMINAN	ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m method	995 1180 2600 limit/base	896 1066 2698 current	1096 1027 1247 3865 history1	998 1239 3789 history2
Zinc Sulfur CONTAMINAN Silicon	ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	995 1180 2600 limit/base >25	896 1066 2698 current 7	1096 1027 1247 3865 history1 6	998 1239 3789 history2 5
Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25	896 1066 2698 current 7 1	1096 1027 1247 3865 history1 6 <1	998 1239 3789 history2 5 <1
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20	896 1066 2698 current 7 1 0	1096 1027 1247 3865 history1 6 <1 2	998 1239 3789 history2 5 <1 2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	995 1180 2600 limit/base >25 >20 limit/base >3	896 1066 2698 current 7 1 0 current	1096 1027 1247 3865 history1 6 <1 2 history1	998 1239 3789 history2 5 <1 2 history2
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	995 1180 2600 limit/base >25 >20 limit/base >3	896 1066 2698 current 7 1 0 current 0	1096 1027 1247 3865 history1 6 <1 2 history1 0.1	998 1239 3789 history2 5 <1 2 history2 0.1
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm TS ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7415	995 1180 2600 limit/base >25 >20 limit/base >3 >20	896 1066 2698 current 7 1 0 current 0 4.7	1096 1027 1247 3865 history1 6 <1 2 history1 0.1 4.9	998 1239 3789 history2 5 <1 2 history2 0.1 4.9
Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm TS ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7415	995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20 >30	896 1066 2698 current 7 1 0 current 0 4.7 16.8	1096 1027 1247 3865 history1 6 <1 2 history1 0.1 4.9 17.4	998 1239 3789 history2 5 <1 2 history2 0.1 4.9 16.9



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Certificate L2367

Laboratory

Sample No.

Lab Number

Unique Number

Contact/Location: MIKE LONGETTE - MILRUT