

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

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)			v2021 Sep2021 May2022			
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110435	PCA0101307	PCA0095889
Sample Date		Client Info		23 Oct 2023	28 Jun 2023	17 Apr 2023
Machine Age	mls	Client Info		115738	109500	105956
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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	18	35	30
Chromium	ppm	ASTM D5185m	>20	<1	2	2
Nickel	ppm	ASTM D5185m	>4	<1	1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	11	10
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m		34	75	84
Tin	ppm	ASTM D5185m	>15	1	2	1
Vanadium	ppm	ASTM D5185m	210	<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	20	7	7
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	50	51	56	57
Manganese	ppm	ASTM D5185m	0	<1	1	2
Magnesium	ppm	ASTM D5185m	950	617	867	882
Calcium	ppm	ASTM D5185m	1050	1424	1159	1122
Phosphorus	ppm	ASTM D5185m	995	982	891	900
Zinc	ppm				001	
		ASTMUD5185m	1180	1208	1117	1165
Sulfur	ppm	ASTM D5185m ASTM D5185m	1180 2600	1208 2844	1117 2143	1165 2561
Sulfur CONTAMINAN	ppm					
CONTAMINAN	ppm	ASTM D5185m	2600	2844	2143	2561
CONTAMINAN Silicon	ppm TS	ASTM D5185m method	2600 limit/base	2844 current	2143 history1	2561 history2
Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ITS ppm	ASTM D5185m method ASTM D5185m	2600 limit/base >25	2844 current 4	2143 history1 4	2561 history2 3
CONTAMINAN Silicon Sodium	ppm ITS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2600 limit/base >25	2844 current 4 0	2143 history1 4 2	2561 history2 3 2
CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ITS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2600 limit/base >25 >20 limit/base	2844 current 4 0 8	2143 history1 4 2 13	2561 history2 3 2 12
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	2600 limit/base >25 >20 limit/base >3	2844 current 4 0 8 current	2143 history1 4 2 13 history1 0.8	2561 history2 3 2 12 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	2600 limit/base >25 >20 limit/base >3 >20	2844 current 4 0 8 current 0.5	2143 history1 4 2 13 history1	2561 history2 3 2 12 history2 0.7
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm TS ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	2600 limit/base >25 >20 limit/base >3 >20	2844 current 4 0 8 current 0.5 8.9	2143 history1 4 2 13 history1 0.8 10.1	2561 history2 3 2 12 history2 0.7 8.7
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm TS ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	2600 limit/base >25 >20 limit/base >3 >20 >30 limit/base	2844 current 4 0 8 current 0.5 8.9 21.0	2143 history1 4 2 13 history1 0.8 10.1 22.2	2561 history2 3 2 12 history2 0.7 8.7 18.8



cSt (100°C) Ba

Abnorma

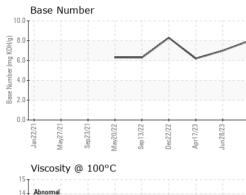
an22/7

Pup 2/2/71

Sep 13/22

Inr17/73

OIL ANALYSIS REPORT







Report Id: MILRUT [WUSCAR] 06005361 (Generated: 11/15/2023 13:33:28) Rev: 1

Contact/Location: MIKE LONGETTE - MILRUT