

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 130512

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

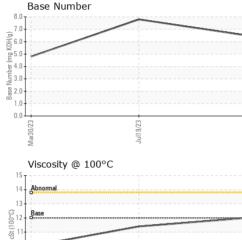
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

(TS)		Ma	2023	Jul2023 Oct202	3	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110424	PCA0101371	PCA0095968
Sample Date		Client Info		20 Oct 2023	19 Jul 2023	30 Mar 2023
Machine Age	mls	Client Info		0	27139	13409
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	59	75	109
Chromium	ppm	ASTM D5185m	>20	1	2	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	7	25
Lead	ppm	ASTM D5185m	>40	1	2	6
Copper	ppm	ASTM D5185m	>330	39	96	239
Tin	ppm	ASTM D5185m	>15	2	3	6
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	13	10	99
Barium	ppm	ASTM D5185m	0	0	2	5
Molybdenum	ppm	ASTM D5185m	50	69	70	27
Manganese	ppm	ASTM D5185m	0	1	1	3
Magnesium	ppm	ASTM D5185m	950	923	870	168
Calcium	ppm	ASTM D5185m	1050	1298	1267	1168
Phosphorus	ppm	ASTM D5185m	995	1076	1022	883
Zinc	10 10 100	AOTH DEADE	4400			1107
	ppm	ASTM D5185m	1180	1344	1311	1127
Sulfur	ppm	ASTM D5185m ASTM D5185m	2600	1344 2726	1311 2823	2983
CONTAMINAN	ppm	ASTM D5185m method	2600 limit/base	2726 current	2823 history1	2983 history2
CONTAMINAN	ppm ITS ppm	ASTM D5185m method ASTM D5185m	2600	2726 current 9	2823 history1 15	2983 history2
CONTAMINAN Silicon Sodium	ppm ITS	ASTM D5185m method ASTM D5185m ASTM D5185m	2600 limit/base >25	2726 current 9 2	2823 history1 15 0	2983 history2 51 4
CONTAMINAN Silicon Sodium Potassium	ppm ITS ppm	ASTM D5185m method ASTM D5185m	2600 limit/base >25 >20	2726 current 9 2 0	2823 history1 15	2983 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ITS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	2600 limit/base >25 >20 limit/base	2726 current 9 2 0 current	2823 history1 15 0 2 history1	2983 history2 ▲ 51 4 4 4 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ITS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	2600 limit/base >25 >20 limit/base >3	2726 current 9 2 0 current 1.4	2823 history1 15 0 2 history1 1.1	2983 history2 ▲ 51 4 4 history2 0.8
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ITS ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624	2600 limit/base >25 >20 limit/base >3 >20	2726 current 9 2 0 current 1.4 12.5	2823 history1 15 0 2 history1 1.1 1.1 11.8	2983 history2 ▲ 51 4 4 • history2 0.8 9.9
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm JTS ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	2600 limit/base >25 >20 limit/base >3	2726 current 9 2 0 current 1.4	2823 history1 15 0 2 history1 1.1	2983 history2 ▲ 51 4 4 history2 0.8
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm JTS ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624	2600 limit/base >25 >20 limit/base >3 >20	2726 current 9 2 0 current 1.4 12.5 23.8	2823 history1 15 0 2 history1 1.1 1.1 11.8	2983 history2 ▲ 51 4 4 • history2 0.8 9.9
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm JTS ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	2600 limit/base >25 >20 limit/base >3 >20 >30 >30	2726 current 9 2 0 current 1.4 12.5 23.8	2823 history1 15 0 2 history1 1.1 1.1 11.8 23.1	2983 history2 ▲ 51 4 4 history2 0.8 9.9 22.5

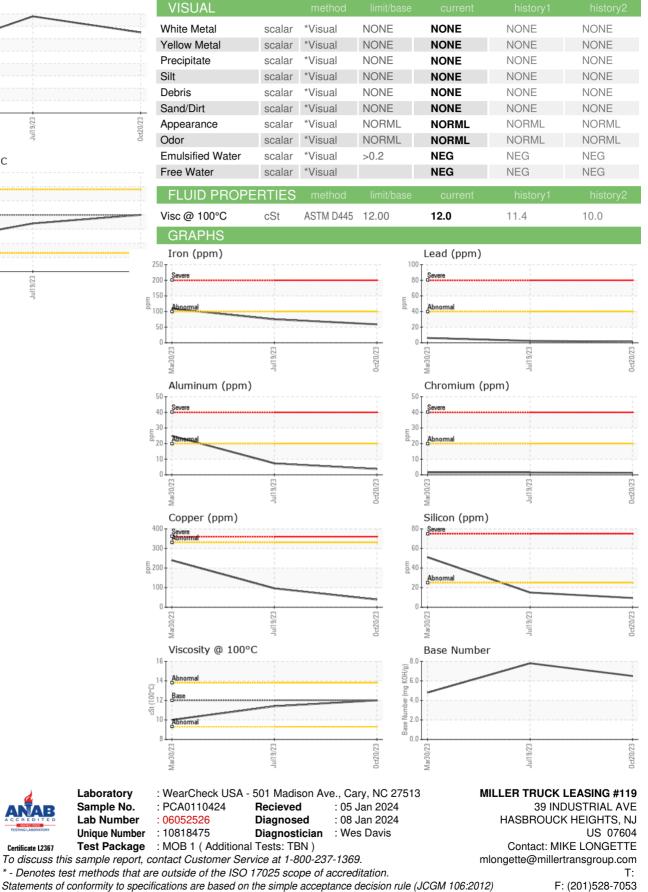


Abnorma

OIL ANALYSIS REPORT



Jul19/23



Certificate L2367