

OIL ANALYSIS REPORT

Area ALBERT LEA Unit 05 DB010105E Component

Natural Gas Engine

PETRO CANADA DURON MONOGRADE HD 40W (350 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: 67 gallons of lube oil added this month.)

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



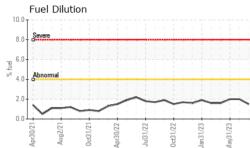


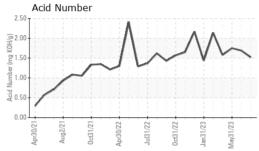
NORMAL

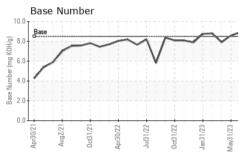
SAMPLE INFORMATION method limit/base current history1	history2
Sample Number Client Info PCA0106479 PCA0088289	PCA0088286
Sample Date Client Info 04 Sep 2023 30 Jun 2023	31 May 2023
Machine Age hrs Client Info 226 18172	18107
Oil Age hrs Client Info 226 18172	18107
Oil Changed Client Info Oil Added Not Changd	Not Changd
Sample Status NORMAL NORMAL	NORMAL
WEAR METALS method limit/base current history1	history2
Iron ppm ASTM D5185m >50 5 3	5
Chromium ppm ASTM D5185m >4 <1	0
Nickel ppm ASTM D5185m >2 0 0	0
Titanium ppm ASTM D5185m 0 0	0
Silver ppm ASTM D5185m >3 0 0	0
Aluminum ppm ASTM D5185m >9 5 2	<1
Lead ppm ASTM D5185m >30 1 0	0
Copper ppm ASTM D5185m >35 3 <1	<1
Tin ppm ASTM D5185m >4 1 0	0
Vanadium ppm ASTM D5185m 0 0	0
Cadmium ppm ASTM D5185m <1	0
ADDITIVES method limit/base current history1	history2
Boron ppm ASTM D5185m <1 <1	<1
Barium ppm ASTM D5185m 0 0	0
Molybdenum ppm ASTM D5185m 2 2	2
Manganese ppm ASTM D5185m <1 <1	<1
Magnesium ppm ASTM D5185m 909 923	982
Calcium ppm ASTM D5185m 1008 1030	1124
Phosphorus ppm ASTM D5185m 1130 1187	1191
Zinc ppm ASTM D5185m 1307 1403	1445
	1445
Sulfur ppm ASTM D5185m 3780 3939	3937
SulfurppmASTM D5185m37803939CONTAMINANTSmethodlimit/basecurrenthistory1	
	3937
CONTAMINANTS method limit/base current history1	3937 history2
CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >+100 6 8	3937 history2 6
CONTAMINANTSmethodlimit/basecurrenthistory1SiliconppmASTM D5185m>+10068SodiumppmASTM D5185m3<1	3937 history2 6 1
CONTAMINANTSmethodlimit/basecurrenthistory1SiliconppmASTM D5185m>+10068SodiumppmASTM D5185m3<1PotassiumppmASTM D5185m>2001	3937 history2 6 1 1
CONTAMINANTSmethodlimit/basecurrenthistory1SiliconppmASTM D5185m>+10068SodiumppmASTM D5185m3<1PotassiumppmASTM D5185m>2001Fuel%ASTM D3524>4.01.52.0	3937 history2 6 1 1 2.0
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CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >+100 6 8 Sodium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 1 Fuel % ASTM D5185m >20 0 1 Fuel % ASTM D5185m >20 0 1 Soot % % ASTM D7824 >4.0 1.5 2.0 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 0 0.1 Nitration Abs/cm *ASTM D7624 >20 3.2 4.4	3937 history2 6 1 1 2.0 history2 0.1 4.1
CONTAMINANTS method limit/base current history1 Silicon ppm ASTM D5185m >+100 6 8 Sodium ppm ASTM D5185m 3 <1 Potassium ppm ASTM D5185m 20 0 1 Fuel % ASTM D5185m >20 0 1 Fuel % ASTM D3524 >4.0 1.5 2.0 INFRA-RED method limit/base current history1 Soot % % *ASTM D7844 0 0.1 Nitration Abs/cm *ASTM D7624 >20 3.2 4.4 Sulfation Abs/.1mm *ASTM D7415 >30 12.2 13.7	3937 history2 6 1 1 2.0 history2 0.1 4.1 14.1
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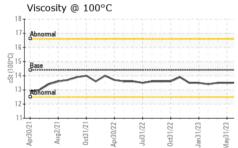


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