

OIL ANALYSIS REPORT

G.LOPES CONSTRUCTION INC./On-Road

311 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

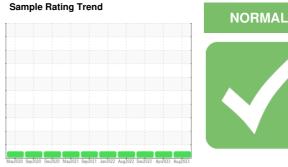
All component wear rates are normal.

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.

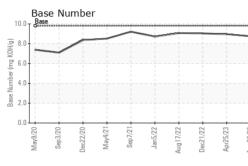


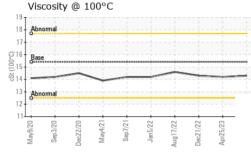


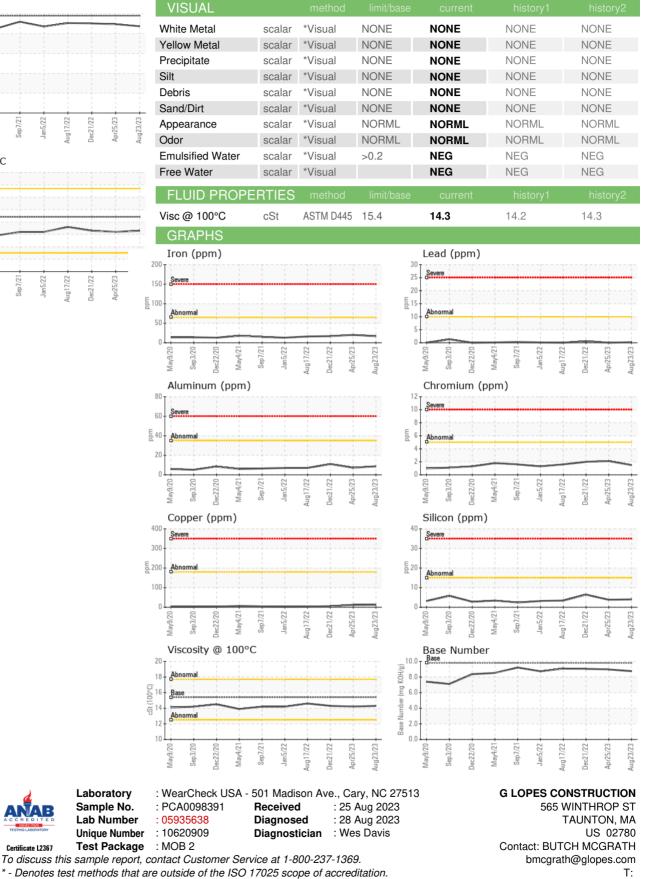
	history2
Sample Number Client Info PCA0098391 PCA0083223 PC/	A0078339
Sample Date Client Info 23 Aug 2023 25 Apr 2023 21 I	Dec 2022
Machine AgemlsClient Info308000308000	3000
•	2000
Oil Changed Client Info N/A N/A N/A	
Sample Status NORMAL NORMAL NO	RMAL
CONTAMINATION method limit/base current history1	history2
Fuel WC Method >3.0 <1.0 <	<1.0
Glycol WC Method NEG NEG	NEG
WEAR METALS method limit/base current history1	history2
Iron ppm ASTM D5185m >65 17 20 1	17
	2
Nickel ppm ASTM D5185m >3 1 0 0	C
Titanium ppm ASTM D5185m >5 1 0 0)
Silver ppm ASTM D5185m >2 <1 0	C
Aluminum ppm ASTM D5185m >35 9 7 1	11
Lead ppm ASTM D5185m >10 <1 0 <	<1
Copper ppm ASTM D5185m >180 13 12 55	5
Tin ppm ASTM D5185m >8 1 1 <	<1
Vanadium ppm ASTM D5185m 0 0 0	C
Cadmium ppm ASTM D5185m 0 0 0	C
ADDITIVES method limit/base current history1	history2
Boron ppm ASTM D5185m 0 <1 0	-
	-
Barium ppm ASTM D5185m 0 2 0 1	6
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66	6
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 55	6 1 60 <1 919
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <2 Magnesium ppm ASTM D5185m 1010 979 914 55 Calcium ppm ASTM D5185m 1070 1209 1074 1	6 1 60 <1 919 1108
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <4 Magnesium ppm ASTM D5185m 1010 979 914 56 Calcium ppm ASTM D5185m 1070 1209 1074 17 Phosphorus ppm ASTM D5185m 1150 1058 984 17	6 1 60 <1 919 1108 1048
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 55 Calcium ppm ASTM D5185m 1070 1209 1074 11 Phosphorus ppm ASTM D5185m 1150 1058 984 11 Zinc ppm ASTM D5185m 1270 1344 1248 11	6 1 60 <1 919 1108 1048 1242
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1	6 1 60 <1 919 1108 1048
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 55 Calcium ppm ASTM D5185m 1070 1209 1074 11 Phosphorus ppm ASTM D5185m 1150 1058 984 11 Zinc ppm ASTM D5185m 1270 1344 1248 12	6 1 60 <1 919 1108 1048 1242
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 1	6 1 60 <1 919 1108 1048 1242 3234 history2
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Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 56 Calcium ppm ASTM D5185m 1010 979 914 56 Calcium ppm ASTM D5185m 1070 1209 1074 16 Phosphorus ppm ASTM D5185m 1150 1058 984 16 Zinc ppm ASTM D5185m 1270 1344 1248 16 Sulfur ppm ASTM D5185m 2060 3246 2923 36 CONTAMINANTS method limit/base current history1 17 Silicon ppm ASTM D5185m >15 4 4 66 Sodium ppm ASTM D5185m	6 1 60 <1 919 1108 1048 1242 3234 history2 6 1 3
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 60 Calcium ppm ASTM D5185m 1010 979 914 60 Calcium ppm ASTM D5185m 1070 1209 1074 11 Phosphorus ppm ASTM D5185m 1150 1058 984 11 Zinc ppm ASTM D5185m 1270 1344 1248 11 Sulfur ppm ASTM D5185m 2060 3246 2923 60 Silicon ppm ASTM D5185m >15 4 4 60 Sodium ppm ASTM D5185m >20 4 3 60 INFRA-RED method limit/base cu	6 1 60 <1 919 1108 1048 1242 3234 history2 6 1 3 history2
Barium ppm ASTM D5185m 0 2 0 1 Molybdenum ppm ASTM D5185m 60 66 61 66 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 1010 979 914 69 Calcium ppm ASTM D5185m 1010 979 914 69 Calcium ppm ASTM D5185m 1070 1209 1074 11 Phosphorus ppm ASTM D5185m 1150 1058 984 11 Zinc ppm ASTM D5185m 1270 1344 1248 12 Sulfur ppm ASTM D5185m 2060 3246 2923 63 CONTAMINANTS method limit/base current history1 11 Silicon ppm ASTM D5185m >15 4 4 64 Sodium ppm ASTM D5185m >20 <th>6 1 60 <1 919 1108 1048 1242 3234 history2 6 1 3 history2 0.8</th>	6 1 60 <1 919 1108 1048 1242 3234 history2 6 1 3 history2 0.8
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Certificate L2367

Laboratory

Sample No.

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