

## **OIL ANALYSIS REPORT**

Sample Rating Trend





## Machine Id MACK 20141

Component Natural Gas Engine

Fluid PETRO CANADA DURON GEO LD 15W40 (--- GAL)

### DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

## Wear

Metal levels are typical for a new component breaking in.

#### 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.

Sample NumberClient InfoSBP0007331Sample DateClient Info05 Jun 2024Machine AgehrsClient Info8148Oil AgehrsClient Info540Oil ChangedClient InfoChangedSample StatusImageImageNORMALImage	
Machine Age         hrs         Client Info         8148             Oil Age         hrs         Client Info         540             Oil Changed         Client Info         Changed	
Oil Age     hrs     Client Info     540        Oil Changed     Client Info     Changed	
Oil Changed Client Info Changed	
Oil Changed Client Info Changed	
CONTAMINATION method limit/base current history1 h	istory2
Water         WC Method >0.1         NEG	
WEAR METALS method limit/base current history1 h	iistory2
Iron ppm ASTM D5185m >50 7	
Chromium         ppm         ASTM D5185m         >5         <1	
Nickel ppm ASTM D5185m >4 0	
Titanium         ppm         ASTM D5185m         >5         0	
Silver ppm ASTM D5185m >3 0	
Aluminum         ppm         ASTM D5185m         >25         2	
Lead ppm ASTM D5185m >40 <b>0</b>	
Copper ppm ASTM D5185m >150 2	
Tin ppm ASTM D5185m >4 <1	
Vanadium         ppm         ASTM D5185m         0	
Cadmium         ppm         ASTM D5185m         0	
ADDITIVES method limit/base current history1 h	istory2
Boron ppm ASTM D5185m 50 10	
Barium         ppm         ASTM D5185m         5         0	
Molybdenum         ppm         ASTM D5185m         50         51	
Manganese         ppm         ASTM D5185m         0         <1	
Magnesium         ppm         ASTM D5185m         560         553	
Calcium         ppm         ASTM D5185m         1510         1637	
Phosphorus         ppm         ASTM D5185m         780         691	
Phosphorus         ppm         ASTM D5185m         780 <b>691</b> Zinc         ppm         ASTM D5185m         870 <b>941</b>	
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620	iistory2
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620	nistory2
ZincppmASTM D5185m870941SulfurppmASTM D5185m20402620CONTAMINANTSmethodlimit/basecurrenthistory1history1	iistory2
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185m         >25         4	iistory2
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         20         0             Potassium         ppm         ASTM D5185m         >20         0	iistory2 iistory2
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         20         2             Potassium         ppm         ASTM D5185m         >20         0	
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         hr           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         history1	
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         hr           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         h           Soot %         %         *ASTM D7844         0	
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         h           Soot %         %         *ASTM D7844         0             Nitration         Abs/cm         *ASTM D7624         >20         10.3             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.7	
Zinc         ppm         ASTM D5185m         870         941             Sulfur         ppm         ASTM D5185m         2040         2620             CONTAMINANTS         method         limit/base         current         history1         h           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >25         4             Potassium         ppm         ASTM D5185m         >20         0             INFRA-RED         method         limit/base         current         history1         h           Soot %         %         *ASTM D7844         0             Nitration         Abs/cm         *ASTM D7424         >20         10.3             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.7	iistory2



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