

Reliant

1491052 Component Diesel Engine

{not provided} (32 GAL) RECOMMENDATION

| DECOMMENDATION | - . | | | 1.1. 11/41 | (<u> </u> | 1.11 A | |
|--|---|---|---|---|--|--------------|----------------------|
| Recommendation Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample. | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | RPL0021216 | | |
| | Sample Date | | Client Info | | 09 Jul 2024 | | |
| | Machine Age | hrs | Client Info | | 1649 | | |
| | Oil Age | hrs | Client Info | | 1649 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Not Changd | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | NORMAL | | |
| WEAR Metal levels are typical for a components first oil change. | | | | | | | |
| | Iron | ppm | ASTM D5185m | | 36 | | |
| | Chromium | ppm | ASTM D5185m | | 2 | | |
| | Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| | Titanium | ppm | ASTM D5185m | | <1 | | |
| | Silver | ppm | ASTM D5185m | | 0 | | |
| | Aluminum | ppm | ASTM D5185m | | 9 | | |
| | Lead | ppm | ASTM D5185m | | 0 | | |
| | Copper | ppm | ASTM D5185m | | 17 | | |
| | Tin | ppm | ASTM D5185m | >15 | <1 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 11 | | |
| | Potassium | ppm ppm | ASTM D5185m | >20 | 4 | | |
| CONTAMINATION There is no indication of any contamination in the oil. | Potassium Fuel | | ASTM D5185m WC Method | >20 >5 | 4 <1.0 | | |
| | Potassium Fuel Water | | ASTM D5185m WC Method WC Method | >20 >5 | 4 <1.0 NEG | | |
| | Potassium Fuel Water Glycol | ppm | ASTM D5185m WC Method WC Method WC Method | >20 >5 >0.2 | 4 <1.0 NEG NEG | | |
| | Potassium Fuel Water Glycol Soot % | ppm % | ASTM D5185m WC Method WC Method WC Method *ASTM D7844 | >20 >5 >0.2 >3 | 4 <1.0 NEG NEG 0.4 | | |
| | Potassium Fuel Water Glycol Soot % Nitration | ppm % Abs/cm | ASTM D5185m WC Method WC Method WC Method *ASTM D7844 *ASTM D7624 | >20 >5 >0.2 >3 >20 | 4 <1.0 NEG NEG 0.4 10.8 | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation | ppm % Abs/cm Abs/.1mm | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 | >20 >5 >0.2 >3 >20 >30 | 4 <1.0 NEG NEG 0.4 10.8 21.7 | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt | % Abs/cm Abs/.1mm scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual | >20 >5 >0.2 >3 >20 >30 NONE | 4 <1.0 NEG NEG 0.4 10.8 21.7 NONE | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation | ppm % Abs/cm Abs/.1mm | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 | >20 >5 >0.2 >3 >20 >30 | 4 <1.0 NEG NEG 0.4 10.8 21.7 | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt | % Abs/cm Abs/.1mm scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual | >20 >5 >0.2 >3 >20 >30 NONE NONE NONE | 4 <1.0 NEG NEG 0.4 10.8 21.7 NONE NONE NONE | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance | ppm % Abs/cm Abs/1mm scalar scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual | >20 >5 >0.2 >3 >20 >30 NONE NONE | 4 <1.0 NEG NEG 0.4 10.8 21.7 NONE NONE | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt | ppm % Abs/cm Abs/.1mm scalar scalar scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual | >20 >5 >0.2 >3 >20 >30 NONE NONE NONE | 4 <1.0 NEG NEG 0.4 10.8 21.7 NONE NONE NONE | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance | ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *ASTM D7415 *Visual *Visual *Visual *Visual | >20 >5 >0.2 >3 >20 >30 NONE NONE NONE NORM | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORE | | |
| There is no indication of any contamination in the oil. | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water | ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NONE NORML NORML NEG | | |
| | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium | ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar scalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 | | |
| There is no indication of any contamination in the oil. | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron | ppm % Abs/cm Abs/1mm scalar scalar scalar scalar scalar scalar scalar gcalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *StM D5185m ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 48 | | |
| There is no indication of any contamination in the oil. | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium | ppm % Abs/cm Abs/1mm scalar scalar scalar scalar scalar scalar scalar gcalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 48 0 | | |
| There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum | ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar gcalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 48 0 118 | | |
| There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Boron Barium Molybdenum Manganese | ppm % Abs/cm Abs/1mm scalar scalar scalar scalar scalar scalar scalar gcalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 48 0 118 1 | | |
| There is no indication of any contamination in the oil. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the | Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum | ppm % Abs/cm Abs/.1mm scalar scalar scalar scalar scalar scalar gcalar | ASTM D5185m WC Method WC Method *ASTM D7844 *ASTM D7624 *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m | >20 >5 >0.2 >20 >30 NONE NONE NONE NORML NORML | 4 <1.0 NEG 0.4 10.8 21.7 NONE NONE NONE NORML NORML NEG 2 48 0 118 | | |

Calcium

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ASTM D5185m

ASTM D5185m

Abs/.1mm *ASTM D7414 >25

ASTM D445

ppm ASTM D5185m

ppm Phosphorus ppm ASTM D5185m

ppm

Base Number (BN) mg KOH/g ASTM D2896

1394

774

897

2660

21.9 5.0

12.8

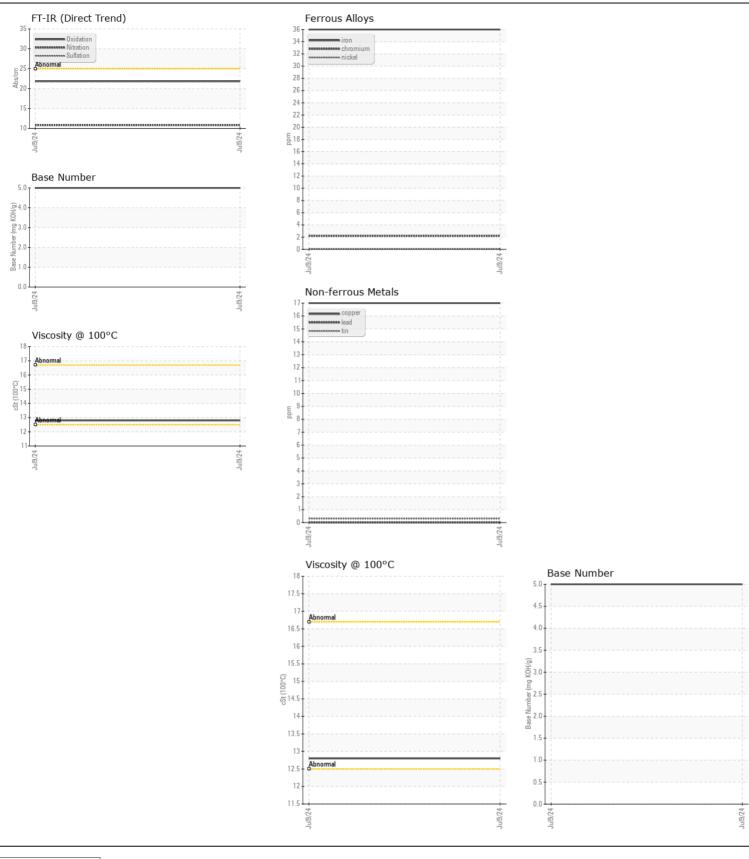
NORMAL

NORMAL

NORMAL

WEAR

CONTAMINATION **FLUID CONDITION**



RTL PACLEASE - 7020 - El Pao Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : RPL0021216 Received 3500 Doniphan Dr : 12 Jul 2024 Lab Number : 06234591 El Paso, TX Tested : 12 Jul 2024 Unique Number : 11123425 : 12 Jul 2024 - Wes Davis US 79922 Diagnosed Test Package : FLEET Contact: JUAN MARTINEZ Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. martinezj15@rushenterprises.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)