

## Reliant

## 1491052 Component Diesel Engine

{not provided} (32 GAL) RECOMMENDATION

DECOMMENDATION	<del>-</del> .			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		
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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

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1394

774

897

2660

21.9 5.0

12.8

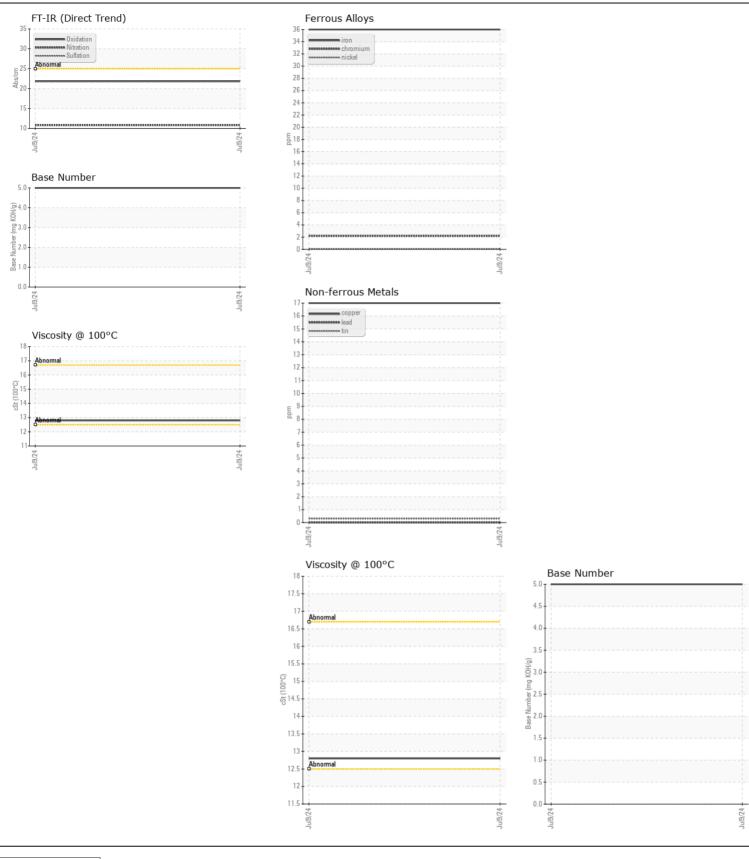
NORMAL

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)