WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

[W49930]

3017DCLJ400265

Component Diesel Engine

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. Very text	DIESEL ENGINE OIL SAE 15W40 (GAL)							
Resample at the noxt 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. Please specify the brand, type, and viscosity of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify the property of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your next sample. Please specify of the oil on your	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	Historv2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Sample Date Sample	Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the	Sample Number		Client Info		JR0199715		
Branch, type, and viscosity of the oil on your next sample. Machine Age Ins Client Info 0		Sample Date		Client Info		20 Feb 2024		
Oil Age hrs Client Info O O O O O O O O O		Machine Age	hrs	Client Info		306		
Cilchanged Cilcent Info Changed Cilcent Info Changed C	brand, type, and viscosity of the oil off your next sample.	Oil Age	hrs	Client Info		0		
Filter Changed Sample Status Chient Info Chonk Chonk		Filter Age	hrs	Client Info		0		
Nome		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Metal levels are typical for a new component breaking in. Nickel ppm ASTM 05185m 20 -1		Sample Status				NORMAL		
Metal levels are typical for a new component breaking in. Nickel ppm ASTM 05185m 20 -1	WEAR	Iron	ppm	ASTM D5185m	>100	5		
Mickel ppm ASTM 05185m >4 <1 .		Chromium		ASTM D5185m	>20			
Titanium ppm ASTM 05185m 30		Nickel				<1		
Silver ppm ASTM D6185m >20 2		Titanium		ASTM D5185m		<1		
Aluminum ppm ASTM D585m 2-00 2		Silver		ASTM D5185m	>3	0		
Lead ppm ASTM D5185m 4-0 -1		Aluminum		ASTM D5185m	>20	2		
Copper ppm		Lead		ASTM D5185m	>40			
Vanadium ppm ASTM D5185m <1		Copper		ASTM D5185m	>330	2		
White Metal Yellow Metal Scalar "Visual NONE NOE NONE NONE NONE NONE NONE NONE NONE NONE NONE		Tin	ppm	ASTM D5185m	>15	<1		
Solition		Vanadium	ppm	ASTM D5185m		<1		
Silicon ppm ASTM D5185m >25 7		White Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM 05185m 20 10		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM 05185m 20 10	CONTAMINATION	Silicon	nnm	ASTM D5185m	>25	7		
Fuel WC Method >5 <1.0	CONTAMINATION							
Water WC Method So.2 NEG So.5 NItration Abs./Imm 'ASTM D7844 So.5	There is no indication of any contamination in the oil.		ррт					
Glycol WC Method NEG Soot %								
Soot %					7 O.L			
Nitration		-	%		>3			
Sulfation Abs/.1mm *ASTM D7415 >30 19.6								
Silt Scalar *Visual NONE Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NORML		Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6		
Sand/Dirt Scalar *Visual NONE NORML Appearance Scalar *Visual NORML NORML		Silt	scalar			NONE		
Appearance		Debris	scalar	*Visual	NONE	NONE		
Codor Scalar *Visual NORML NORML NORML Emulsified Water Scalar *Visual >0.2 NEG		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m >158 3		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 250 208		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 250 208	FLUID CONDITION	Sodium	nnm	ASTM D5185m	>158	3		
Barium ppm ASTM D5185m 10 1 Molybdenum ppm ASTM D5185m 100 4 Magnesium ppm ASTM D5185m 450 26 Magnesium ppm ASTM D5185m 3000 2194 Phosphorus ppm ASTM D5185m 1150 958 Zinc ppm ASTM D5185m 4250 4179 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.tmm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0								
Molybdenum ppm ASTM D5185m 100 4 Manganese ppm ASTM D5185m 500 26 Calcium ppm ASTM D5185m 3000 2194 Phosphorus ppm ASTM D5185m 1150 958 Zinc ppm ASTM D5185m 1350 1240 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0								
Manganese ppm ASTM D5185m <1								
Magnesium ppm ASTM D5185m 450 26 Calcium ppm ASTM D5185m 3000 2194 Phosphorus ppm ASTM D5185m 1150 958 Zinc ppm ASTM D5185m 1350 1240 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0		•						
Calcium ppm ASTM D5185m 3000 2194 Phosphorus ppm ASTM D5185m 1150 958 Zinc ppm ASTM D5185m 1350 1240 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0		_		ASTM D5185m	450			
Phosphorus ppm ASTM D5185m 1150 958 Zinc ppm ASTM D5185m 1350 1240 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0		-						
Zinc ppm ASTM D5185m 1350 1240 Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0								
Sulfur ppm ASTM D5185m 4250 4179 Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0		•		ASTM D5185m	1350	1240		
Oxidation Abs/.1mm *ASTM D7414 >25 15.9 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.0								
		Base Number (BN)	mg KOH/g	ASTM D2896	8.5			
					14.4			

Contact/Location: DAVID ZIEG - JAMASH





Laboratory Sample No.

Lab Number : 06101450 Unique Number: 10899680

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0199715

Received **Tested** Diagnosed

: 27 Feb 2024 : 28 Feb 2024

: 28 Feb 2024 - Wes Davis

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005 Contact: DAVID ZIEG

dzieg@jamesriverequipment.com T: (804)798-6001

Test Package : CONST (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (804)798-0292