

Machine Id **I4663** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

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.

WEAR

All component wear rates are normal.

CONTAMINATION

FLUID CONDITION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

The BN result indicates that there is suitable alkalinity remaining in the

oil. The condition of the oil is suitable for further service.

	Test	UOM	Method	Limit/Abn	Curren		History1	History2
	Sample Number		Client Info		IL00355			
	Sample Date		Client Info		05 Apr 20	024		
	Machine Age	mls	Client Info		0			
	Oil Age	mls	Client Info		0	_		
	Filter Age	mls	Client Info		0			
	Oil Changed		Client Info		Change			
	Filter Changed		Client Info		Change			
	Sample Status				NORM	AL		
	Iron	ppm	ASTM D5185m	>100	42			
	Chromium	ppm	ASTM D5185m	>20	<1			
	Nickel	ppm	ASTM D5185m	>4	0			
	Titanium	ppm	ASTM D5185m		0			
	Silver	ppm	ASTM D5185m	>3	0			
	Aluminum	ppm	ASTM D5185m	>20	13			
	Lead	ppm	ASTM D5185m	>40	0			
	Copper	ppm	ASTM D5185m	>330	3			
	Tin	ppm	ASTM D5185m	>15	ء <1			
	Vanadium	ppm	ASTM D5185m	10	0			
	White Metal	scalar	*Visual	NONE	NON	F		
	Yellow Metal	scalar	*Visual	NONE	NON			
		ooului						
	Silicon	ppm	ASTM D5185m	>25	7			
	Potassium	ppm	ASTM D5185m	>20	22			
	Fuel		WC Method	>5	<1.0			
	Water		WC Method	>0.2	NEG			
	Glycol		WC Method		NEG			
	Soot %	%	*ASTM D7844	>3	0.9			
	Nitration	Abs/cm	*ASTM D7624	>20	11.8			
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0			
	Silt	scalar	*Visual	NONE	NON	E		
	Debris	scalar	*Visual	NONE	NON	E		
	Sand/Dirt	scalar	*Visual	NONE	NON	E		
	Appearance	scalar	*Visual	NORML	NOR	ML		
	Odor	scalar	*Visual	NORML	NOR	ML		
	Emulsified Water	scalar	*Visual	>0.2	NEG			
	Sodium		ASTM D5185m	>158	3			
	Boron	ppm	ASTM D5185m	250	39	_		
	Barium	ppm						
	Molybdenum	ppm	ASTM D5185m ASTM D5185m	10 100	0 106			
	Manganese	ppm	ASTM D5185m	100	1			
	Magnesium	ppm	ASTM D5185m	450	739			
	Calcium	ppm	ASTM D5185m	450 3000	1311			
	Phosphorus	ppm ppm	ASTM D5185m	1150	747			
	Zinc	ppm	ASTM D5185m	1350	886			
	Sulfur	ppm	ASTM D5185m	4250	3277	,		
	Oxidation	Abs/.1mm	*ASTM D5105111	>25	21.1			
	Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896	8.5	5.6			
	Visc @ 100°C	cSt	ASTM D2030 ASTM D445	14.4	13.0			
		501	, 10 1 10 DTTJ	17.7	10.0			



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 RUSH TRUCK LEASING - SALT LAKE CITY IDEALEASE Sample No. Received 964 SOUTH 3800 WEST, BLDG B : IL0035586 : 24 Apr 2024 Lab Number : 06158801 Tested SALT LAKE CITY, UT : 25 Apr 2024 Diagnosed Unique Number : 10994224 : 25 Apr 2024 - Wes Davis US 84104 Test Package : FLEET Contact: JAY ALEXANDER Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. AlexanderJ1@RushEnterprises.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (801)977-9381

Contact/Location: JAY ALEXANDER - LAKSAL Page 2 of 2