

Machine Id **56888 (S/N 1XKZDP9X5RJ301014)** Diesel Engine

SHELL ROTELLA T 15W40 (--- GAL)

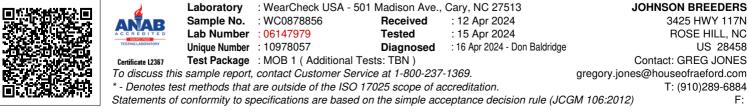
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0878856		
	Sample Date		Client Info		11 Apr 2024		
	Machine Age	mls	Client Info		28172		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		23		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	10		
	Lead	ppm	ASTM D5185m	>40	2		
	Copper	ppm	ASTM D5185m	>330	5		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		9		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		26		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	9.2		
	Sulfation	Abs/.1mm	*ASTM D7415		21.4		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
I EOID CONDITION	Boron	ppm	ASTM D5185m	316	10		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		28		
	Manganese	ppm	ASTM D5185m	1.12	<1		
	Magnesium	ppm	ASTM D5185m	24	339		
	Calcium		ASTM D5185m		2078		
	Phosphorus	ppm	ASTM D5185m				
	•	ppm			943		
	Zinc	ppm	ASTM D5185m		1100		
	Sulfur	ppm	ASTM D5185m		3723		
	Oxidation	Abs/.1mm	*ASTM D7414		16.1		
	Base Number (BN)	mg KOH/g	ASTM D2896	10.1	5.8		

Visc @ 100°C cSt

ASTM D445 15.7

14.3





Contact/Location: GREG JONES - JOHROSNC Page 2 of 2