

OIL ANALYSIS REPORT



Machine Id **373050P** Component **Diesel Engine** Fluid SHELL ROTELLA T 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0028980		
Sample Date		Client Info		03 Jul 2024		
Machine Age	hrs	Client Info		705		
Oil Age	hrs	Client Info		105		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	4		
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	3		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	2		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	53		
Barium	ppm	ASTM D5185m	0.0	0		
Molybdenum	ppm	ASTM D5185m	1.2	56		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	24	506		
Calcium	ppm	ASTM D5185m	2292	1553		
Phosphorus	ppm	ASTM D5185m	1064	1043		
Zinc	ppm	ASTM D5185m	1160	1253		
Sulfur	ppm	ASTM D5185m	4996	3383		
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6		
Sodium	ppm	ASTM D5185m		4		
Potassium	ppm	ASTM D5185m	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	5.9		
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4		
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2		
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	9.4		



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		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
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		
Free Water	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	14.4		
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe			100	Severe		
			80	- Develo		
Abnomal			E ⁶⁰	Abnormal		
			40	- Q		
0			20	1		
24 			24	24		
Abnormal - Abnormal 			40 ud 20 10 +720pr	Abnormal between betwe		
Copper (ppm)				Silicon (ppm)		
Abnormal						
U			60			
0 -			틆.40	Abnormal		
D -			20			
1				L		
)			Jul3/24	Jul3/24		
7n13/24 +						
Viscosity @ 100°C	2			Base Number		
Viscosity @ 100°C	2		12.0	Base Number		
Viscosity @ 100°C	2		(B) H10.0 X	Base Number		
Viscosity @ 100°C	2		12.0 ЮНОХ НОХ Вш в 6.0 в 6.0	Base Number		
Viscosity @ 100°C	2		(12.0 (5)(HO) X B (0) 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	Base Number		
Viscosity @ 100°C	2		(D)HO) D)HO) D) D) D) D) D) D) D) D) D) D) D) D) D)	Base Number		
Viscosity @ 100°C	2		(B)HOX Bu Jaquinny 4.0 9888 10.0 140000 140000 1400000000	Base Number		



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Contact/Location: BILL BLIEM - MILLUM