

OIL ANALYSIS REPORT

Plant US1 Greenville MAF1 - Plastifier Component

Gearbox Fluid SHELL OMALA 320 (--- GAL)

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

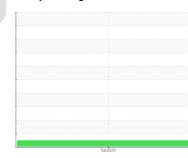
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





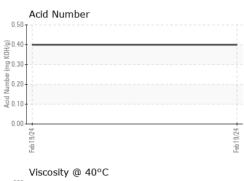
NORMAL

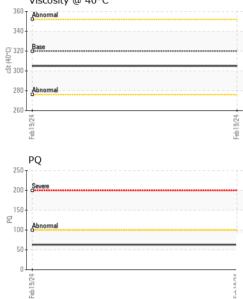
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TLC0001444		
Sample Date		Client Info		19 Feb 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		63		
Iron	ppm	ASTM D5185m	>200	73		
Chromium	ppm	ASTM D5185m	>15	0		
Nickel	ppm	ASTM D5185m	>15	1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	<1		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>200	<1		
Tin	ppm	ASTM D5185m	>25	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5.5	9		
Barium	ppm	ASTM D5185m	0.4	0		
Molybdenum	ppm	ASTM D5185m	0.5	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	23	2		
Calcium	ppm	ASTM D5185m	13	47		
Phosphorus	ppm	ASTM D5185m	450	331		
Zinc	ppm	ASTM D5185m	9.9	13		
Sulfur	ppm	ASTM D5185m	8181	12027		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	8		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	<1		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40		

Sample Rating Trend



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt		*Visual	NONE	NONE		
	Debris		*Visual	NONE	NONE		
	Sand/Dirt		*Visual	NONE	NONE		
Feb 19/24	Appearance		*Visual	NORML	NORML		
E E	Odor		*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	320	305		
	SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Feb19/24 +	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				PQ		
	80			220	0		
v 0	60 - chromium			200	Severe		
10.01	E 40 -			180 -			
L	20-			160 -			
				140-			
	Feb 19/24			-20 -00 -00 -00 -00 -00 -00 -00 -00 -00			
				훈 문 100·	Abnormal		
	Non-ferrous Metal	S			-		
	copper			80.			
	F 6+ tin			60.			
				40 -			
	2			20 -	•		
	24 24			0.			
	<u> </u>			19/	3/2		
	eb10			19	19		
	²²⁶¹ 99 Viscosity @ 40°C			Feb19/24	Feb19/24		
	Viscosity @ 40°C				윤 Acid Number		
	Viscosity @ 40°C						
	Viscosity @ 40°C						
	Viscosity @ 40°C						
	Viscosity @ 40°C						
	Viscosity @ 40°C 360 340 340 340 340 340 340 340 34			(B) 0.50 (B) 0.40 (B) 0.30 (B) 0.20 (C) 0.10 (C) 0.10 (C) 0.00	Acid Number		
	Viscosity @ 40°C			(0,50 (0,40 HQ) 80,30 argun 20 Provide 10,20 Provide 10,20			
Laboratory Sample No. Lab Number Unique Number Test Package	Viscosity @ 40°C	1 Madison Receiv Tested Diagno	ved : 23 1 : 26	Laper 1972 Laper	Acid Number		LE US 1 JN DOO

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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