

# **OIL ANALYSIS REPORT**

# Plant US1 Greenville Machine Id BD-1 - Plastifier

Gearbox Fluid SHELL OMALA 320 (--- GAL)

#### DIAGNOSIS

## 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

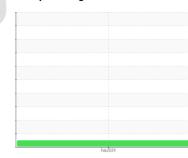
All component wear rates are normal.

## 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		TLC0001468		
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	J	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		32		
Iron	ppm	ASTM D5185m	>200	75		
Chromium	ppm	ASTM D5185m	>15	<1		
Nickel	ppm	ASTM D5185m	>15	2		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	1		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>200	5		
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	<1		
Barium	ppm	ASTM D5185m	0.4	0		
Molybdenum	ppm	ASTM D5185m	0.5	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	23	3		
Calcium	ppm	ASTM D5185m	13	50		
Phosphorus	ppm	ASTM D5185m	450	303		
Zinc	ppm	ASTM D5185m	9.9	15		
Sulfur	ppm	ASTM D5185m	8181	10807		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	7		
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		0.51		

#### Sample Rating Trend



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.60							history2
1.40	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
).36 +	Precipitate	scalar	*Visual	NONE	NONE		
.24	Silt	scalar	*Visual	NONE	NONE		
1.12	Debris	scalar	*Visual	NONE	NONE		
0.00	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
Febl	Odor	scalar	*Visual	NORML	NORML		
Viscosity @ 40°C	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
340	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
320 - Base	Visc @ 40°C	cSt	ASTM D445	320	303		
300 -	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
280	F7/file					no image	no image
250 <b>PQ</b> 200 - Severe	Bottom					no image	no image
150	GRAPHS						
	Ferrous Alloys				PQ		
50-	80			220			
	60 - chromium			200	Severe		
Feb 19/24	E 40			180			
a.	20			160			
	0						
	Feb 19/24			3/24			
	Feb1				Abnormal		
	Non-ferrous Met	als		100	Abnormal		
	10 copper			80	•		
	8 - Reasonable ad			60	•		
				40			
	2			20			
	Feb 19/24			Feb19/24	3/24		A C G
	Feb			Feb	Feb 19/24		E.4.10.74
	Viscosity @ 40°C	2			Acid Number		
	360 Abnormal			。 第10.60 第10.48	T		
	340 Base			HO .48			
	© 320 - <b>Base</b> ↔ ↔ ↔ 300 -			y bi 0.36 age 0.24 Pi 0.02 Pi 0.02 Pi 0.02 Pi 0.02			
				- @ 0.24			
	280 <b>Abnormal</b> 260			F 0.12	1		
				42/6			No.
	Feb 19/24			Feb19/24	Feb 19/24		1-1-10.04
TESTING LABORATORY Unique Numl	-	Recei Teste Diagr	ived : 23 d : 26	3 Feb 2024 3 Feb 2024 3 Feb 2024 - W	140 Ves Davis	Contact: N	