

OIL ANALYSIS REPORT



Machine Id **3 MILL** Component **Discharge Trunnion Bearing** Fluid SHELL OMALA S2 GX 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.

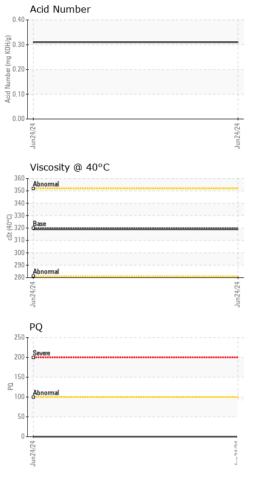
Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0898802		
Sample Date		Client Info		24 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0		
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)		0		
Copper	ppm	ASTM D5185(m)	>20	2		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	6.2	<1		
Barium	ppm	ASTM D5185(m)	0.0	0		
Molybdenum	ppm	ASTM D5185(m)	0	0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	0	<1		
Calcium	ppm	ASTM D5185(m)		10		
Phosphorus	ppm	ASTM D5185(m)	290	233		
Zinc	ppm	ASTM D5185(m)	3.8	17		
Sulfur	ppm	ASTM D5185(m)	8167	7447		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	0		
Sodium	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	0		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.31		



OIL ANALYSIS REPORT



	VISUAL		method	limit/base	current	history1	history
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	VLITE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>2	NEG		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPER	RTIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D7279(m)	320	319		
	SAMPLE IMAG	ES	method	limit/base	current	history1	history
					And and a second		
	Color					no image	no image
	Bottom					no image	no image
	20110111					no mago	intage
	GRAPHS						
	Ferrous Alloys				PQ		
	¹⁰ T			220			
	8 iron chromium			200	Severe		
	E 6 nickel			180	D		
	2			160	J		
	0			140			
	Jun24/24			12(DA			
	-				Abnormal		
	Non-ferrous Met	als		100			
	8 copper			80			
	= 6 - tin			60] +		
				40	D -		
	2			20	D		
					,		
	Jun24/24			Jun24/2	Jun24/24		
				٦٢	Jun		
	Viscosity @ 40°C				Acid Number		
	360 Abnormal			(9.40 SHO 30 Bu 30.20 W 10.10 SHO 30 SHO 30			
0	Base			와 0.30 Ē) +		
25+ (40°C)	320 - Gase			ja 0.20	•		
	300 -) -		
	280 Abnormal			0.00]		
	Jun24/24			Jun24/24	Jun24/24		
lo. ber nber	: WearCheck - C8-11 : WC0898802 : <mark>02645012</mark> : 5802551	Rece Teste	ived : 0	MTW (Mill,1 COPF	Vale - Clarabelle MTW (Mill,Tailings&Wa COPPER CLIFF, CA POM		
	: IND 2	wing at 1	200 260 240	1			t: Guy Gauth
	contact Customer Sei of accreditation, (m)				nallah		hier@vale.c: (705)682-56
	or accreditation, (m)						(705)682-50

Report Id: INCOCLARA [WCAMIS] 02645012 (Generated: 07/04/2024 11:35:24) Rev: 1

CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Guy Gauthier - INCOCLARA

F: (705)682-6273