

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

401 CRANE BRIDGE NW

Gearbox Fluid SHELL OMALA S4 GX 220 (--- 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.

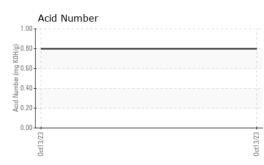
Fluid Condition

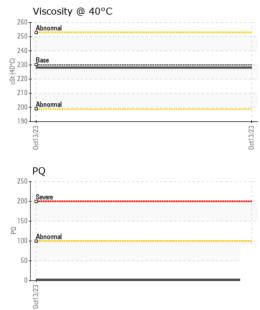
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0716516		
Sample Date		Client Info		13 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		2		
Iron	ppm	ASTM D5185(m)	>200	50		
Chromium	ppm	ASTM D5185(m)	>15	<1		
Nickel	ppm	ASTM D5185(m)	>15	2		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>25	<1		
Lead	ppm	ASTM D5185(m)	>100	<1		
Copper	ppm	ASTM D5185(m)	>200	<1		
Tin	ppm	ASTM D5185(m)	>25	0		
Antimony	ppm	ASTM D5185(m)	>5	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)		22		
Barium	ppm	ASTM D5185(m)		2		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		<1		
Calcium	ppm	ASTM D5185(m)		9		
Phosphorus	ppm	ASTM D5185(m)		407		
Zinc	ppm	ASTM D5185(m)		20		
Sulfur	ppm	ASTM D5185(m)		5117		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	11		
Sodium	ppm	ASTM D5185(m)		5		
Potassium	ppm	ASTM D5185(m)	>20	<1		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.80		
Acia Number (AN)	niy non/y	AJ I VI D9/4		0.00		



OIL ANALYSIS REPORT





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SAMPLE IMAGES olor ottom GRAPHS Ferrous Alloys				ase	-		history2
olor Ottom GRAPHS Ferrous Alloys		method	limit/b	ase	current	historv1	history2
Ottom GRAPHS Ferrous Alloys				P			
GRAPHS Ferrous Alloys						no image	no image
Ferrous Alloys						no image	no image
iron							
chromium					PQ		
chromium			-	220			
IIILKEI				200-	Severe		
				180-			
				160-			
				140			
0ct13/23			0ct13/23				
Oct			Oct1	120- 문	Abnormal		
Non-ferrous Metals	;			100-	o		
copper				80-			
essessesses lead				60-			
tin				40 -			
				20-			
0ct13/23			0ct13/23	01	2/23		
Oct			0ct1		Uct13/23		
Viscosity @ 40°C					Acid Number		
Abnormal							
Base				1.00			
				ຍັ 0.60			
Abnormal			1	đ 0.40			
				0.20-			
/23 +				0.00	//23		
0ct13/23			0ct13/23		Uct1 3/23		
2591185 D 668264 D ND 2	leceived Diagnosed Diagnosticia	: 23 (: 25 (an : Wes	Oct 2023 Oct 2023 S Davis	3		Contact: Ja	DUSE, 155 BALSAM S PER CLIFF, O CA POM 1N coynthe Gelina
act Customer Servic ccreditation, (m) me							inas@vale.co (705)682-598

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

cSt (40°C)

Laboratory

Sample No.

Lab Number

Unique Number Test Package

CALA

ISO 17025:2017 Accredited Laboratory

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F: (705)682-6535