

STOCK PREP

SHELL MORLINA S4 B 460 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. Please note that this is a corrected copy for laboratory data update for water content. (Customer Sample Comment: Morlina s4 b 460)

WEAR

All component wear rates are normal.

CONTAMINATION

Appearance is hazy. There is a moderate amount of visible silt present in the sample. The water content is negligible.

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0000965		
Sample Date		Client Info		29 Aug 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
PQ		ASTM D8184		50		
Iron	ppm	ASTM D5185m	>150	30		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		2		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	3		
Lead	ppm	ASTM D5185m	>100	0		
Copper	ppm	ASTM D5185m	>50	12		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Cilicon			. 50	20		
Silicon	ppm	ASTM D5185m	>50	20		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	>0.1	0.023		
ppm Water	ppm	ASTM D6304	>1000	234.5		
Silt	scalar	*Visual	NONE			
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML			
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NEG		
Sodium	ppm	ASTM D5185m		0		
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		2		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		7		
Calcium	ppm	ASTM D5185m		2381		
		ASTM D5185m		427		
Phosphorus	ppm					
Phosphorus Zinc		ASTM D5185m		38		
	ppm	ASTM D5185m ASTM D5185m		38 3680		
Zinc Sulfur						
Zinc	ppm ppm	ASTM D5185m	445	3680		

WEAR

CONTAMINATION

FLUID CONDITION

NORMAL

ABNORMAL

NORMAL



MCKINLEY PAPER COMPANY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 回話 Sample No. : PE0000965 Received 1902 MARINE DR :01 Sep 2023 Lab Number : 05941330 PORT ANGELES, WA Tested : 12 Sep 2023 Unique Number : 10631942 US 98363 Diagnosed : 12 Sep 2023 - Doug Bogart Test Package : PLANT (Additional Tests: ICP, KF, KV40, PQ, PrtCount, SCREEN) Contact: JOSHUA HALL Certificate L2367 joshua.hall@biopappel.com To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (360)457-4474 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: JOSHUA HALL Page 2 of 2