WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

170831 EAST

5 Slewing Gearbox

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE	Sample Number		Client Info		PP		
	Sample Date		Client Info		10 Sep 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		
75W90. Please confirm. NOTE: Please provide information regarding	Filter Changed		Client Info		N/A		
reservoir capacity, filter type and micron rating with next sample.	Sample Status				NORMAL		
WEAR	PQ		ASTM D8184*		0		
WEAN	Iron	nnm	ASTM D5185(m)	· 50	14		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)	>10	0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum		ASTM D5185(m)		<1		
	Lead	ppm	ASTM D5185(m)	\15	0		
	Copper	ppm	ASTM D5185(m)	>10	3		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)	210	0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION The water content is negligible. There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)	>25	2		
	Potassium	ppm	ASTM D5185(m)	>20	0		
	Water	%	ASTM D6304*	>0.2	0.053		
	ppm Water	ppm	ASTM D6304*	>2000	534.1		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	WGOIL		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual [^]	>0.2	NEG		
	Sodium	ppm	ASTM D5185(m)		1		
FLUID CONDITION	000.0						
	Boron	ppm	ASTM D5185(m)	400	284		
The AN level is acceptable for this fluid. The condition of the oil is		ppm	. ,	400 200			
	Boron		ASTM D5185(m)	200	284		
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	200	284 0		
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	200	284 0 0		
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	200	284 0 0 0		
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	200 12 12 150	284 0 0 0 0	 	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	200 12 12 150	284 0 0 0 0 11 2		
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	200 12 12 150 1650 125	284 0 0 0 11 2 1471 4 23048	 	
The AN level is acceptable for this fluid. The condition of the oil is	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	200 12 12 150 1650 125 22500 2.00	284 0 0 0 11 2 1471 4		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PP : 02581397

Tested Unique Number : 5642462 Test Package : IND 2 (Additional Tests: KF, TAN Man)

Received : 11 Sep 2023 : 13 Sep 2023 Diagnosed

: 13 Sep 2023 - Kevin Marson

HIBERNIA MGMT & DEVELOPMENT CO. LTD SUITE 1000,, 100 NEW GOWER STREET ST.JOHNS, NL CA A1C 6K3

Contact: Sam Nash samantha.m.nash@exxonmobil.com T:

Contact/Location: Sam Nash - HIBSTJ

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.