WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL

170832 AGG #2

Component 2 Gearbox							
GEAR OIL LS 80W90 (GAL)							
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 LS 80W90. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.	Sample Number	OOW	Client Info	LIIIIU/ADII	PP	PP	
	Sample Date		Client Info		10 Sep 2023	26 Jun 2023	
	Machine Age	hrs	Client Info		0	0	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	NORMAL	
WEAR	PQ		ASTM D8184*		0	0	
All component wear rates are normal.	Iron	ppm	ASTM D5185(m)	>150	21	21	
	Chromium	ppm	ASTM D5185(m)		0	0	
	Nickel	ppm	ASTM D5185(m)		<1	0	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	
	Lead	ppm	ASTM D5185(m)	>65	<1	<1	
	Copper	ppm	ASTM D5185(m)	>80	23	16	
	Tin	ppm	ASTM D5185(m)	>8	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	6	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
	Water		WC Method	>0.2	NEG	NEG	
	Silt	scalar	Visual*	NONE	NONE	NONE	
	Debris	scalar	Visual*	NONE	NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance	scalar	Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	
The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m)	150	1	1	
	Barium	ppm	ASTM D5185(m)		2	2	
	Molybdenum	ppm	ASTM D5185(m)		0	0	
	Manganese	ppm	ASTM D5185(m)		1	1	
	Magnesium	ppm	ASTM D5185(m)	10	<1	<1	
	Calcium	ppm	ASTM D5185(m)	70	11	12	
	Phosphorus	ppm	ASTM D5185(m)	2000	661	661	
	Zinc	ppm	ASTM D5185(m)	50	108	91	

Sulfur

Acid Number (AN)

Visc @ 40°C

Report Id: HIBSTJ [WCAMIS] 02581408 (Generated: 02/14/2024 05:59:24) Rev: 1

179 Contact/Location: Sam Nash - HIBSTJ

9505

0.98

9476

2.15

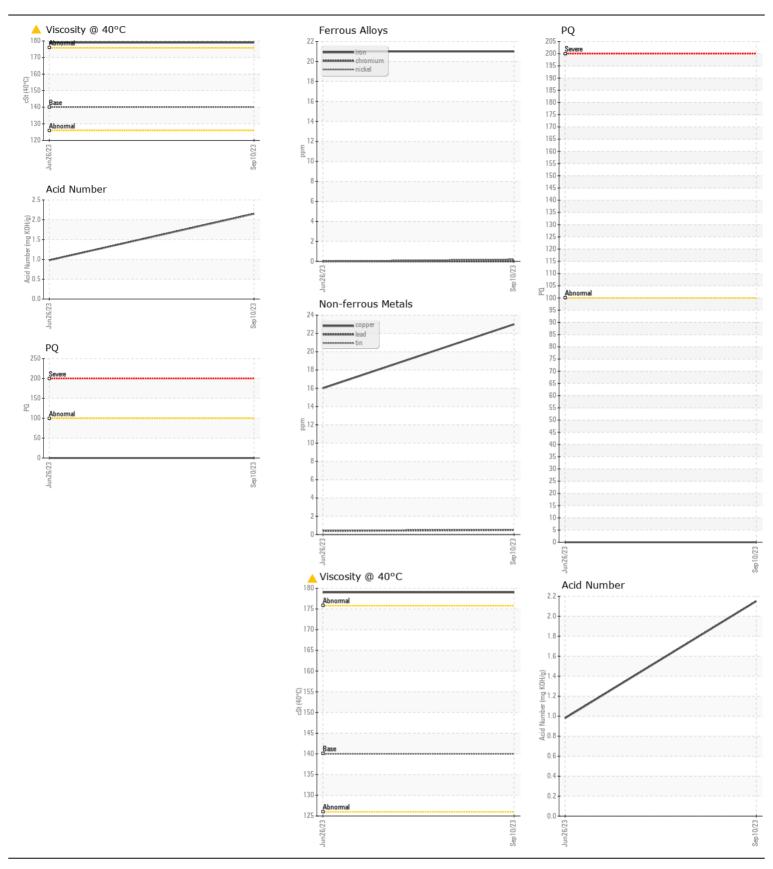
179

ASTM D5185(m) 20000

ASTM D7279(m) 140

ppm

mg KOH/g ASTM D974*





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

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

: PP Lab Number : 02581408 Unique Number : 5642473

Received **Tested** Diagnosed Test Package : IND 2 (Additional Tests: TAN Man)

: 11 Sep 2023 : 12 Sep 2023

: 12 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

F: (709)722-3766

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.

T: