WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL

EAST CRANE [13998089]

170831 HOIST

Brake

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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		PP	PP	PP
	Sample Date		Client Info		13 Jun 2024	18 Apr 2024	07 Mar 2023
	Machine Age	hrs	Client Info		0	0	0
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR All component wear rates are normal.	PQ		ASTM D8184*		2	12	4
	Iron	ppm	ASTM D5185(m)	>350	51	47	37
	Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
	Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)		0	0	0
	Aluminum	ppm	ASTM D5185(m)	>8	0	0	<1
	Lead	ppm	ASTM D5185(m)	>10	<1	<1	<1
	Copper	ppm	ASTM D5185(m)	>150	36	34	17
	Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
CONTAMINATION There is no indication of any contamination in the fluid.	Silicon	ppm	ASTM D5185(m)	>400	<1	0	<1
	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2
	Water		WC Method	>0.2	NEG	NEG	NEG
	Silt	scalar	Visual*	NONE	VLITE	NONE	NONE
	Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
	Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
	Odor	scalar	Visual*	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
FLUID CONDITION Viscosity of sample indicates oil is within SAE 80 range, advise investigate. The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.	Sodium	ppm	ASTM D5185(m)		1	<1	3
	Boron	ppm	ASTM D5185(m)	150	167	193	219
	Barium	ppm	ASTM D5185(m)		0	0	0
	Molybdenum	ppm	ASTM D5185(m)		0	0	0
	Manganese	ppm	ASTM D5185(m)		<1	<1	<1
	Magnesium	ppm	ASTM D5185(m)		2	2	20
	Calcium	ppm	ASTM D5185(m)	70	8	7	21
	Phosphorus	ppm	ASTM D5185(m)		913	1002	1375
	Zinc	ppm	ASTM D5185(m)	50	65	46	21
	Sulfur	ppm	ASTM D5185(m)	20000	14869	16582	22760
	Acid Number (AN)	mg KOH/g	ASTM D974*		1.23	1.51	2.01

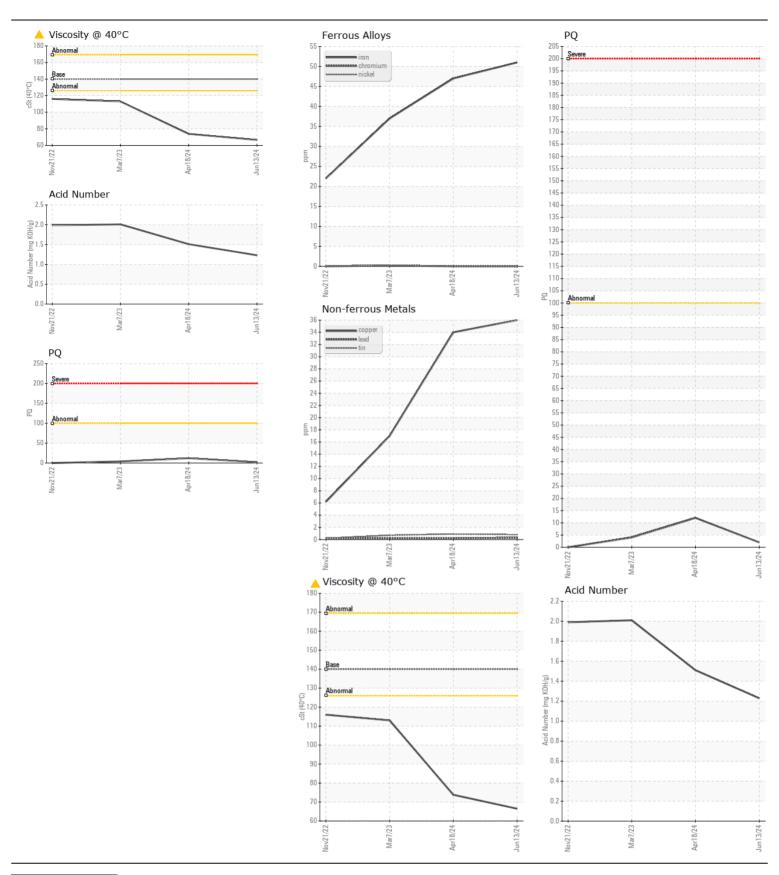
Visc @ 40°C cSt

Report Id: HIBSTJ [WCAMIS] 02642143 (Generated: 06/18/2024 16:00:40) Rev: 1

▲ 73.8 Contact/Location: Sam Nash - HIBSTJ

△ 66.5

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CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: PP Lab Number : 02642143 Unique Number : 5799682

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

Tested Diagnosed

: 14 Jun 2024 : 18 Jun 2024 : 18 Jun 2024 - Kevin Marson

SUITE 1000,, 100 NEW GOWER STREET ST.JOHNS, NL CA A1C 6K3 Contact: Sam Nash

Test Package : IND 2 (Additional Tests: TAN Man) To discuss this sample report, contact Customer Service at 1-800-268-2131.

samantha.m.nash@exxonmobil.com T:

HIBERNIA MGMT & DEVELOPMENT CO. LTD

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.

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