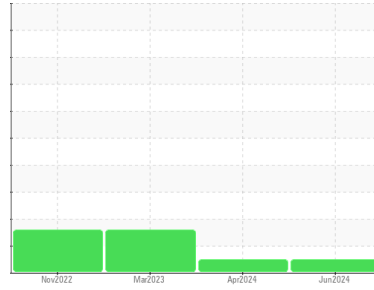




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**EAST CRANE**  
 Machine Id  
**170831 LUFFING BRAKE**  
 Component  
**Luffing Brake**  
 Fluid  
**{not provided} (--- GAL)**

### DIAGNOSIS

#### Recommendation

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.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the fluid.

#### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PP</b>	PP	PP
Sample Date	Client Info			<b>13 Jun 2024</b>	18 Apr 2024	07 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>8</b>	70	106
Iron	ppm	ASTM D5185(m)	>350	<b>37</b>	68	108
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>8	<b>0</b>	0	<1
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185(m)	>150	<b>39</b>	37	63
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	1
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

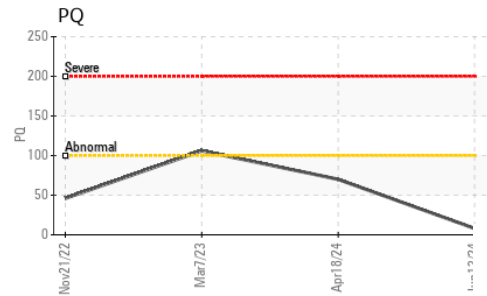
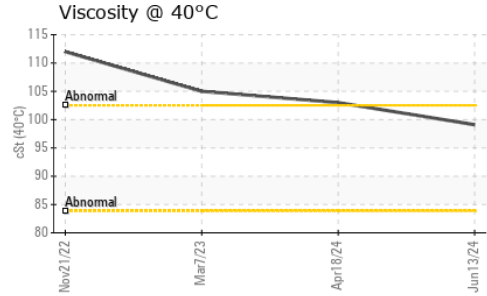
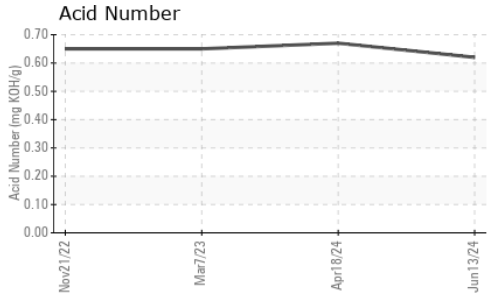
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>4</b>	4	4
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185(m)		<b>1</b>	2	3
Calcium	ppm	ASTM D5185(m)		<b>3</b>	7	6
Phosphorus	ppm	ASTM D5185(m)		<b>256</b>	257	284
Zinc	ppm	ASTM D5185(m)		<b>9</b>	20	18
Sulfur	ppm	ASTM D5185(m)		<b>18680</b>	18468	18734
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>400	<b>&lt;1</b>	0	1
Sodium	ppm	ASTM D5185(m)		<b>3</b>	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.62</b>	0.67	0.65



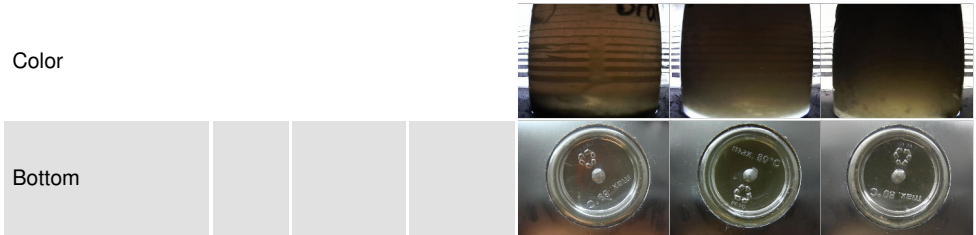
# OIL ANALYSIS REPORT



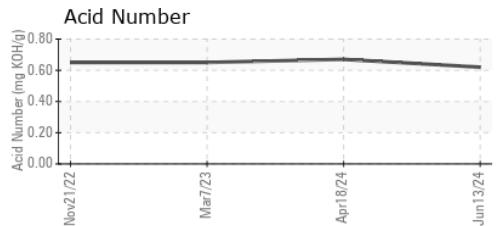
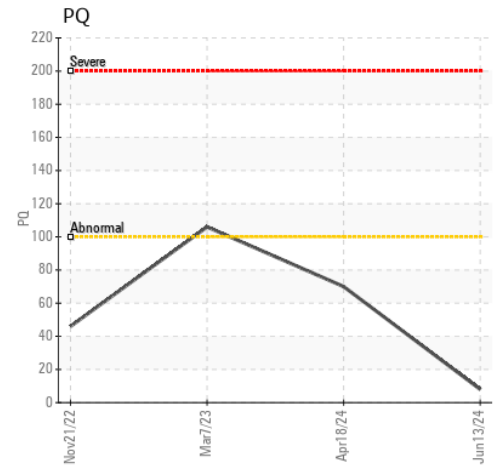
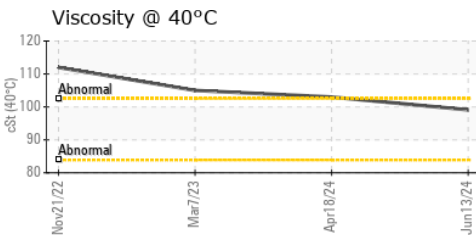
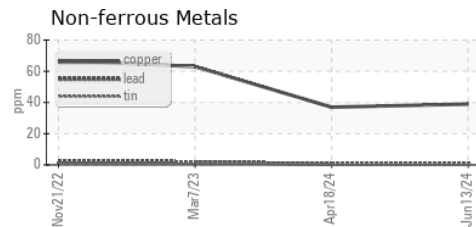
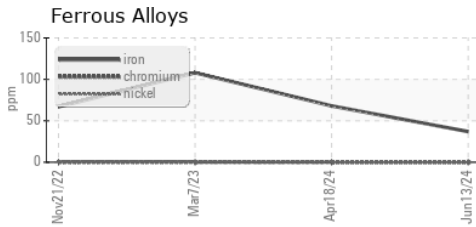
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	VLITE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	.5%
Free Water	scalar	Visual*		NEG	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	99.1	103	105

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP  
**Lab Number** : 02642144  
**Unique Number** : 5799683  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**HIBERNIA MGMT & DEVELOPMENT CO. LTD**  
 SUITE 1000,, 100 NEW GOWER STREET  
 ST.JOHN'S, NL  
 CA A1C 6K3  
 Contact: Sam Nash  
 samantha.m.nash@exxonmobil.com

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.

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