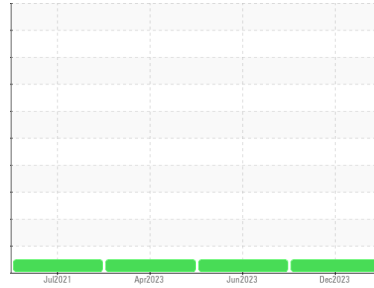




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**Q-1705B NORTH DRIVE GEARBOX (S/N 20423/2)**

Component  
**Gearbox**

Fluid  
**IRVING HDH SAE 75W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0764320</b>	WC0764306	WC0764255
Sample Date	Client Info			<b>14 Dec 2023</b>	22 Jun 2023	16 Apr 2023
Machine Age	yrs	Client Info		<b>0</b>	1	5
Oil Age	yrs	Client Info		<b>0</b>	0	1
Oil Changed	Client Info			<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

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>0</b>	6	0
Iron	ppm	ASTM D5185(m)	>200	<b>17</b>	8	14
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	<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)	>25	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	4	3
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

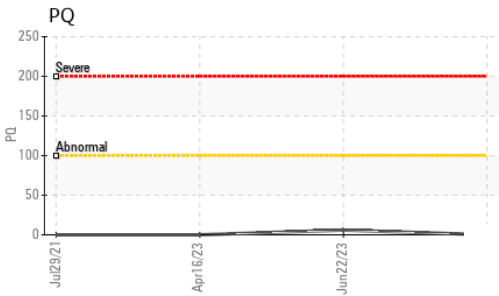
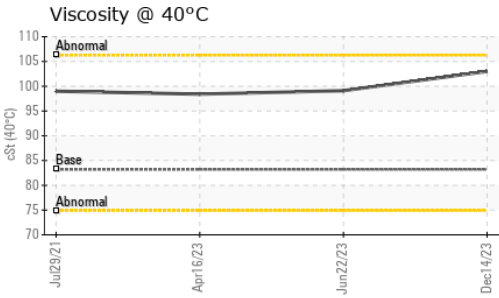
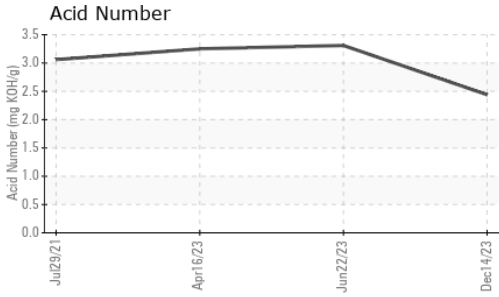
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>248</b>	129	131
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185(m)		<b>3</b>	3	1
Phosphorus	ppm	ASTM D5185(m)		<b>1234</b>	1106	1115
Zinc	ppm	ASTM D5185(m)		<b>6</b>	6	6
Sulfur	ppm	ASTM D5185(m)		<b>21742</b>	22178	22517
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>3</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>2.44</b>	3.31	3.25



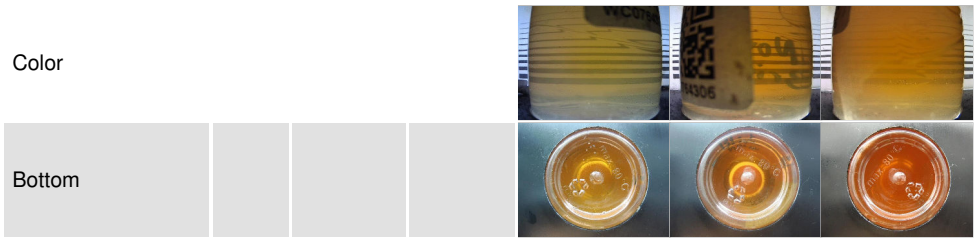
# OIL ANALYSIS REPORT



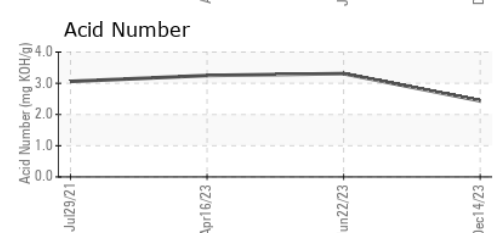
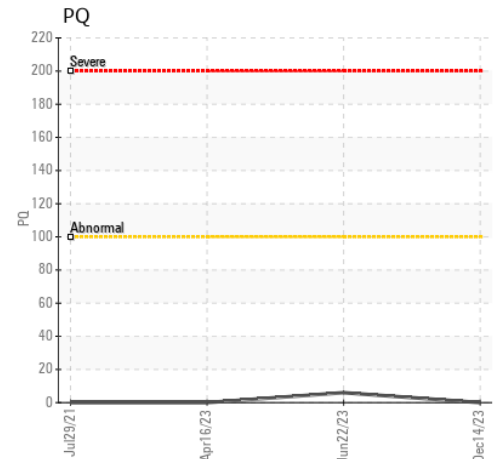
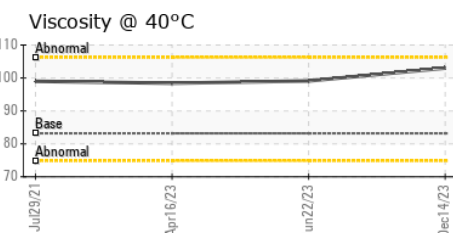
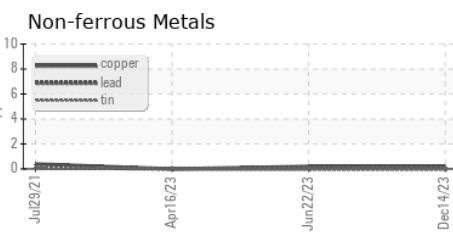
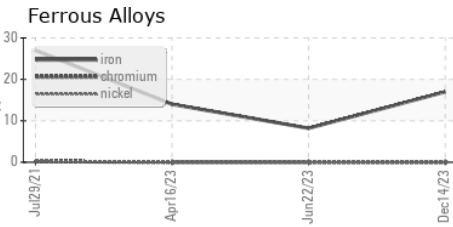
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	83.2	103	99.1

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.** : WC0764320      **Received** : 02 Jan 2024  
**Lab Number** : 02606108      **Diagnosed** : 02 Jan 2024  
**Unique Number** : 5707194      **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Parker Wellbore**  
 215 Water Street, Suite 802, PO Box 74  
 St. John's, NL  
 CA A1C 6C9  
 Contact: HMDC Material Control Coordinator  
 hmdc.material.control.coordinator@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.