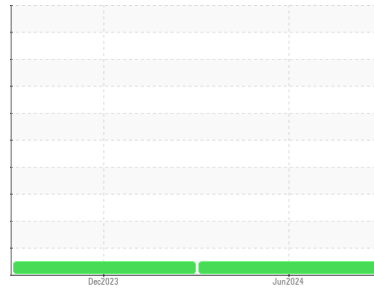




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

## MUD PUMP #2 (S/N G-C8018)

Component

**Gearbox**

Fluid

**IRVING GEAR OIL ISO 320 (--- 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>WC0764338</b>	WC0764315	---
Sample Date	Client Info			<b>01 Jun 2024</b>	17 Dec 2023	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Filtered</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>10</b>	0	---
Iron	ppm	ASTM D5185(m)	>200	<b>34</b>	15	---
Chromium	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>3</b>	2	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	1	---
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m)	>200	<b>2</b>	<1	---
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

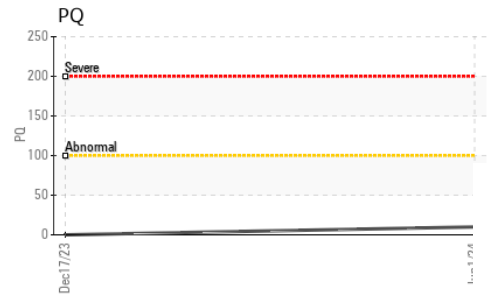
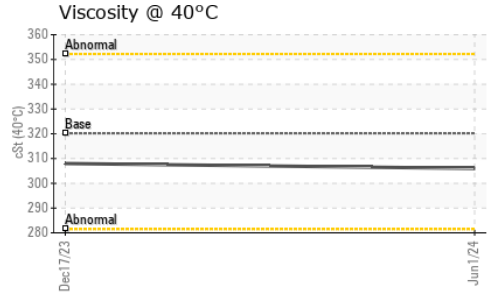
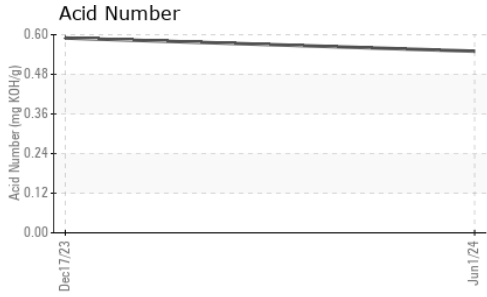
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>13</b>	8	---
Barium	ppm	ASTM D5185(m)		<b>20</b>	8	---
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>2</b>	1	---
Calcium	ppm	ASTM D5185(m)		<b>9</b>	5	---
Phosphorus	ppm	ASTM D5185(m)		<b>175</b>	164	---
Zinc	ppm	ASTM D5185(m)		<b>5</b>	4	---
Sulfur	ppm	ASTM D5185(m)		<b>14300</b>	14196	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>8</b>	4	---
Sodium	ppm	ASTM D5185(m)		<b>7</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.55</b>	0.59	---



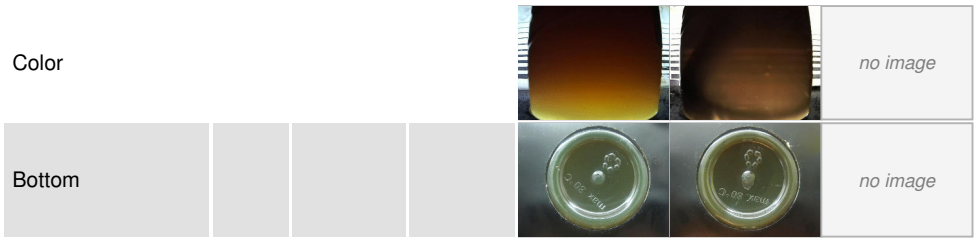
# OIL ANALYSIS REPORT



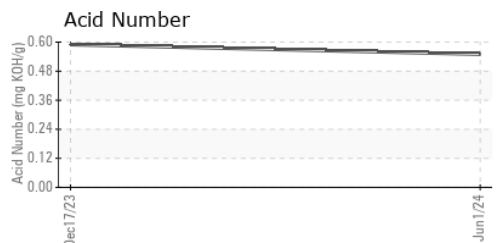
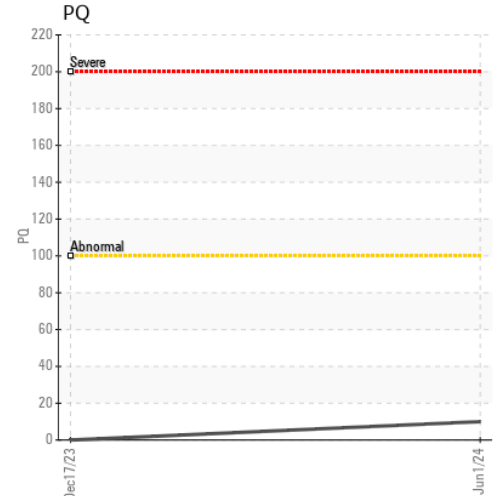
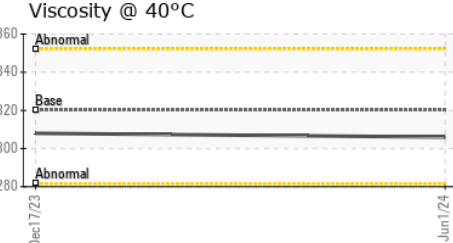
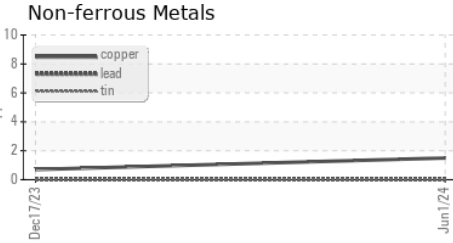
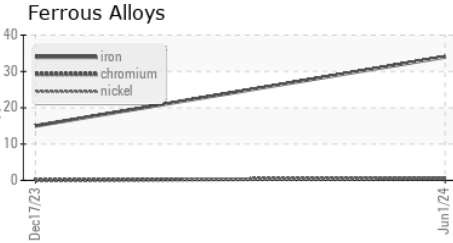
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320.2	306	308

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.** : WC0764338  
**Lab Number** : 02643506  
**Unique Number** : 5801045  
**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.