



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**AH23226 - Starboard Michell thrust Block**  
 Component  
**Thrust Bearing**  
 Fluid  
**PETRO CANADA PREMIUM R&O 100 (136 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0900567</b>	WC0855643	WC0855648
Sample Date		Client Info		<b>21 Apr 2024</b>	24 Mar 2024	22 Jan 2024
Machine Age	mths	Client Info		<b>0</b>	0	4
Oil Age	mths	Client Info		<b>0</b>	0	0
Filter Age	mths	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	None
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m)	>85	<b>&lt;1</b>	1	<1
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	0
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
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)	>40	<b>0</b>	0	<1
Lead	ppm	ASTM D5185(m)	>60	<b>7</b>	7	5
Copper	ppm	ASTM D5185(m)	>7	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	▲ VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

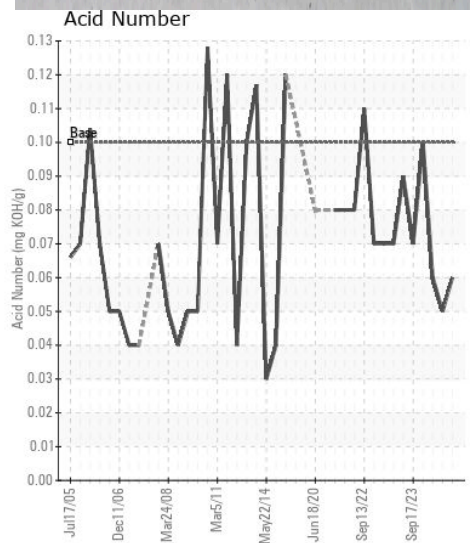
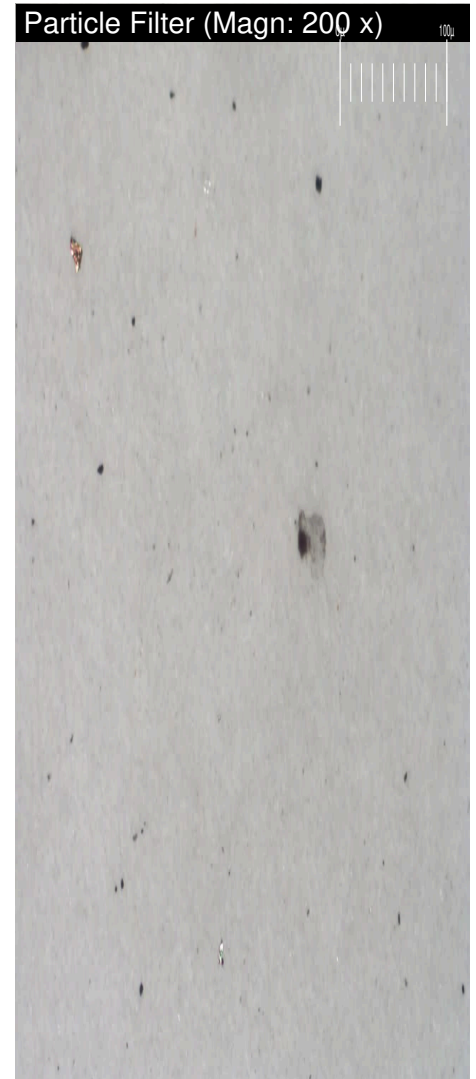
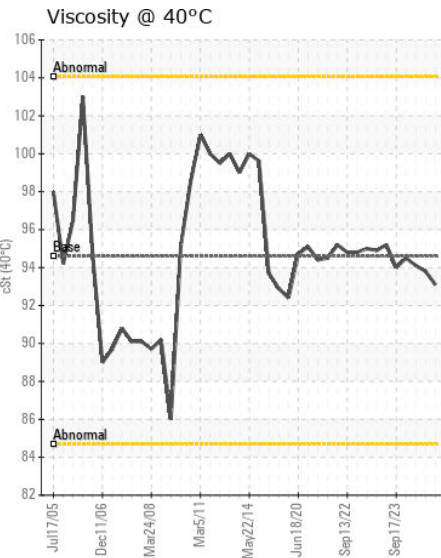
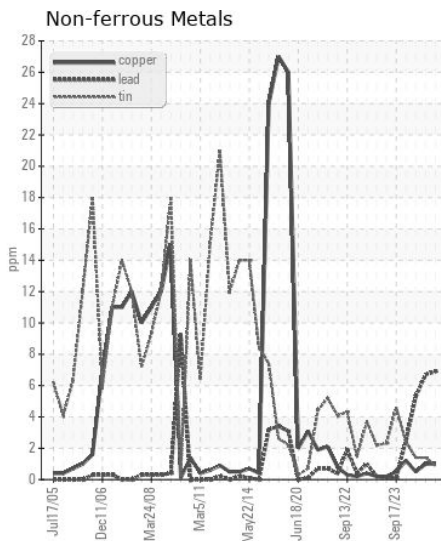
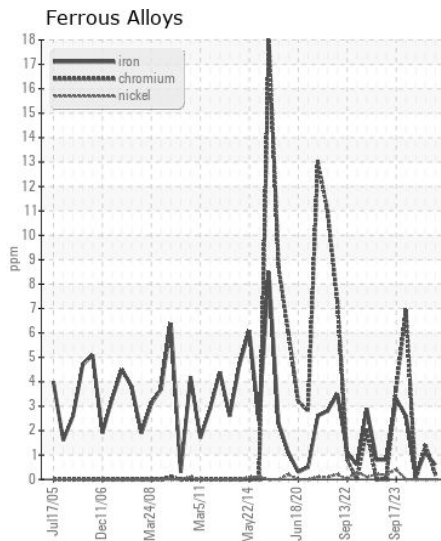
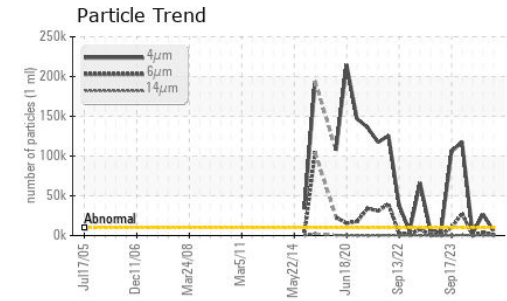
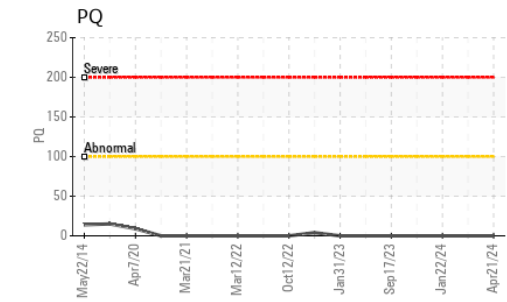
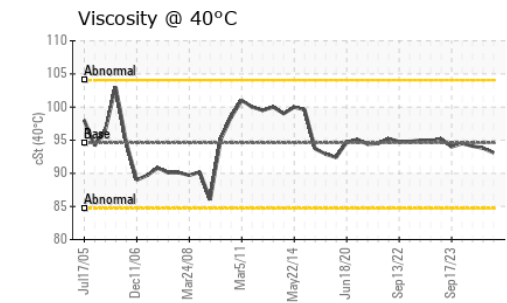
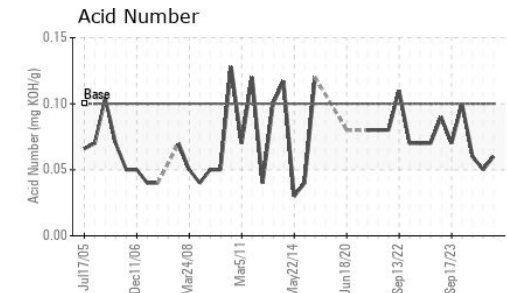
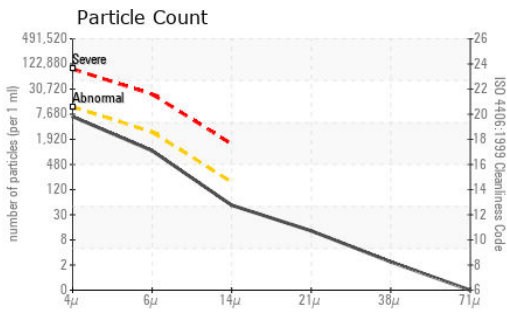
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	<b>1</b>	1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Water		WC Method	>2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>10000	<b>5871</b>	▲ 26879	2796
Particles >6µm		ASTM D7647	>2500	<b>899</b>	● 3857	674
Particles >14µm		ASTM D7647	>160	<b>45</b>	● 229	34
Particles >21µm		ASTM D7647	>40	<b>11</b>	● 57	8
Particles >38µm		ASTM D7647	>10	<b>2</b>	4	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/14	<b>20/17/13</b>	▲ 22/19/15	19/17/12
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	4	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	4
Phosphorus	ppm	ASTM D5185(m)	0	<b>6</b>	7	7
Zinc	ppm	ASTM D5185(m)	0	<b>4</b>	4	4
Sulfur	ppm	ASTM D5185(m)	0	<b>147</b>	276	169
Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	<b>0.06</b>	0.05	0.06
Visc @ 40°C	cSt	ASTM D7279(m)	94.6	<b>93.1</b>	93.8	94.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0900567  
**Lab Number** : 02635272  
**Unique Number** : 5776425  
**Test Package** : MAR 2 ( Additional Tests: BottomAnalysis, FilterPatch, PQ, PrtCount, PrtFilter, TAN

**CANADIAN COAST GUARD/DFO**  
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 Contact: Chief Engineer  
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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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