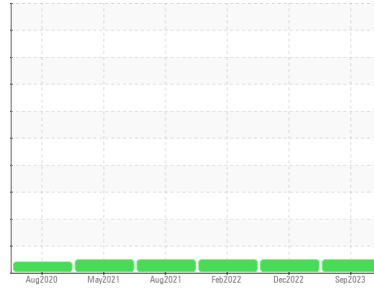




# OIL ANALYSIS REPORT

## Sample Rating Trend

**NORMAL**



## Machine Id STEERING SYSTEM (S/N FILTER EE30410)

Component  
**Steering**  
Fluid

**MOBIL DTE 10 EXCEL 32 (57 LTR)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### 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>WC0857936</b>	WC0732100	WC0616893
Sample Date	Client Info			<b>18 Sep 2023</b>	06 Dec 2022	17 Feb 2022
Machine Age	hrs	Client Info		<b>1313</b>	1110	864
Oil Age	hrs	Client Info		<b>1313</b>	1110	357
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>50	<b>7</b>	7	6
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
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>2</b>	2	2
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>8</b>	10	9
Calcium	ppm	ASTM D5185(m)	120	<b>117</b>	119	108
Phosphorus	ppm	ASTM D5185(m)	475	<b>313</b>	369	338
Zinc	ppm	ASTM D5185(m)		<b>326</b>	363	364
Sulfur	ppm	ASTM D5185(m)	1275	<b>1268</b>	1282	1212
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

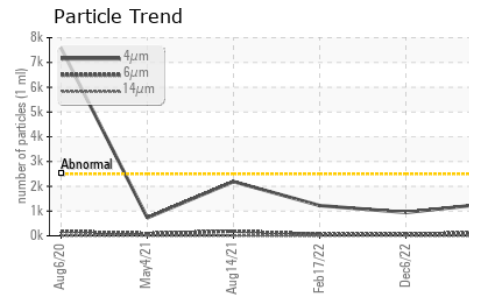
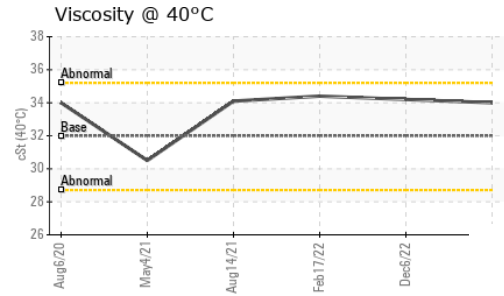
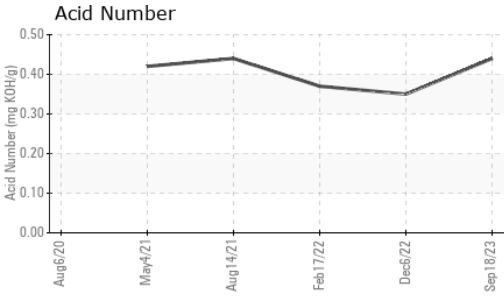
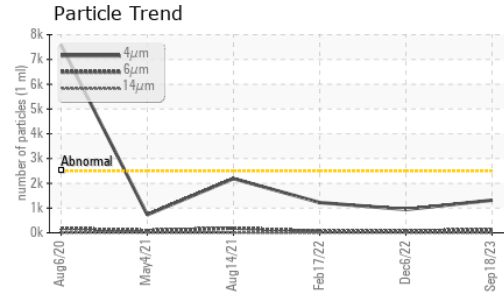
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<b>1316</b>	943	1223
Particles >6µm		ASTM D7647	>640	<b>127</b>	68	51
Particles >14µm		ASTM D7647	>80	<b>6</b>	5	3
Particles >21µm		ASTM D7647	>20	<b>2</b>	1	0
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>18/14/10</b>	17/13/10	17/13/9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.44</b>	0.35	0.37



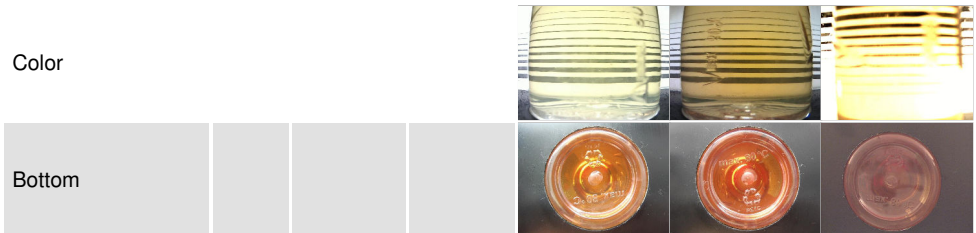
# OIL ANALYSIS REPORT



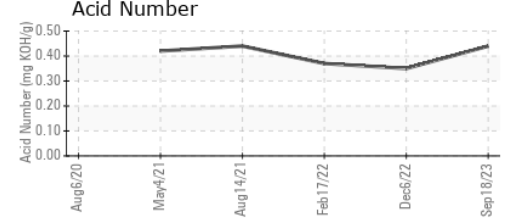
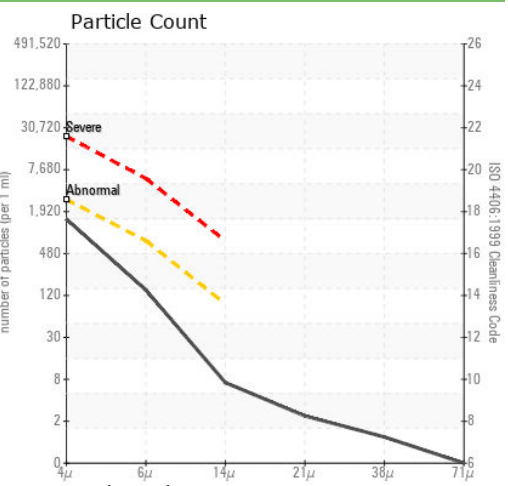
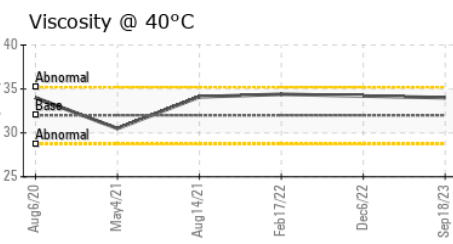
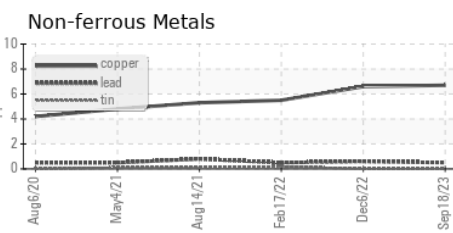
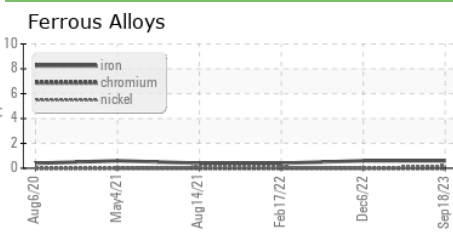
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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)	32	34.0	34.2

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.** : WC0857936 **Received** : 05 Oct 2023  
**Lab Number** : 02587329 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656395 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2 ( Additional Tests: PrtCount, TAN Man )

**CANADIAN COAST GUARD**  
 CCGS CONCEPTION BAY, 280 SOUTHSIDE RD, BOX 5667  
 ST. JOHN'S, NL  
 CA A1C 5X1  
 Contact: Chief Engineer  
 CCG.ConceptionBayCE-BaiedeConceptionLE.GCC@dfo-mpo.gc.ca  
 T: 1(709)884-8513  
 F:

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.