



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**MAIN ENGINE #1**  
 Component  
**1 Main Engine**  
 Fluid  
**MOBIL DELVAC 1640 (1500 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid. this testkit includes BN to determine the suitability of the oil for continued use.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0684704</b>	WC0802972	WC0802984
Sample Date		Client Info		<b>08 Oct 2023</b>	09 Sep 2023	13 Aug 2023
Machine Age	hrs	Client Info		<b>35160</b>	34879	34677
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Component wear rates appear to be normal (unconfirmed).

Iron	ppm	ASTM D5185(m)	>120	<b>3</b>	3	3
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>300	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

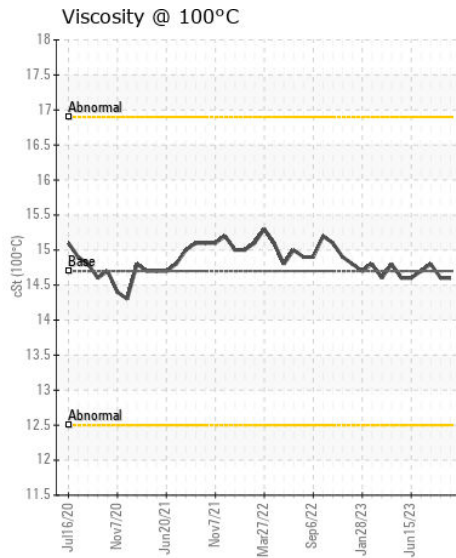
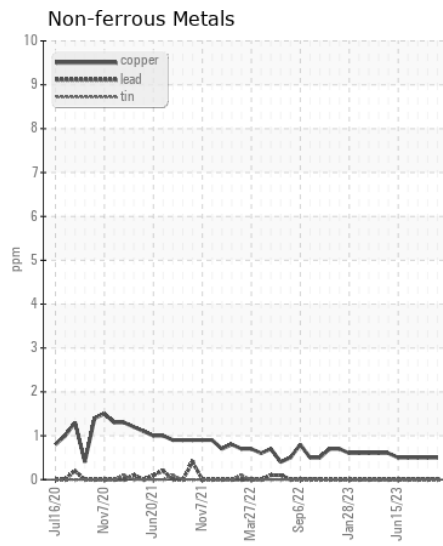
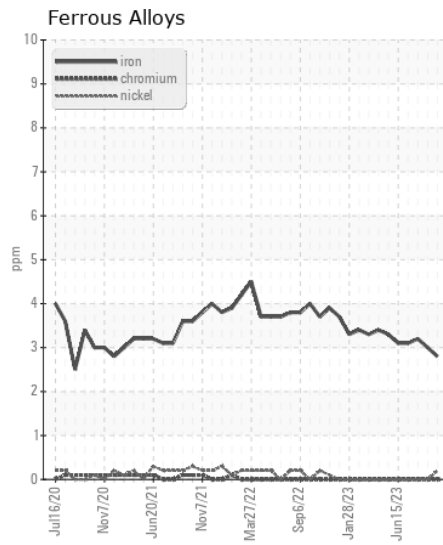
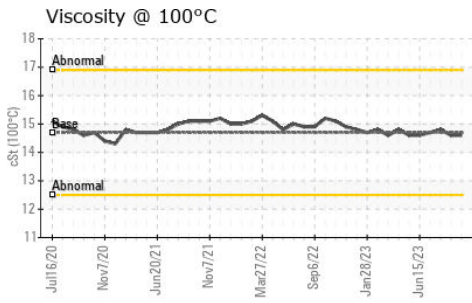
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	7.8	7.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.1</b>	16.8	17.8
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service (unconfirmed).

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Boron	ppm	ASTM D5185(m)		<b>1</b>	1	1
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>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>221</b>	222	219
Calcium	ppm	ASTM D5185(m)		<b>3739</b>	3642	3689
Phosphorus	ppm	ASTM D5185(m)		<b>894</b>	945	929
Zinc	ppm	ASTM D5185(m)		<b>1003</b>	997	995
Sulfur	ppm	ASTM D5185(m)		<b>8419</b>	8530	8594
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>10.8</b>	10.7	10.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.7	<b>14.6</b>	14.6	14.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0684704  
**Lab Number** : 02589117  
**Unique Number** : 5658183  
**Test Package** : MAR 1  
**Received** : 16 Oct 2023  
**Tested** : 16 Oct 2023  
**Diagnosed** : 16 Oct 2023 - Wes Davis

**Siem Offshore Canada LP.**  
 M/V Avalon Sea, 140 WATER STREET SUITE 1000  
 ST. JOHN'S, NL  
 CA A1C 6H6  
 Contact: Avalon Sea  
 ecr@avalonsea.siemoffshore.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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