



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**EGR-3112 #2 SHIP SERVICE GEN (S/N 1016043707)**

Component  
**Diesel Engine**

Fluid  
**SHELL ROTELLA T4 15W40 (55 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0869962</b>	WC0827867	WC0827865
Sample Date		Client Info		<b>04 May 2024</b>	30 Mar 2024	09 Mar 2024
Machine Age	hrs	Client Info		<b>36000</b>	35600	35200
Oil Age	hrs	Client Info		<b>400</b>	400	400
Filter Age	hrs	Client Info		<b>400</b>	400	400
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>3</b>	3	3
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
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)	>330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

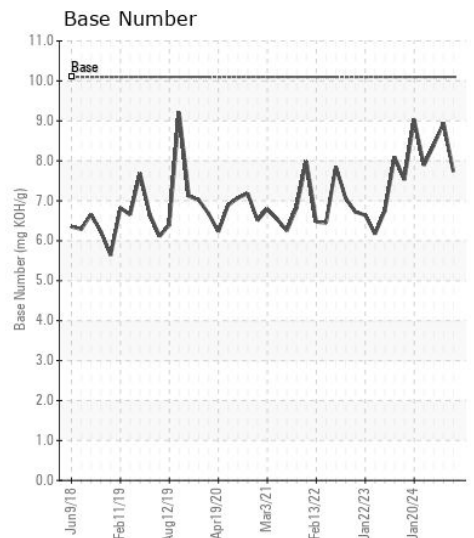
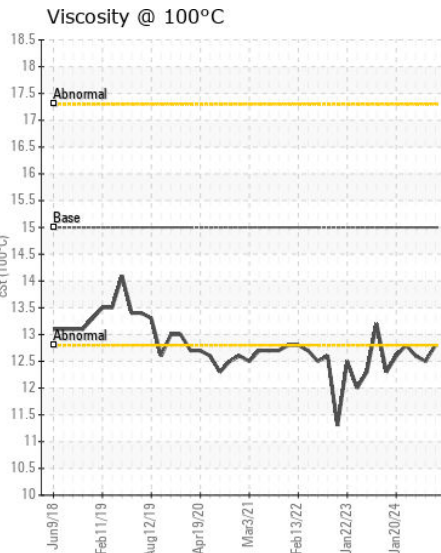
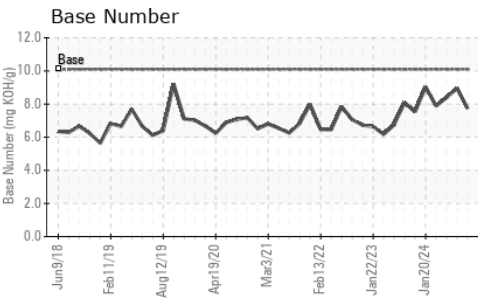
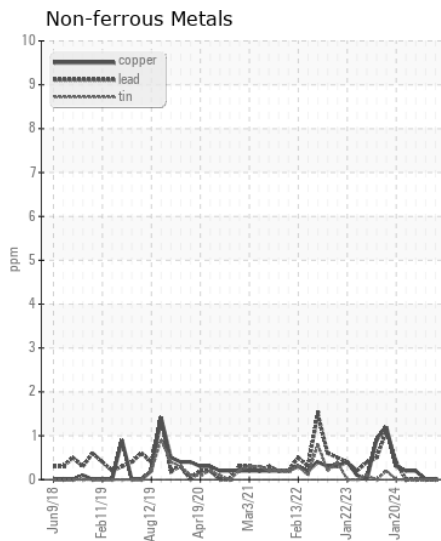
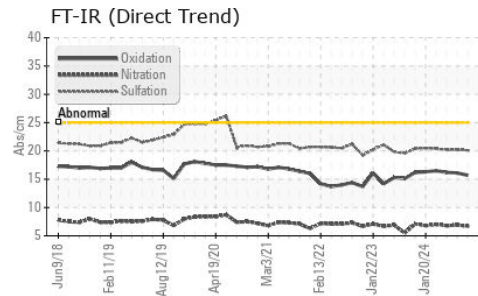
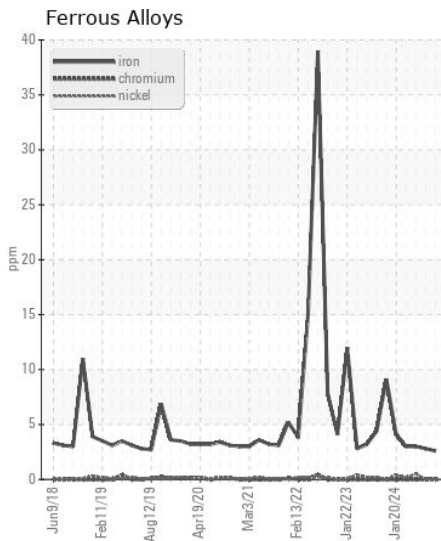
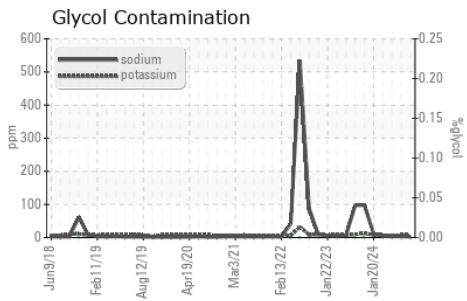
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	7	7
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	0.0
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.7</b>	6.9	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.1</b>	20.2	20.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	3
Boron	ppm	ASTM D5185(m)		<b>151</b>	139	149
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>1</b>	1	2
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>17</b>	17	19
Calcium	ppm	ASTM D5185(m)		<b>2199</b>	2173	2174
Phosphorus	ppm	ASTM D5185(m)		<b>942</b>	919	938
Zinc	ppm	ASTM D5185(m)		<b>1110</b>	1106	1105
Sulfur	ppm	ASTM D5185(m)		<b>2834</b>	2781	2980
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.7</b>	16.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896*	10.1	<b>7.73</b>	8.95	8.39
Visc @ 100°C	cSt	ASTM D7279(m)	15	<b>12.8</b>	12.5	12.6



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0869962  
**Lab Number** : 02638771  
**Unique Number** : 5787933  
**Test Package** : MAR 2 ( Additional Tests: Glycol )

**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Wes Davis

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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.