



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
EGR-3111 #1 SHIP SERVICE GEN (S/N 1016043674)

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		WC0827864	WC0827876	WC0698920
Sample Date		Client Info		06 Jan 2024	17 Sep 2023	23 Jun 2023
Machine Age	hrs	Client Info		10000	9600	7600
Oil Age	hrs	Client Info		400	400	400
Filter Age	hrs	Client Info		400	400	400
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	3	3	3
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	1
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

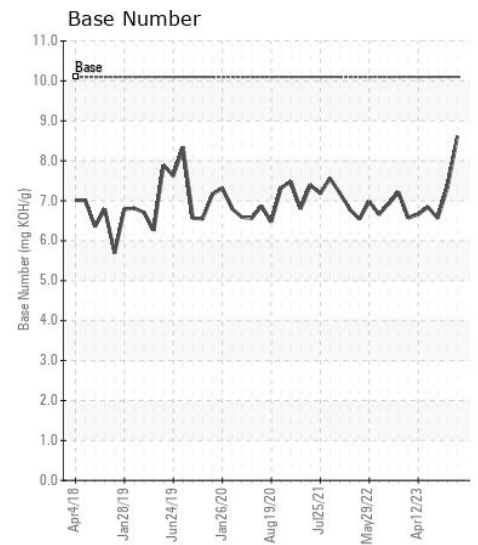
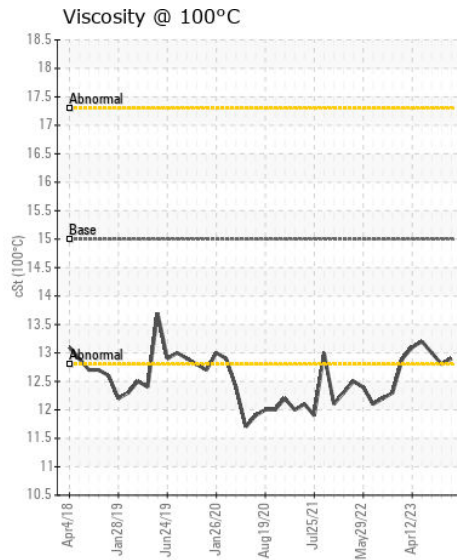
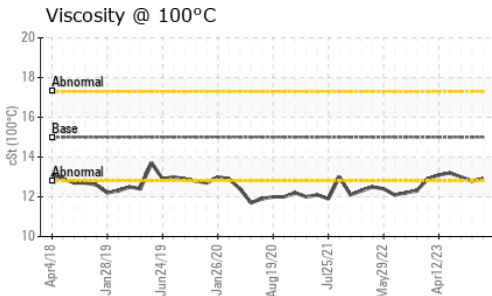
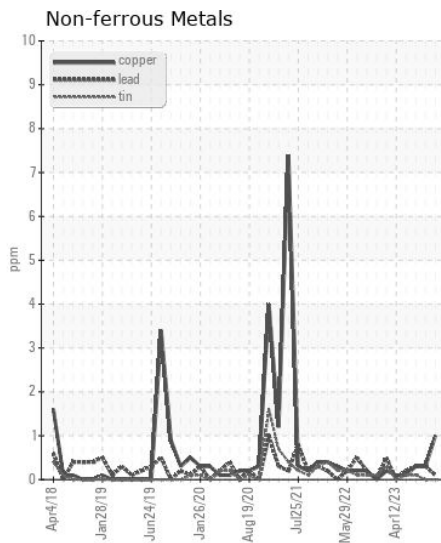
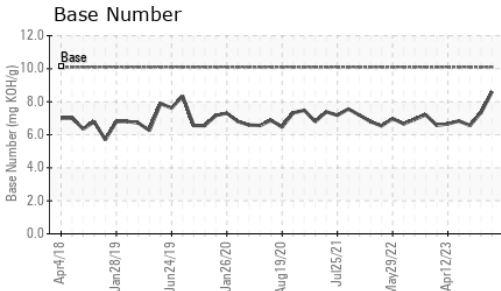
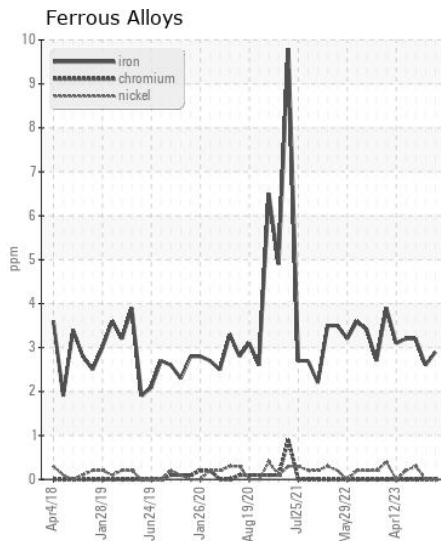
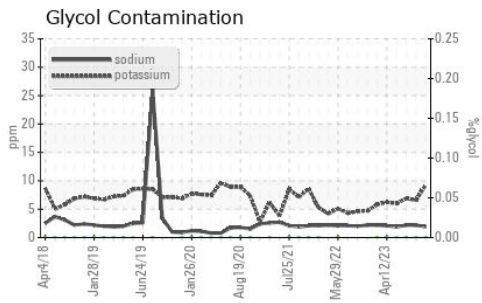
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	2	2
Potassium	ppm	ASTM D5185(m)	>20	9	7	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.9	7.0	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.1	20.5
Emulsified Water	scalar	Visual*	>0.2	NEG	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)		2	2	2
Boron	ppm	ASTM D5185(m)		145	139	137
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		1	1	1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		17	17	16
Calcium	ppm	ASTM D5185(m)		2160	2171	2184
Phosphorus	ppm	ASTM D5185(m)		947	956	969
Zinc	ppm	ASTM D5185(m)		1106	1123	1129
Sulfur	ppm	ASTM D5185(m)		3049	2853	2877
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	16.2	16.6
Base Number (BN)	mg KOH/g	ASTM D2896*	10.1	8.61	7.34	6.56
Visc @ 100°C	cSt	ASTM D7279(m)	15	12.9	12.8	13.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0827864
Lab Number : 02609166
Unique Number : 5710252
Test Package : MAR 2 (Additional Tests: Glycol)

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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.