



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
STERLING 238
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (30 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005208	RW0004285	RW0003897
Sample Date		Client Info		20 Jun 2024	28 Jun 2023	25 Aug 2022
Machine Age	hrs	Client Info		3604	3467	3258
Oil Age	hrs	Client Info		137	113	159
Filter Age	hrs	Client Info		137	113	159
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 D5185m	>100	6	8	8
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	6	2
Lead	ppm	ASTM D5185m	>40	<1	3	<1
Copper	ppm	ASTM D5185m	>330	0	4	2
Tin	ppm	ASTM D5185m	>15	<1	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

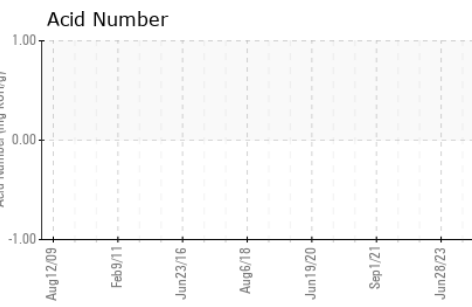
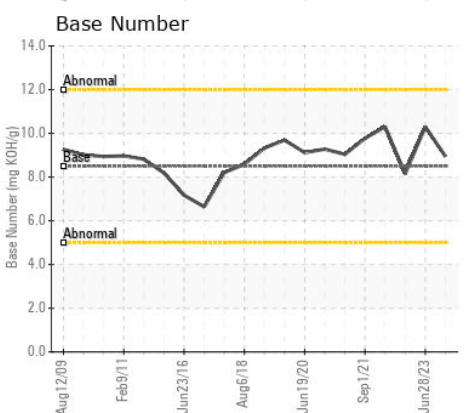
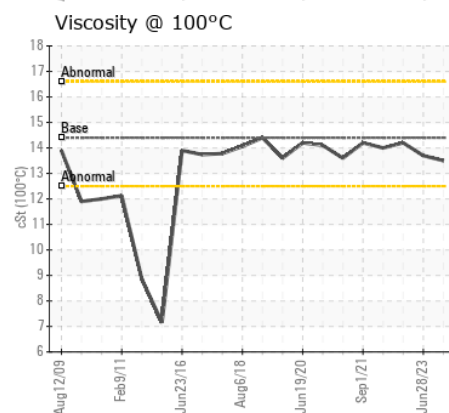
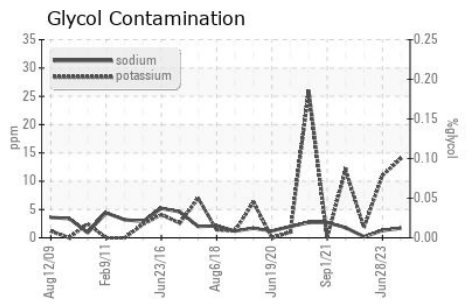
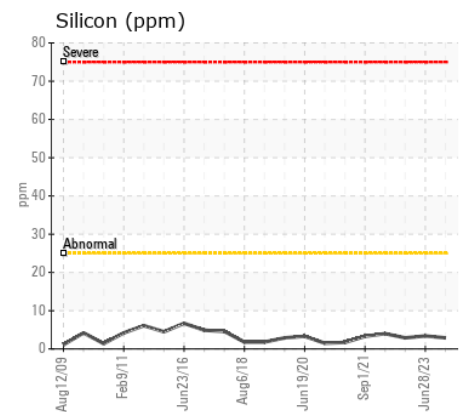
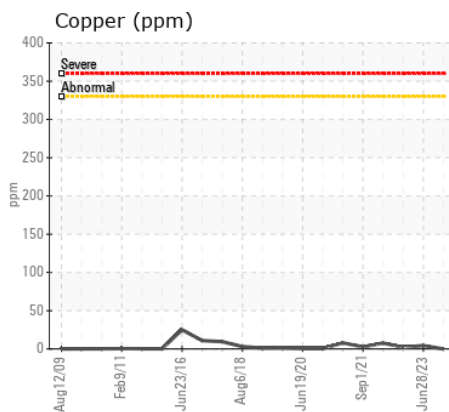
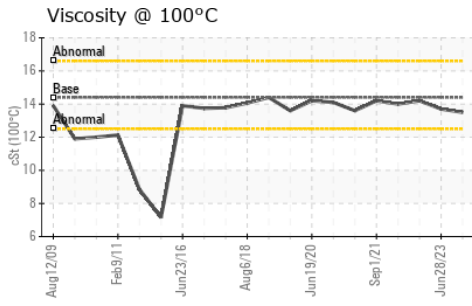
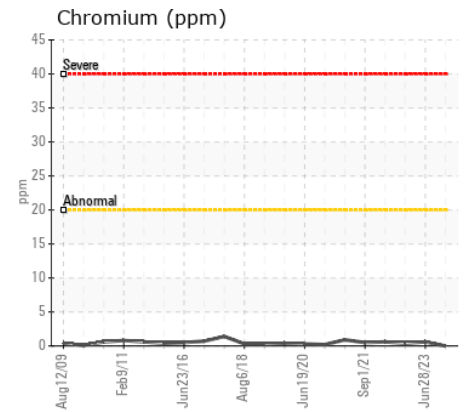
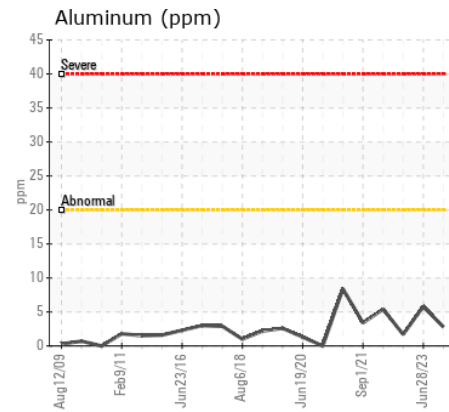
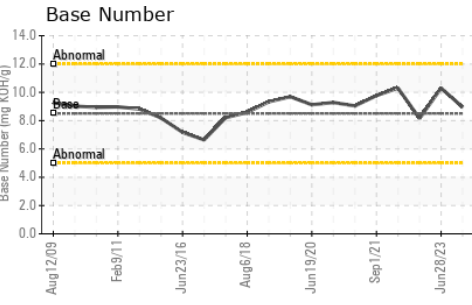
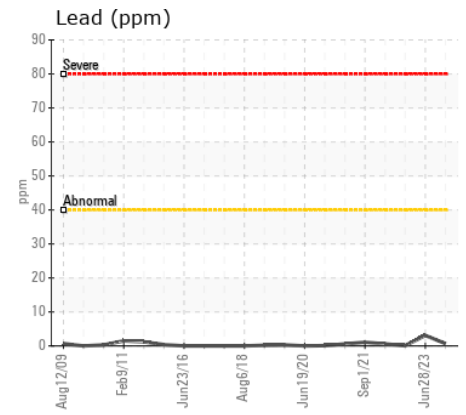
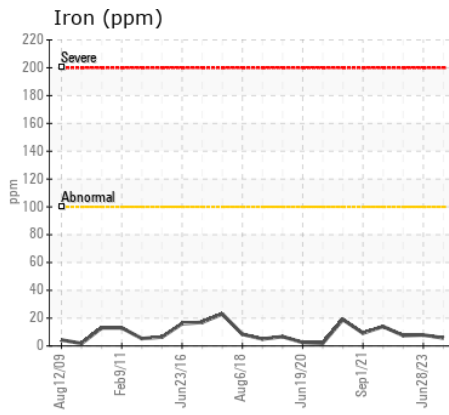
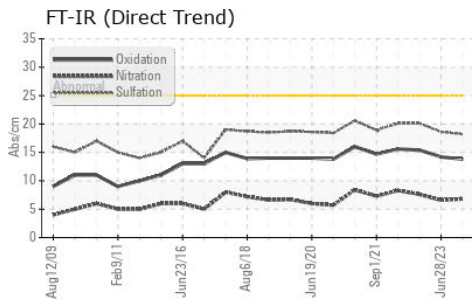
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	3	3
Potassium	ppm	ASTM D5185m	>20	14	11	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.6	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	18.6	20.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
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 D5185m	>158	2	1	<1
Boron	ppm	ASTM D5185m	250	7	6	8
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	61	60	57
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m	450	1000	953	885
Calcium	ppm	ASTM D5185m	3000	1138	1015	1073
Phosphorus	ppm	ASTM D5185m	1150	1079	994	981
Zinc	ppm	ASTM D5185m	1350	1359	1226	1177
Sulfur	ppm	ASTM D5185m	4250	3745	3640	2898
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	14.2	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.95	10.30	8.15
Visc @ 100°C	cSt	ASTM D445	14.4	13.5	13.7	14.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005208 **Received** : 28 Jun 2024
Lab Number : 06224089 **Tested** : 02 Jul 2024
Unique Number : 11102286 **Diagnosed** : 02 Jul 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: Glycol, KV40, TAN Man)
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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