



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(EQ2631) W
Machine Id
Riga BPS (S/N 44748675)
Component
Diesel Engine
Fluid
KENDALL SHP 5W40 Diesel Engine Oil (20 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934068	WC0810886	WC05548116
Sample Date		Client Info		08 May 2024	18 May 2023	17 May 2022
Machine Age	hrs	Client Info		1022	1003	0
Oil Age	hrs	Client Info		1022	27	0
Filter Age	hrs	Client Info		0	27	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	2	1	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	2	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	1
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

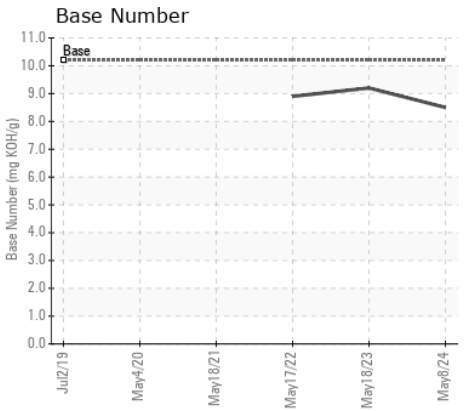
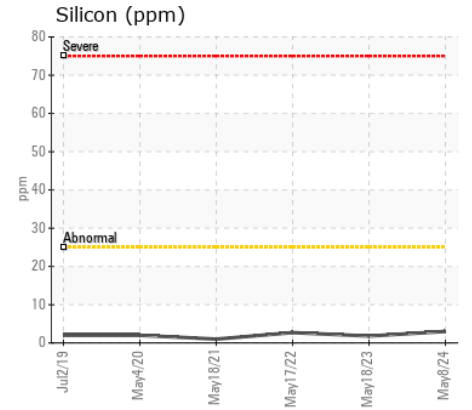
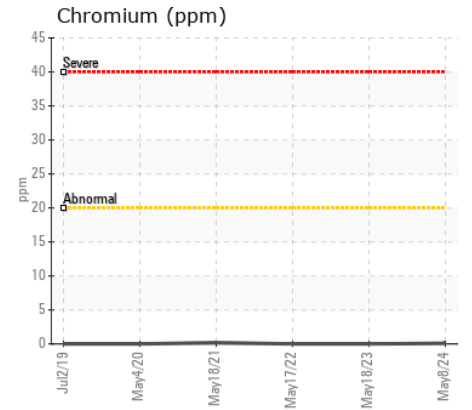
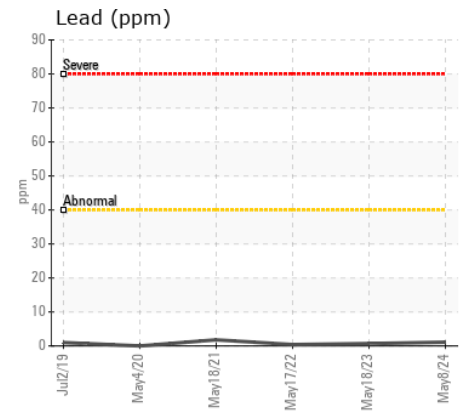
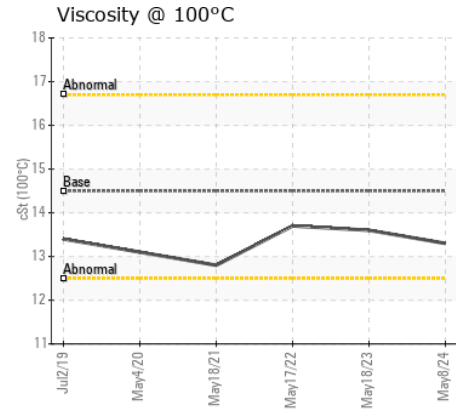
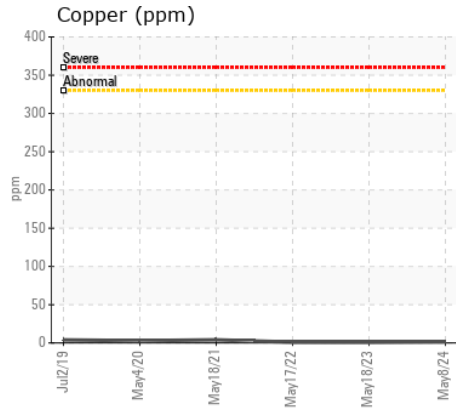
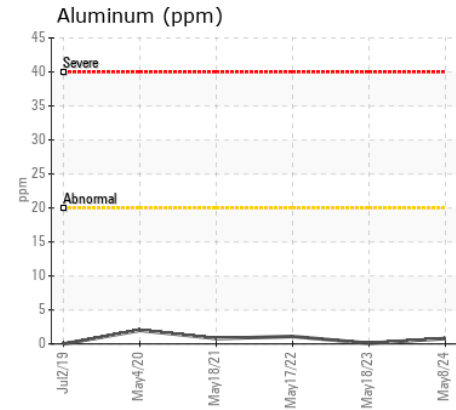
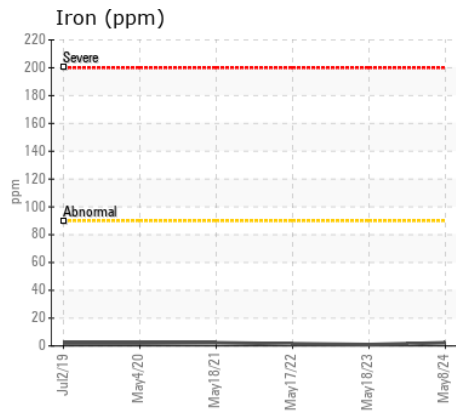
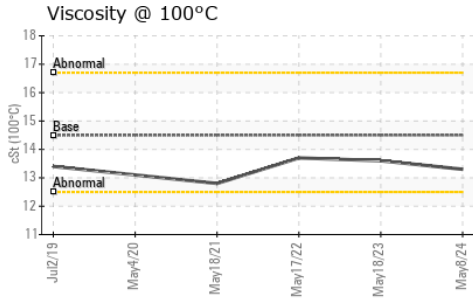
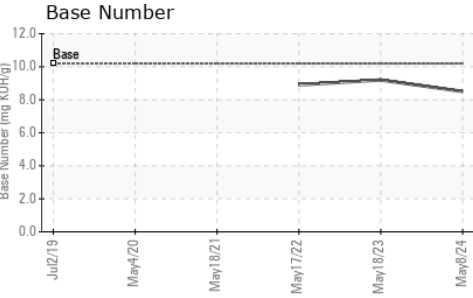
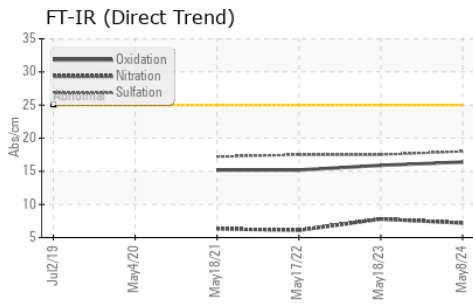
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	2	3
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 2.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.8	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.5	17.5
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		2	2	<1
Boron	ppm	ASTM D5185m		64	66	73
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		52	48	54
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		986	929	1055
Calcium	ppm	ASTM D5185m		1034	954	1056
Phosphorus	ppm	ASTM D5185m		1084	987	1134
Zinc	ppm	ASTM D5185m	1288	1290	1239	1272
Sulfur	ppm	ASTM D5185m		4028	3694	3249
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	15.9	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.5	9.2	8.9
Visc @ 100°C	cSt	ASTM D445	14.5	13.3	13.6	13.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934068 **Received** : 13 May 2024
Lab Number : 06176917 **Tested** : 14 May 2024
Unique Number : 11022970 **Diagnosed** : 14 May 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

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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)