



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**(EQ1838) W**  
Machine Id  
**North Road BPS Electrical (S/N FSE02861)**  
Component  
**Diesel Engine**  
Fluid  
**KENDALL SHP 5W40 Diesel Engine Oil (35 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0934072</b>	WC0810890	WC0696111
Sample Date		Client Info		<b>08 May 2024</b>	18 May 2023	17 May 2022
Machine Age	hrs	Client Info		<b>381</b>	343	0
Oil Age	hrs	Client Info		<b>381</b>	60	0
Filter Age	hrs	Client Info		<b>0</b>	60	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>2</b>	1	2
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	2
Aluminum	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

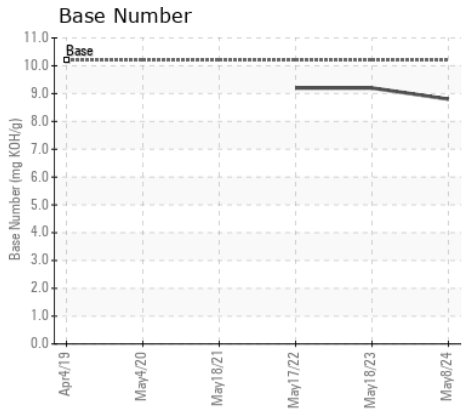
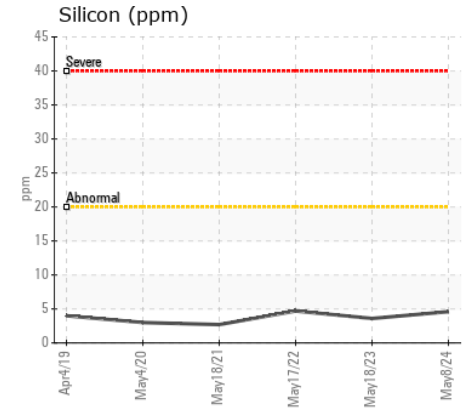
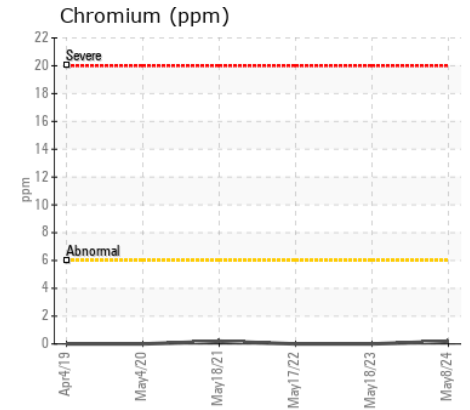
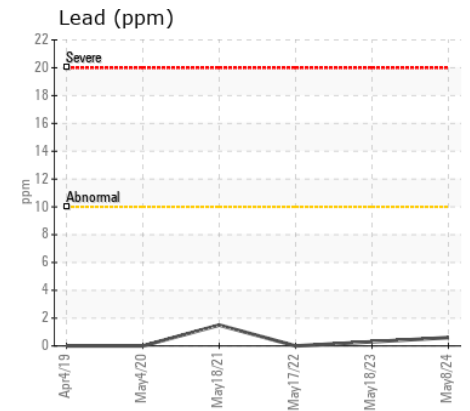
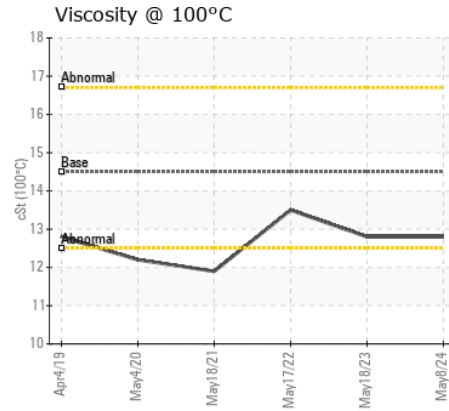
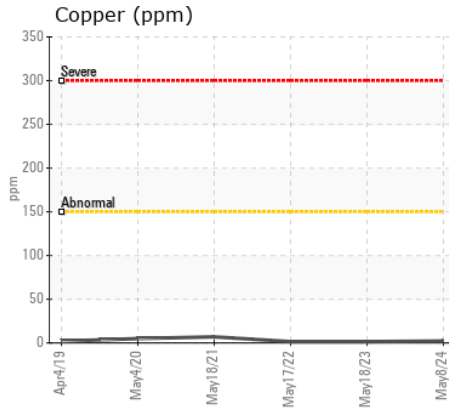
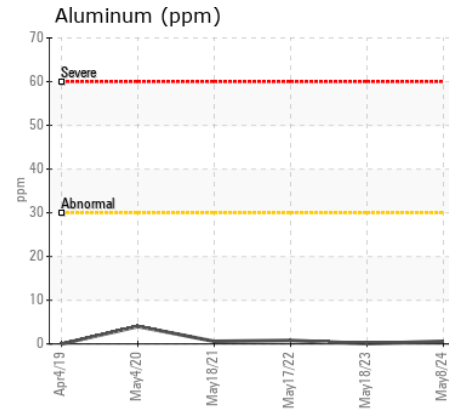
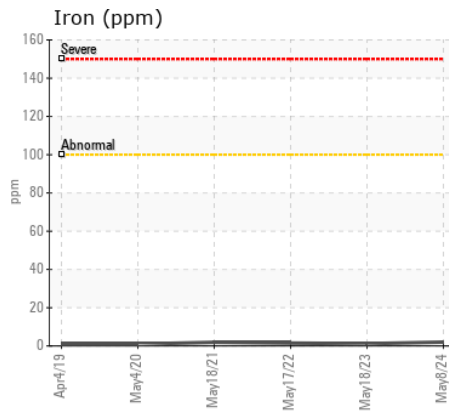
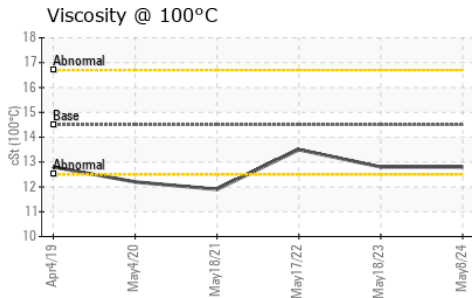
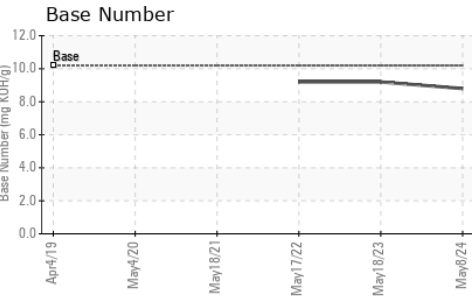
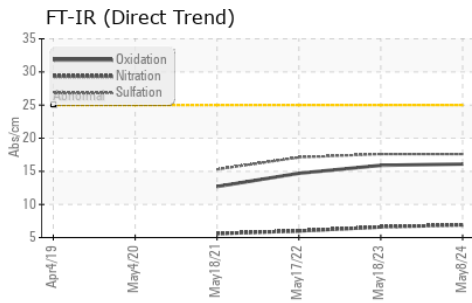
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	1.9
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	6.6	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</b>	17.6	17.1
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	>0.2	<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 D5185m		<b>2</b>	2	1
Boron	ppm	ASTM D5185m		<b>65</b>	70	72
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>58</b>	55	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>1116</b>	1044	1113
Calcium	ppm	ASTM D5185m		<b>894</b>	836	926
Phosphorus	ppm	ASTM D5185m		<b>1102</b>	1005	1122
Zinc	ppm	ASTM D5185m	1288	<b>1308</b>	1224	1251
Sulfur	ppm	ASTM D5185m		<b>4100</b>	3697	3150
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	15.9	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>8.8</b>	9.2	9.2
Visc @ 100°C	cSt	ASTM D445	14.5	<b>12.8</b>	12.8	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0934072  
**Lab Number** : 06176909  
**Unique Number** : 11022962  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MONROE COUNTY WATER AUTHORITY**  
 4799 DEWEY AVE  
 ROCHESTER, NY  
 US 14612  
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 scott.trail@mcwa.com  
 T: (585)775-5257  
 F:

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)