

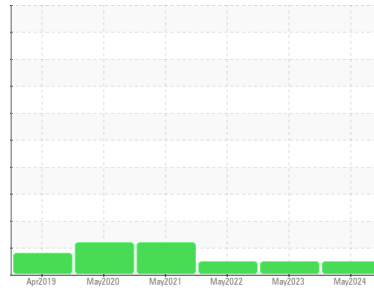


OIL ANALYSIS REPORT



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

Sample Rating Trend



NORMAL

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0934072	WC0810890	WC0696111
Sample Date	Client Info		08 May 2024	18 May 2023	17 May 2022
Machine Age	hrs	Client Info	381	343	0
Oil Age	hrs	Client Info	381	60	0
Oil Changed	Client Info		Not Chngd	Not Chngd	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	1.9
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	2	1	2
Chromium	ppm	ASTM D5185m	>6	<1	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	2
Aluminum	ppm	ASTM D5185m	>30	<1	<1	<1
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>150	2	2	2
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		65	70	72
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		58	55	57
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		1116	1044	1113
Calcium	ppm	ASTM D5185m		894	836	926
Phosphorus	ppm	ASTM D5185m		1102	1005	1122
Zinc	ppm	ASTM D5185m	1288	1308	1224	1251
Sulfur	ppm	ASTM D5185m		4100	3697	3150

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	5	4	5
Sodium	ppm	ASTM D5185m		2	2	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.6	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	17.6	17.1

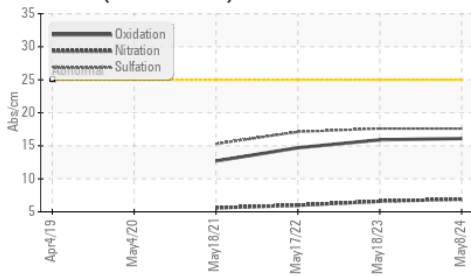
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	15.9	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.8	9.2	9.2

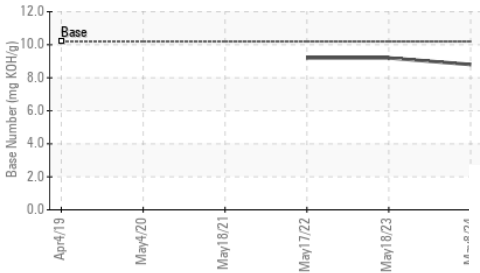


OIL ANALYSIS REPORT

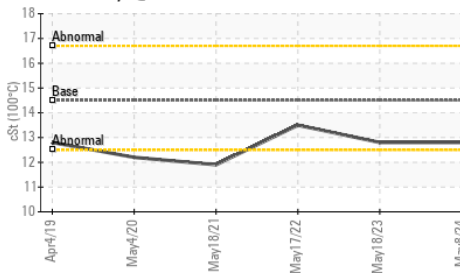
FT-IR (Direct Trend)



Base Number



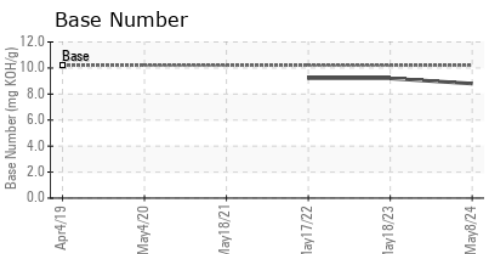
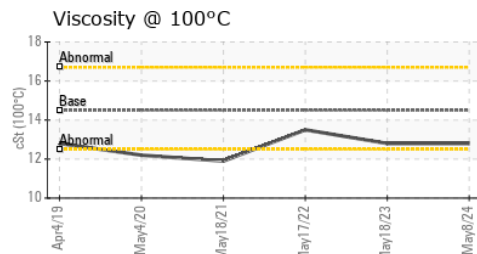
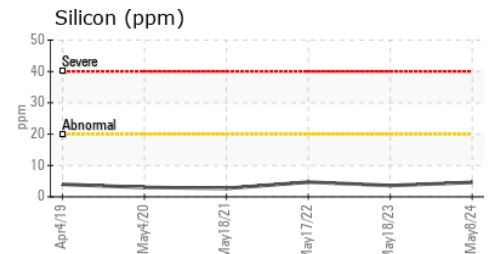
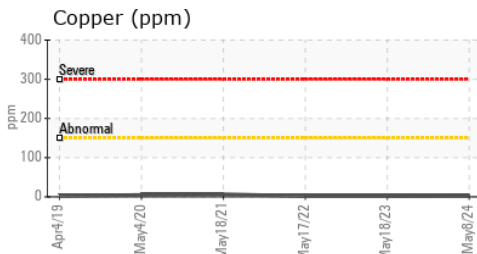
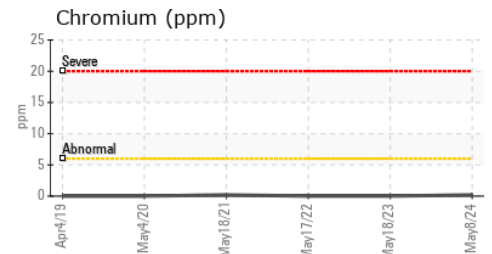
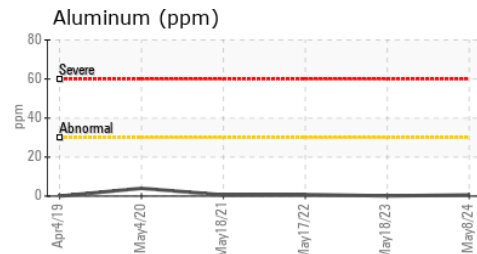
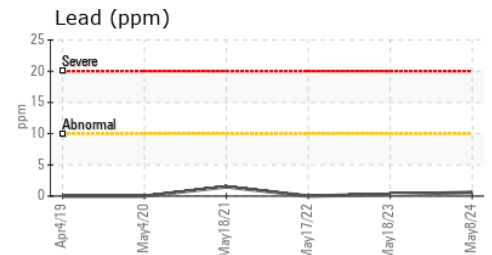
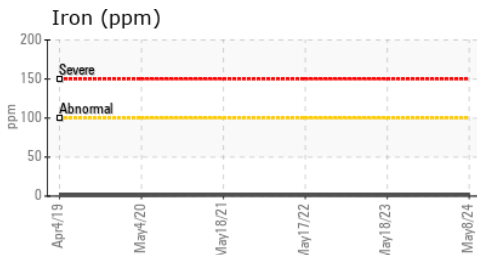
Viscosity @ 100°C



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.5	12.8	12.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934072 **Received** : 13 May 2024
Lab Number : 06176909 **Tested** : 14 May 2024
Unique Number : 11022962 **Diagnosed** : 14 May 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

MONROE COUNTY WATER AUTHORITY
 4799 DEWEY AVE
 ROCHESTER, NY
 US 14612
 Contact: SCOTT TRAIL
 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)