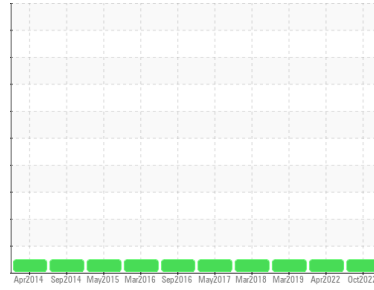




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
GEN OIL SAMPLE
 Machine Id
CUMMINS BLOWER GEN
 Component
Center Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (70 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
 Metal levels are typical for a new component breaking in.

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			WC0749222	WC0685696	WCI2290135
Sample Date	Client Info			06 Oct 2022	13 Apr 2022	05 Mar 2019
Machine Age	hrs	Client Info		362	338	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Not Chngd	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	3	3	2
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	4	3	3
Silver	ppm	ASTM D5185m	>2	1	<1	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	<1
Lead	ppm	ASTM D5185m	>40	6	5	3
Copper	ppm	ASTM D5185m	>330	11	10	7
Tin	ppm	ASTM D5185m	>15	2	2	1
Antimony	ppm	ASTM D5185m		---	---	8
Vanadium	ppm	ASTM D5185m		1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	5	9	10
Barium	ppm	ASTM D5185m	10	0	0	<1
Molybdenum	ppm	ASTM D5185m	100	39	37	37
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	715	719	722
Calcium	ppm	ASTM D5185m	3000	1369	1377	1171
Phosphorus	ppm	ASTM D5185m	1150	1042	1003	937
Zinc	ppm	ASTM D5185m	1350	1225	1207	1038
Sulfur	ppm	ASTM D5185m	4250	3770	2852	3175

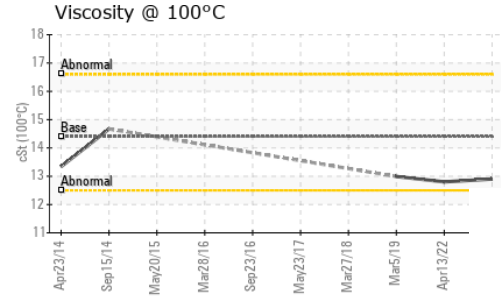
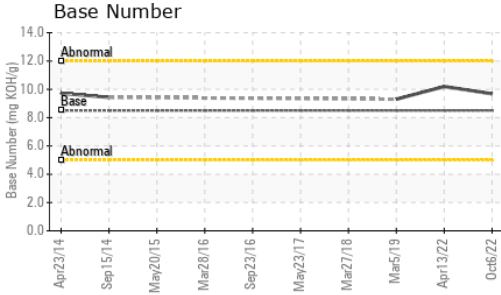
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Sodium	ppm	ASTM D5185m	>158	10	8	10
Potassium	ppm	ASTM D5185m	>20	0	0	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.7	6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	18.3	15.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	15.1	12
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.68	10.2	9.30



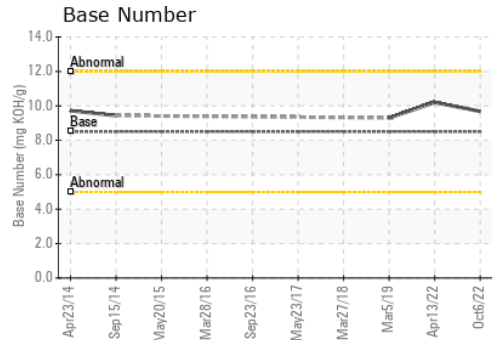
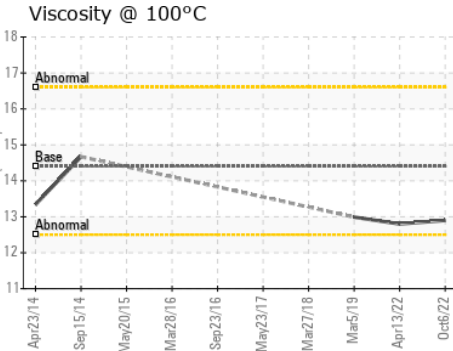
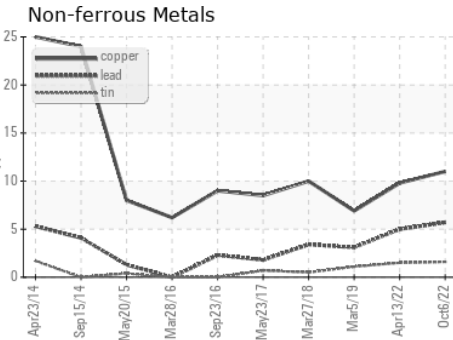
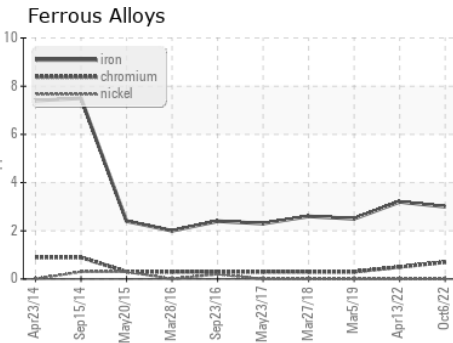
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.8	12.99

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0749222 **Received** : 07 Oct 2022
Lab Number : 05660992 **Diagnosed** : 10 Oct 2022
Unique Number : 10165561 **Diagnostician** : Wes Davis
Test Package : IND 2

NORTH CARY WATER RECLAMATION FACILITY
 1900 OLD REEDY CREEK RD
 CARY, NC
 US 27513

Contact: BRIAN CARTWRIGHT
 brian.cartwright@townofcary.org
 T: (919)677-0850
 F: (919)677-0920

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)