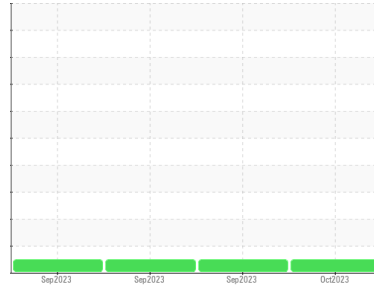




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
T3Y00201

Component
Diesel Engine

Fluid
CAT DIESEL ENGINE OIL 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

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			WC0863766	WC0863767	WC0863763
Sample Date	Client Info			01 Oct 2023	29 Sep 2023	24 Sep 2023
Machine Age	hrs	Client Info		210	260	160
Oil Age	hrs	Client Info		100	150	60
Oil Changed	Client Info			Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	4	4	2
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	4	2	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		94	66	62
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	42	34
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		623	609	413
Calcium	ppm	ASTM D5185m		1925	1897	1247
Phosphorus	ppm	ASTM D5185m		1118	1028	751
Zinc	ppm	ASTM D5185m	1460	1327	1298	864
Sulfur	ppm	ASTM D5185m		3621	3747	2400

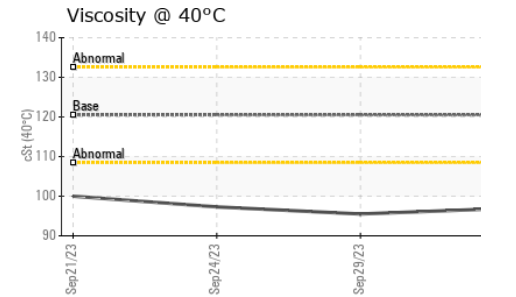
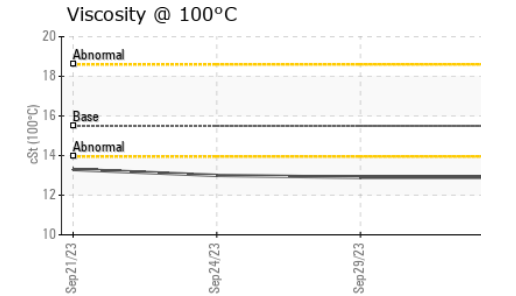
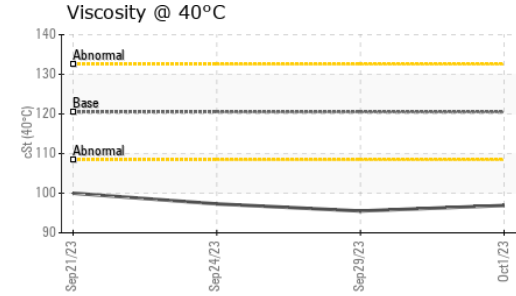
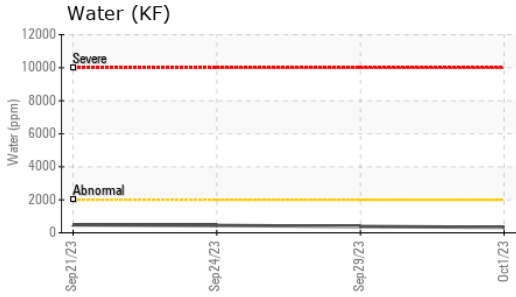
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	4
Sodium	ppm	ASTM D5185m		6	2	5
Potassium	ppm	ASTM D5185m	>20	3	1	3
Water	%	ASTM D6304	>0.2	0.033	0.038	0.045
ppm Water	ppm	ASTM D6304	>2000	332.0	382.6	450.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	4.9	5.1	4.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	21.1	20.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	18.7	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	11.3	10.0	10.1	10.2



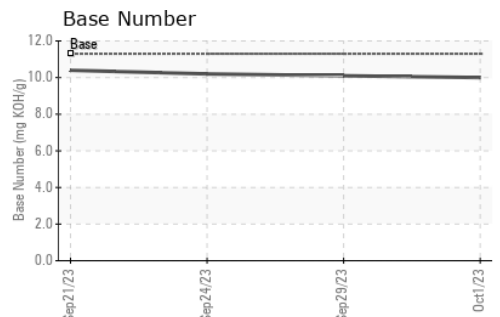
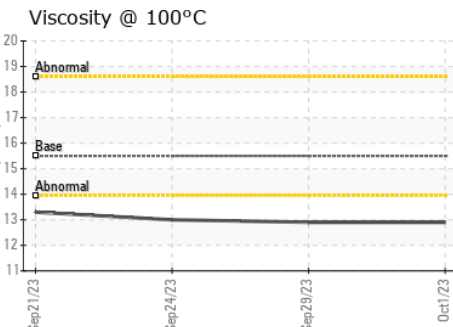
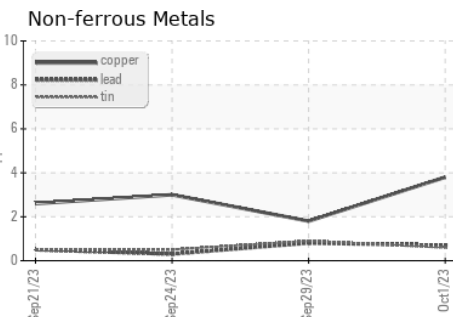
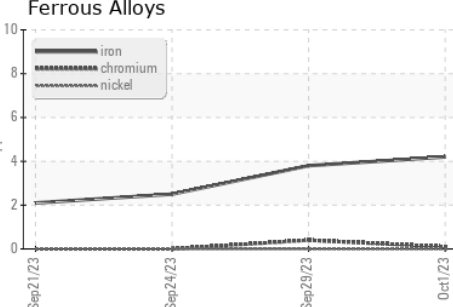
OIL ANALYSIS REPORT



VISUAL	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 @ 40°C	cSt	ASTM D445	120.5	96.9	95.51
Visc @ 100°C	cSt	ASTM D445	15.5	12.9	13.0
Viscosity Index (VI)	Scale	ASTM D2270	135	129	132

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863766 **Received** : 02 Oct 2023
Lab Number : 05966157 **Diagnosed** : 09 Nov 2023
Unique Number : 10672708 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FT-IR, ICP, KF, KV100, KV40, PrtCount, SCREEN, TBN, VI)

CARTER MACHINERY COMPANY INC
 1330 LYNCHBURG TURNPIKE
 SALEM, VA
 US 24153
 Contact: TREVOR KIRSTE
 trevor_kirste@cartermachinery.com

Certificate L2367
 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)