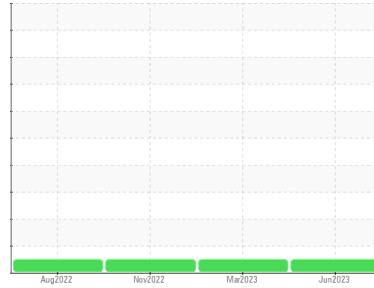


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
T268
Component
Diesel Engine
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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	history 1	history 2
Sample Number	Client Info			PCA0100007	PCA0092490	PCA0085006
Sample Date	Client Info			29 Jun 2023	17 Mar 2023	11 Nov 2022
Machine Age	mls Client Info			276676	251469	226076
Oil Age	mls Client Info			25207	226076	201946
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	12	8	15
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

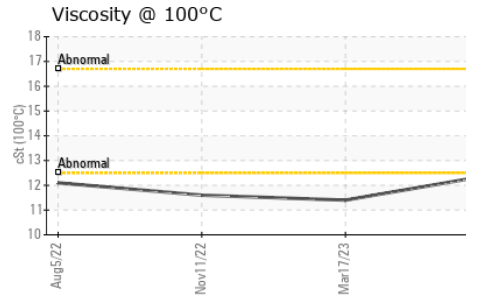
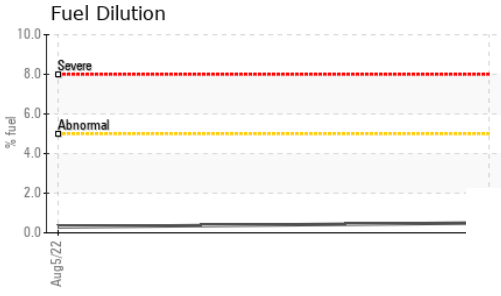
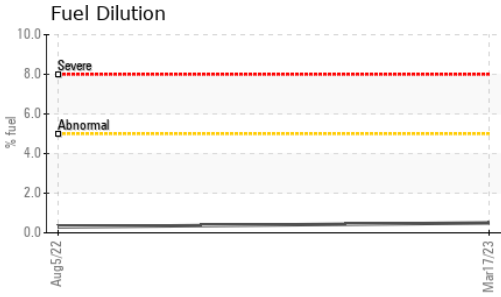
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		1	4	5
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		69	64	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		853	906	921
Calcium	ppm	ASTM D5185m		1201	1130	1170
Phosphorus	ppm	ASTM D5185m		978	990	937
Zinc	ppm	ASTM D5185m		1178	1194	1197
Sulfur	ppm	ASTM D5185m		2778	2938	3102

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	7	4	8
Sodium	ppm	ASTM D5185m		0	2	<1
Potassium	ppm	ASTM D5185m	>20	3	2	4
Fuel	%	ASTM D3524	>5	<1.0	0.5	<1.0

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	0.8	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.7	7.9	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	18.9	22.5

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	14.3	17.3
Base Number (BN)	mg KOH/g	ASTM D2896		6.5	8.1	7.7

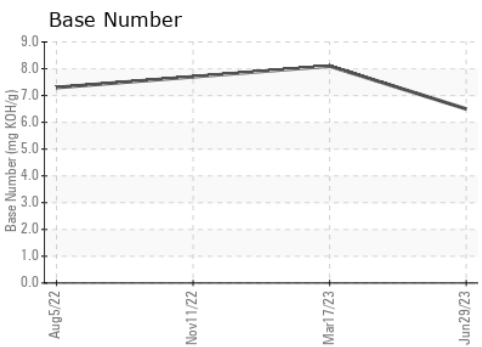
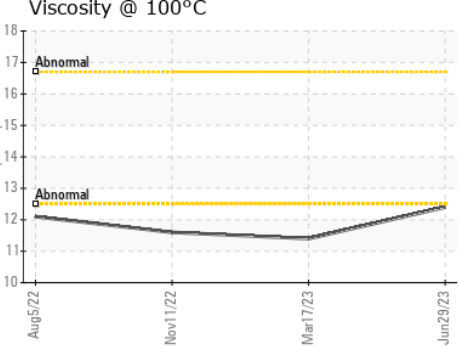
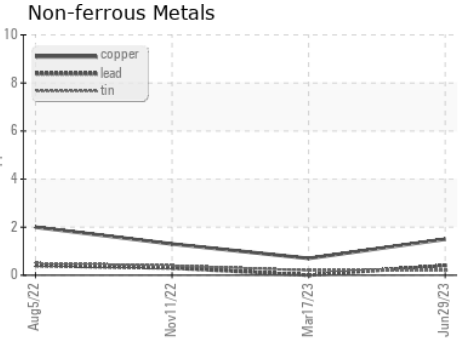
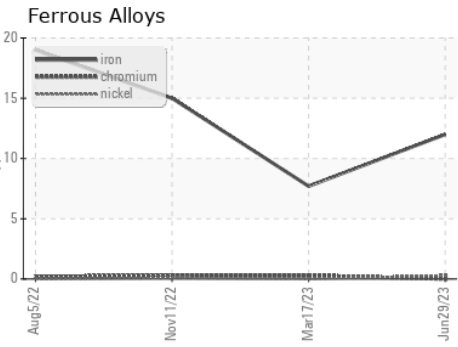
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	12.4	11.4	11.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100007 **Received** : 10 Jul 2023
Lab Number : **05893380** **Diagnosed** : 11 Jul 2023
Unique Number : 10549190 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

NW WHITE & CO - COLUMBIA DIVISION
 100 INDEPENDENCE BLVD
 COLUMBIA, SC
 US 29210
 Contact: GEORGE EDWARDS
 gedwards@nwwhite.com

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)

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F: