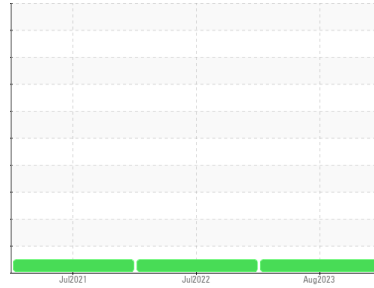




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
PUTNAM NATIONAL GOLF COURSE 2109389

Component
Diesel Engine
Fluid
SAE 5W30 (--- GAL)

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			WC0834348	WC0699522	WC0539605
Sample Date	Client Info			20 Aug 2023	22 Jul 2022	27 Jul 2021
Machine Age	hrs	Client Info		0	492	467
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	1	5	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	2
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	<1	2	3
Tin	ppm	ASTM D5185m	>15	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	2
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		81	24	56
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		60	56	64
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		712	878	911
Calcium	ppm	ASTM D5185m		1091	1087	1357
Phosphorus	ppm	ASTM D5185m		808	904	953
Zinc	ppm	ASTM D5185m		993	1186	1055
Sulfur	ppm	ASTM D5185m		3100	3005	2680

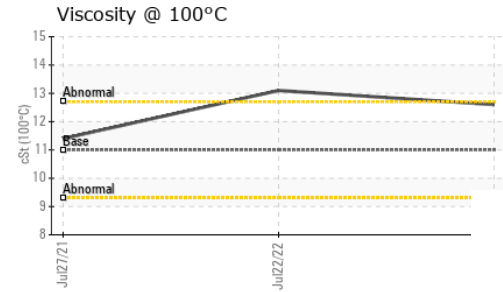
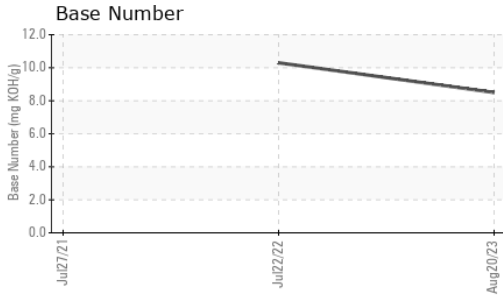
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	3	8
Sodium	ppm	ASTM D5185m		2	5	7
Potassium	ppm	ASTM D5185m	>20	3	5	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	4.6	7.3	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.6	20.1	18.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.6	15.1	13.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	10.3	---



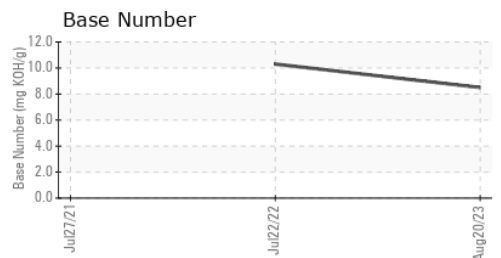
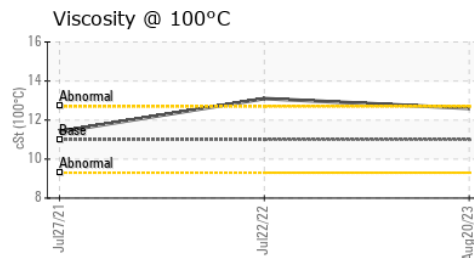
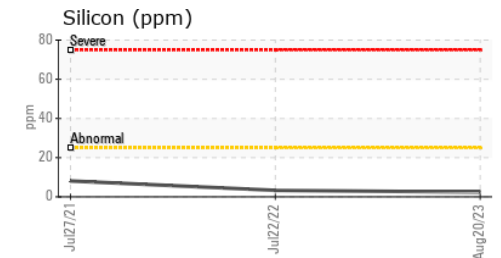
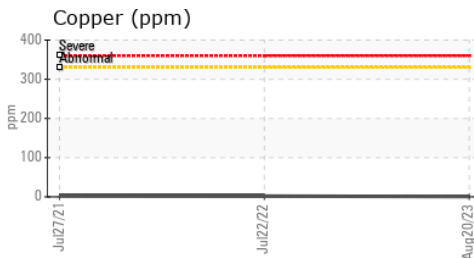
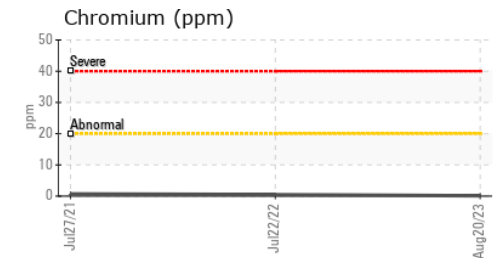
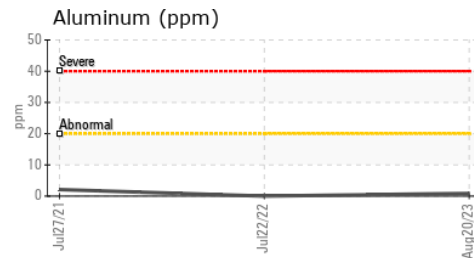
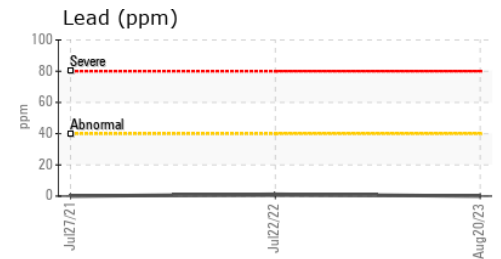
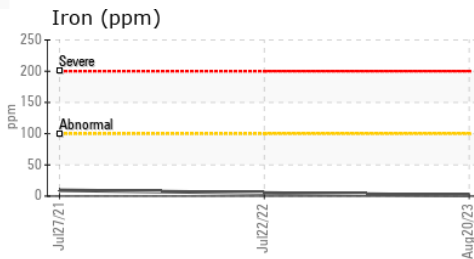
OIL ANALYSIS REPORT



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 @ 100°C	cSt	ASTM D445	11.0	12.6	13.1	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0834348 **Received** : 21 Aug 2023
Lab Number : 05929337 **Diagnosed** : 22 Aug 2023
Unique Number : 10609284 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

GEN TECH LTD
 3017 RT 9W
 NEW WINDSOR, NY
 US 12553
 Contact: JOE SAYEGH
 joe@gentechltd.com
 T: (845)568-0500
 F: (845)568-3073

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)