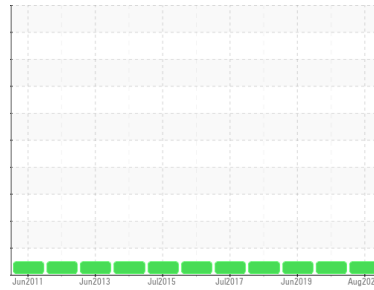




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
GENERAC 214

Component
Natural Gas Engine

Fluid
ROYAL PURPLE MOTOR OIL 15W40 (6 QTS)

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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0033655	RP0005641	RP164881
Sample Date	Client Info		28 Aug 2023	24 Jun 2020	18 Jun 2019
Machine Age	hrs	Client Info	1857	1382	1155
Oil Age	hrs	Client Info	40	19	18
Oil Changed	Client Info		N/A	Not Changd	Not Changd
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	5	2	3
Chromium	ppm	ASTM D5185m >4	<1	0	0
Nickel	ppm	ASTM D5185m >2	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	3	3	3
Lead	ppm	ASTM D5185m >30	2	0	3
Copper	ppm	ASTM D5185m >35	4	<1	4
Tin	ppm	ASTM D5185m >4	0	0	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<1	2	2
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 100	101	95	110
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 60	17	13	9
Calcium	ppm	ASTM D5185m 3050	3340	2737	3260
Phosphorus	ppm	ASTM D5185m 1050	1129	877	1033
Zinc	ppm	ASTM D5185m 1200	1355	960	1122

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	17	11	26
Sodium	ppm	ASTM D5185m	5	4	4
Potassium	ppm	ASTM D5185m >20	3	1	1
Water	%	ASTM D6304 >0.1	NEG	NEG	NEG

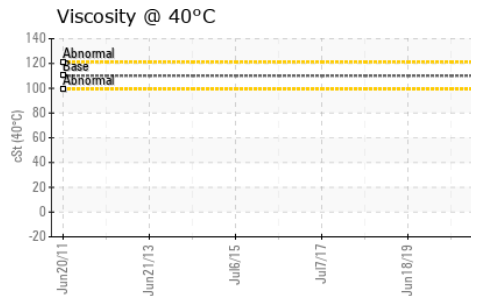
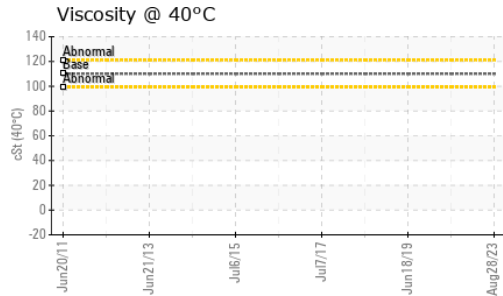
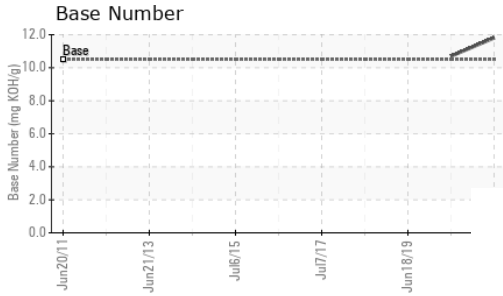
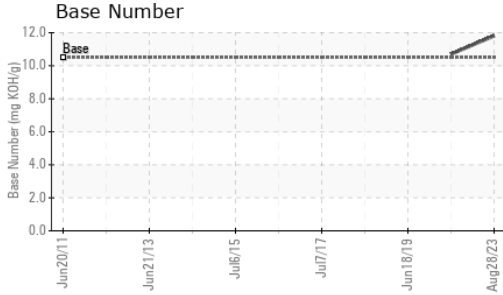
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	6.6	4.9	5.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.2	25.9	24.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.4	17	15.8
Acid Number (AN)	mg KOH/g	ASTM D8045	1.51	1.80	2.55
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	11.81	10.7	---

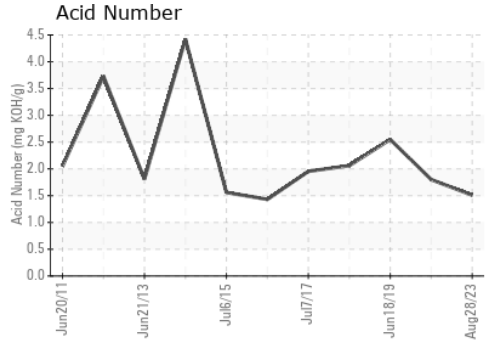
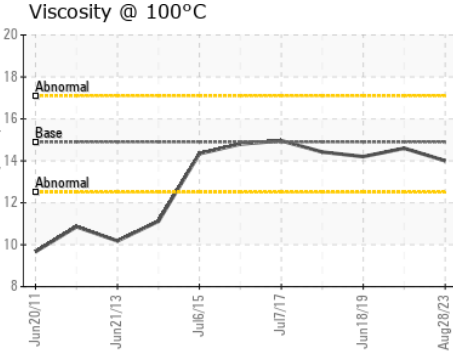
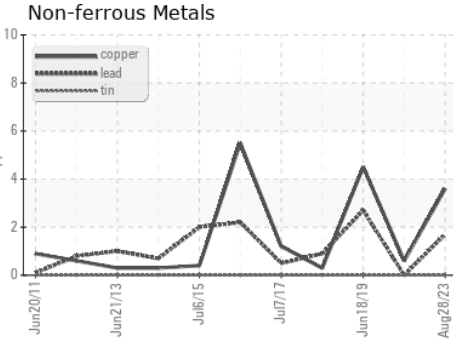
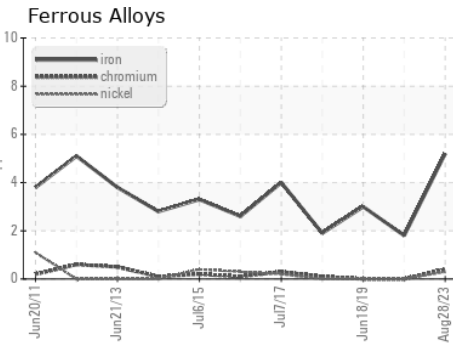
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.9	14.0	14.6	14.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0033655 **Received** : 21 Nov 2023
Lab Number : **06014604** **Diagnosed** : 30 Nov 2023
Unique Number : 10753748 **Diagnostician** : Jonathan Hester

Test Package : IND 2 (Additional Tests: FT-IR, KV100, TBN)

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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