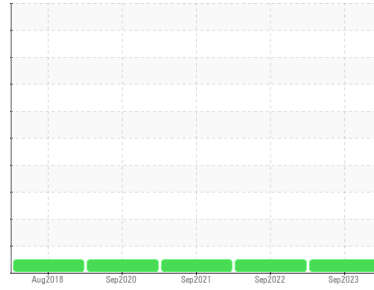




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area

[117477]

Machine Id

GENERAC 3001154184 - FRANKLIN CO 911

Component

Diesel Engine

Fluid

RED STAR 10W30 (2 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		WC0663253	WC0663238	WC0519281
Sample Date	Client Info		27 Sep 2023	19 Sep 2022	01 Sep 2021
Machine Age	hrs	Client Info	0	234	204
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	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	90	86	70
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	75	14	21
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	162	725	739
Calcium	ppm	ASTM D5185m	2008	1302	1307
Phosphorus	ppm	ASTM D5185m	1061	979	1000
Zinc	ppm	ASTM D5185m	1236	1138	1142
Sulfur	ppm	ASTM D5185m	4336	4452	3466

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	7	4	5
Sodium	ppm	ASTM D5185m	2	2	2
Potassium	ppm	ASTM D5185m >20	3	4	4

INFRA-RED

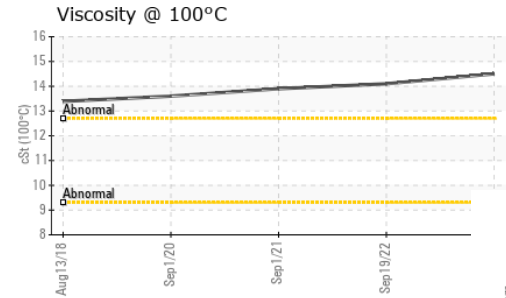
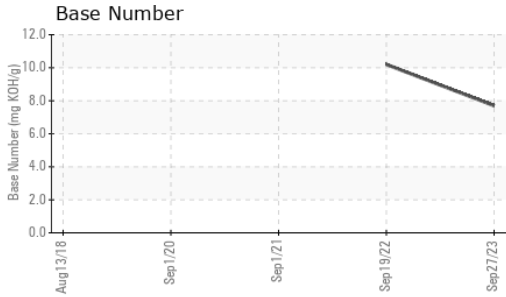
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.2	6.8	6.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.4	19.9	16.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.3	14.8	12
Base Number (BN)	mg KOH/g	ASTM D2896	7.7	10.2	---



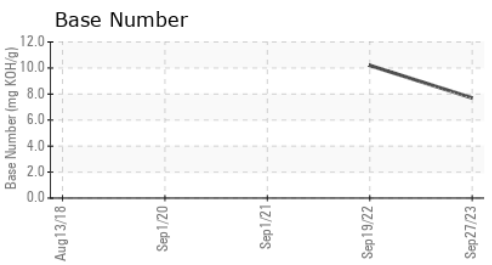
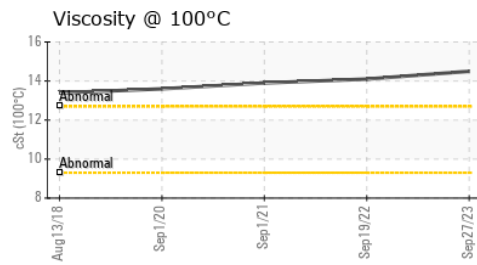
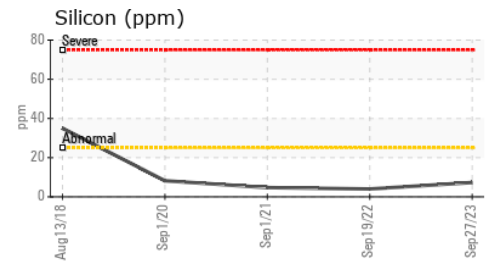
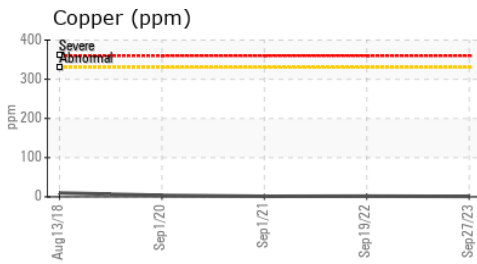
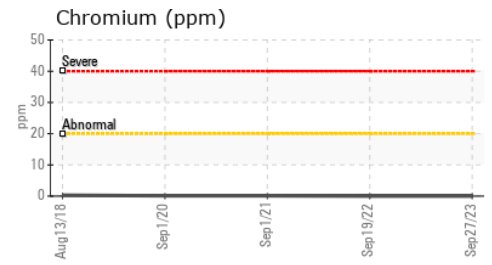
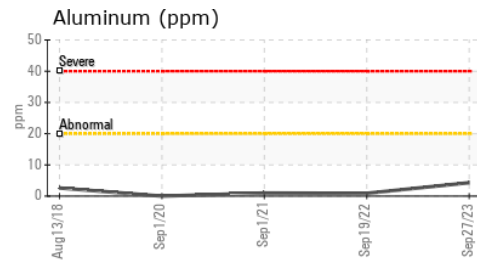
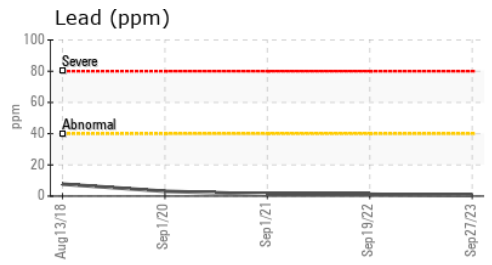
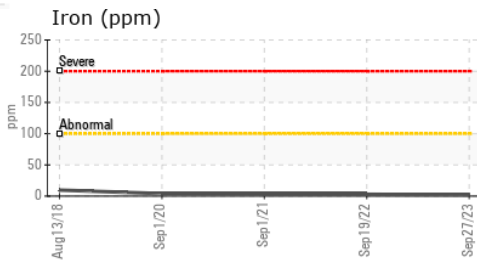
OIL ANALYSIS REPORT



PARAMETER	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	LIGHT
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	14.5	14.1	13.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0663253 **Received** : 03 Oct 2023
Lab Number : 05967352 **Diagnosed** : 05 Oct 2023
Unique Number : 10673903 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: TBN)

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 RALEIGH, NC
 US 27616
 Contact: BRANDON RICE
 brandon.rice@natpow.com
 T:
 F: (919)790-9714

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)