



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**GENERAC N STATE(OLD HWY 109)**  
 Component  
**Propane Engine**  
 Fluid  
**SHELL ROTELLA T 15W40 (4 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0933170</b>	WC0329424	WCM1395036
Sample Date		Client Info		<b>16 May 2024</b>	16 May 2019	14 May 2018
Machine Age	hrs	Client Info		<b>334</b>	257	233
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>2</b>	2	2
Chromium	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

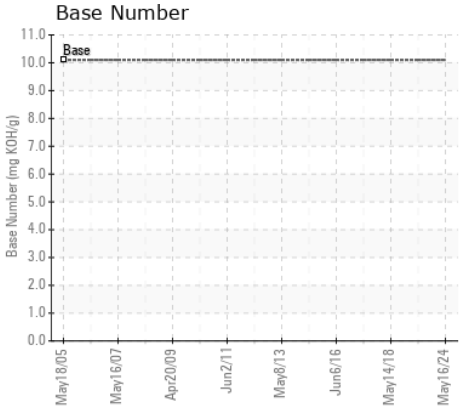
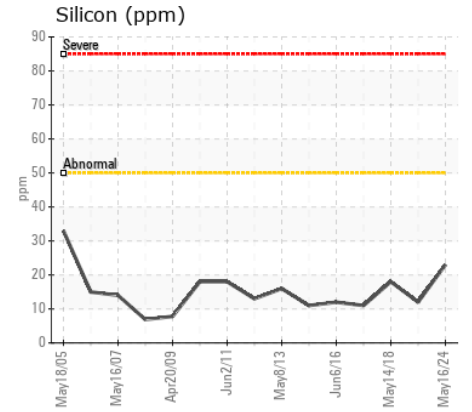
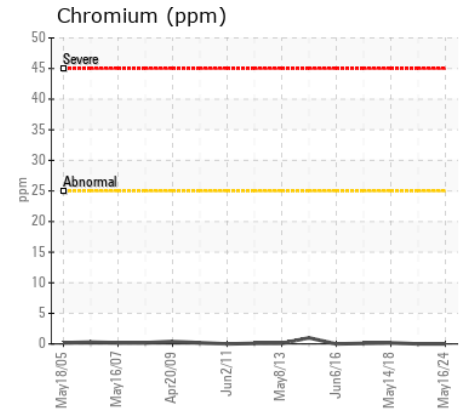
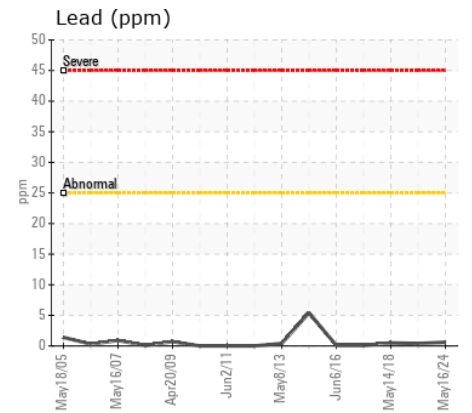
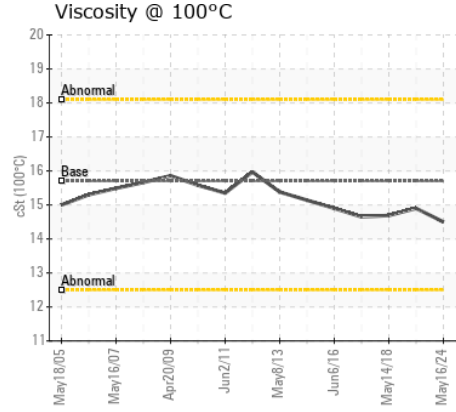
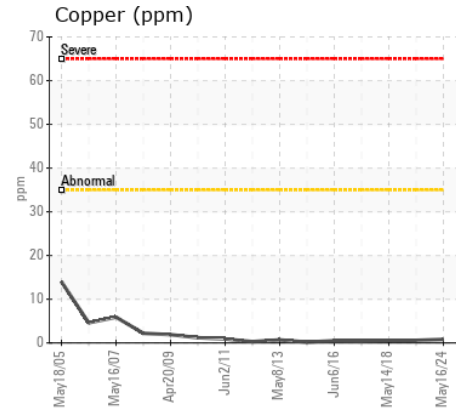
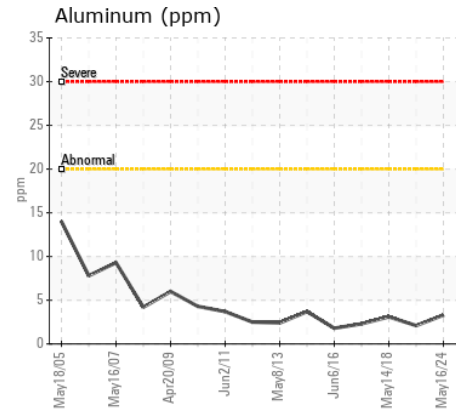
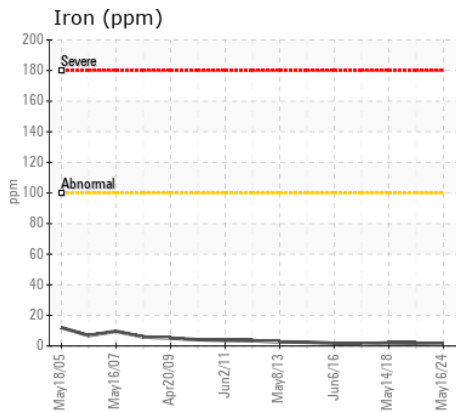
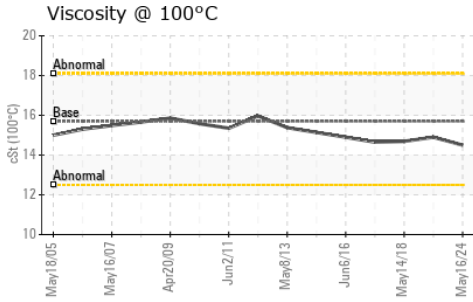
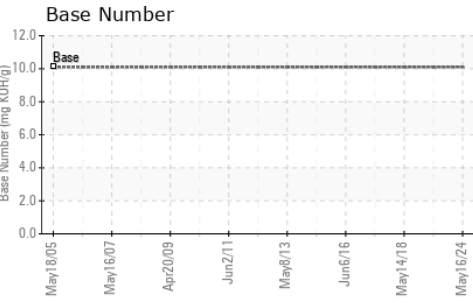
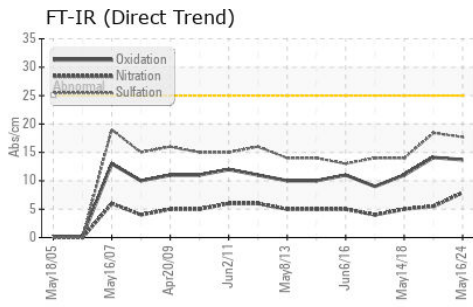
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>23</b>	12	18
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	5	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	5.5	5.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.7</b>	18.4	14.
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m		<b>2</b>	4	2
Boron	ppm	ASTM D5185m	316	<b>71</b>	12	19
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>94</b>	60	61
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>94</b>	947	941
Calcium	ppm	ASTM D5185m	2292	<b>2412</b>	1170	1172
Phosphorus	ppm	ASTM D5185m	1064	<b>1113</b>	958	1056
Zinc	ppm	ASTM D5185m	1160	<b>1299</b>	1193	1193
Sulfur	ppm	ASTM D5185m	4996	<b>4315</b>	2759	2610
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.7</b>	14.1	11.
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>5.7</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	<b>14.5</b>	14.9	14.69



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0933170  
**Lab Number** : 06188847  
**Unique Number** : 11045599  
**Test Package** : MOB 1

**Received** : 23 May 2024  
**Tested** : 24 May 2024  
**Diagnosed** : 24 May 2024 - Wes Davis

**PIEDMONT GENERATOR**  
 7560 NC HWY 22 NORTH  
 CLIMAX, NC  
 US 27233

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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)