



# OIL ANALYSIS REPORT

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

Machine Id  
**GENERAC NSTATE(WEAVIL ST)**  
 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>WC0848579</b>	WC0647405	WC0395616
Sample Date		Client Info		<b>10 Jan 2024</b>	18 Jan 2022	26 Nov 2019
Machine Age	mths	Client Info		<b>396</b>	0	324
Oil Age	mths	Client Info		<b>0</b>	12	0
Filter Age	mths	Client Info		<b>0</b>	12	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

All component wear rates are normal.

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

## CONTAMINATION

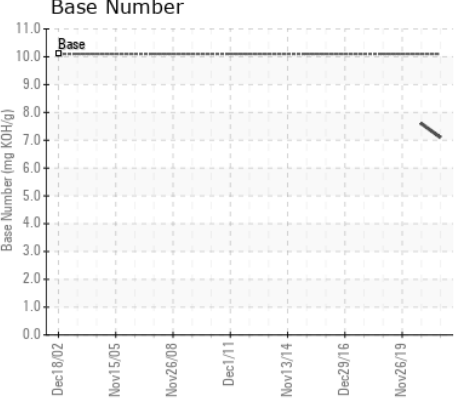
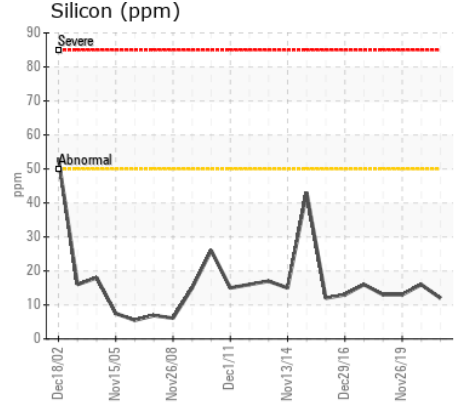
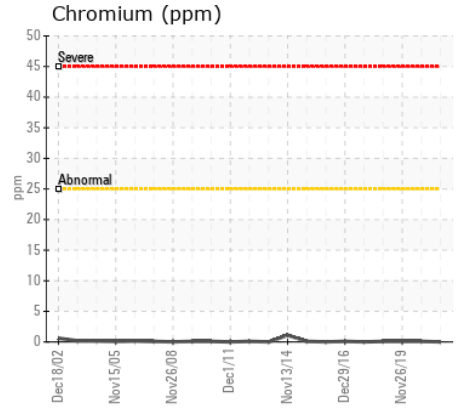
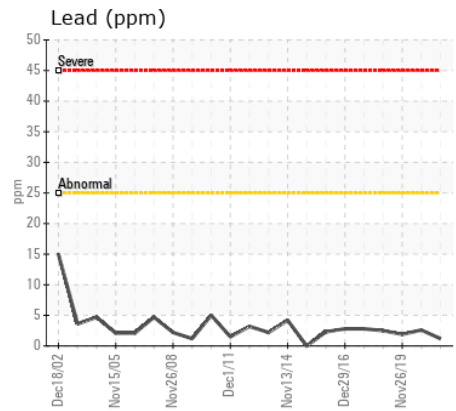
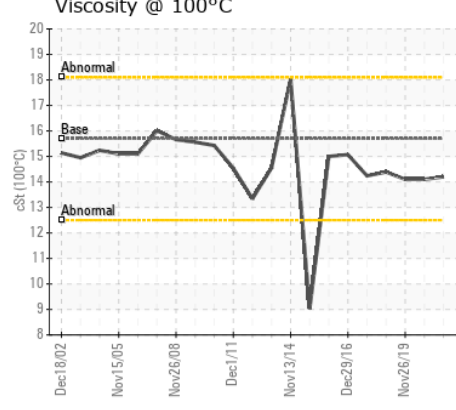
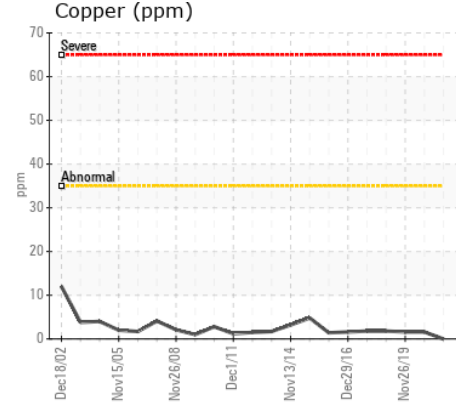
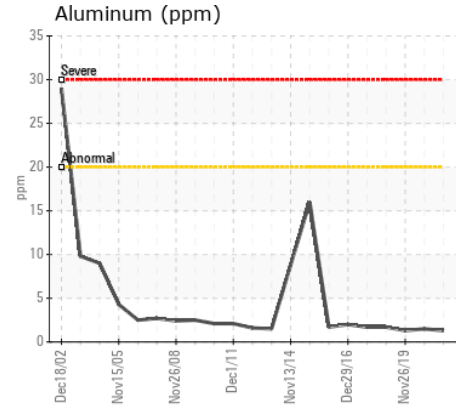
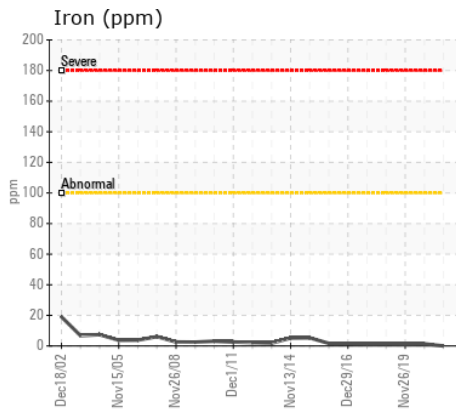
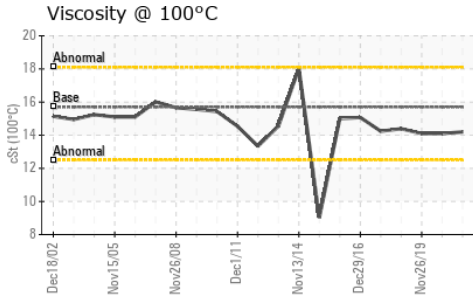
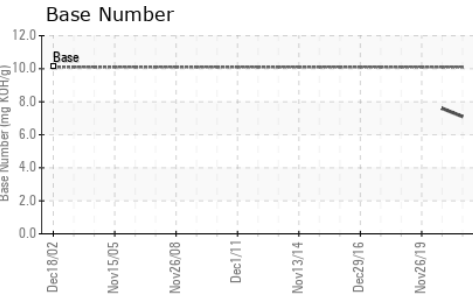
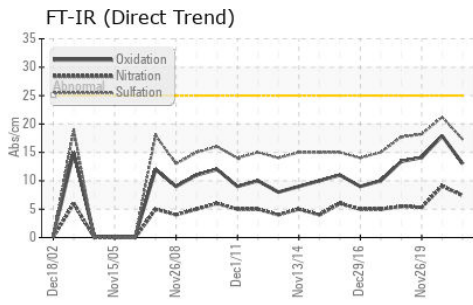
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>12</b>	16	13
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	3
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	9.1	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.3</b>	21.2	18.2
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>&lt;1</b>	2	2
Boron	ppm	ASTM D5185m	316	<b>79</b>	70	8
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>86</b>	57	63
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>126</b>	601	1071
Calcium	ppm	ASTM D5185m	2292	<b>2431</b>	1629	1218
Phosphorus	ppm	ASTM D5185m	1064	<b>1229</b>	1076	1066
Zinc	ppm	ASTM D5185m	1160	<b>1404</b>	1216	1248
Sulfur	ppm	ASTM D5185m	4996	<b>5205</b>	3063	2780
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	17.9	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.1</b>	7.6	---
Visc @ 100°C	cSt	ASTM D445	15.7	<b>14.2</b>	14.1	14.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0848579  
**Lab Number** : 06146947  
**Unique Number** : 10977025  
**Test Package** : MOB 1

**Received** : 12 Apr 2024  
**Tested** : 15 Apr 2024  
**Diagnosed** : 15 Apr 2024 - Wes Davis

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

Contact: TERRY SHEPPARD  
 terry1pg@bellsouth.net; bill3pg@bellsouth.net  
 T: (336)685-4859  
 F: (336)685-5297

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)