



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GENERAC NSTATE EVANS RD
 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		WC0887915	WC0647386	WC0436265
Sample Date		Client Info		12 Mar 2024	21 Feb 2022	14 Jan 2020
Machine Age	hrs	Client Info		445	402	362
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	3	2	2
Chromium	ppm	ASTM D5185m	>25	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>25	5	2	0
Copper	ppm	ASTM D5185m	>35	5	<1	<1
Tin	ppm	ASTM D5185m	>8	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

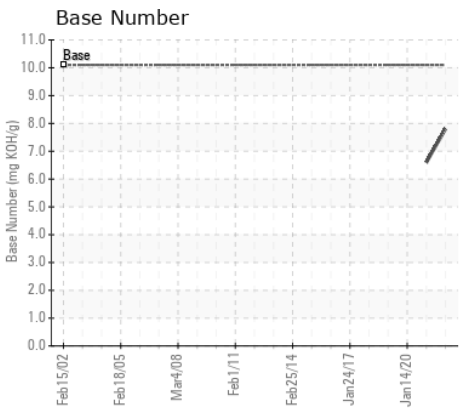
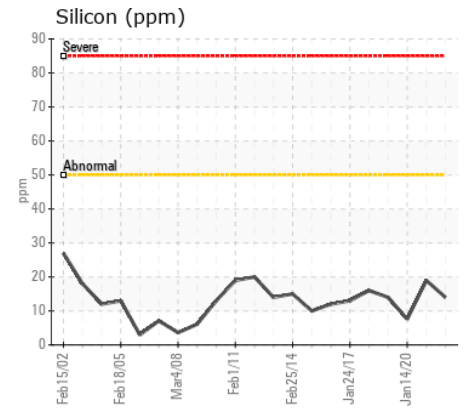
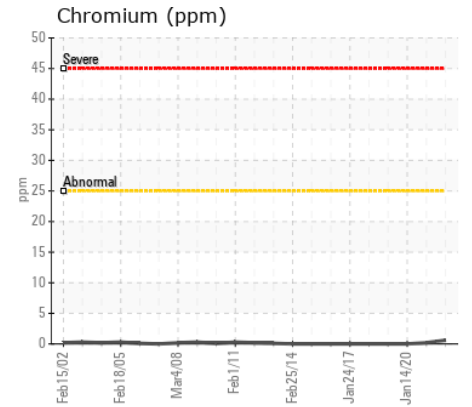
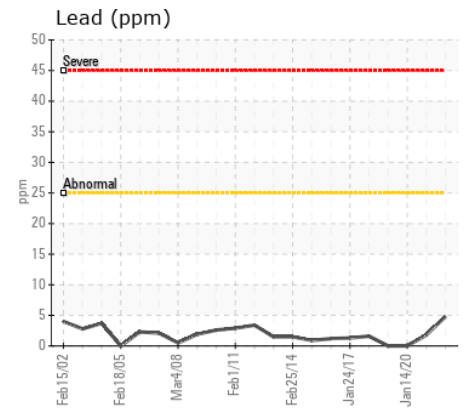
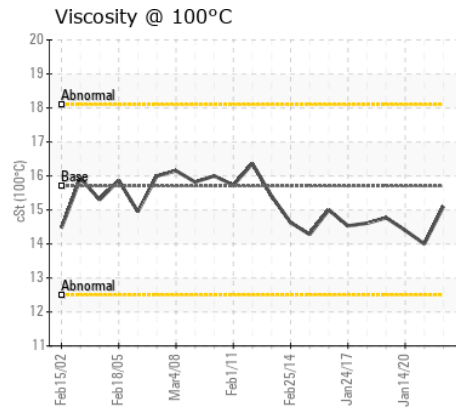
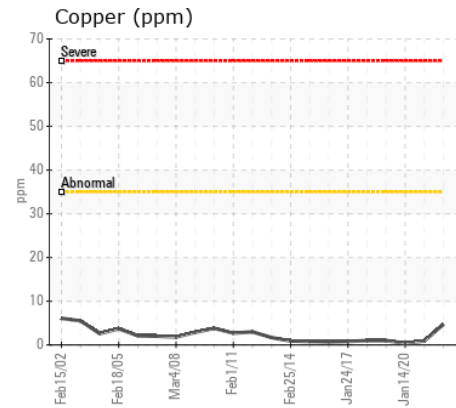
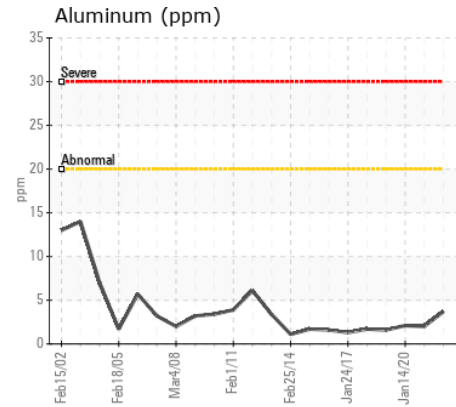
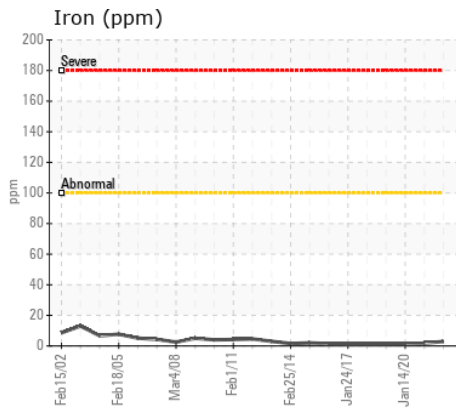
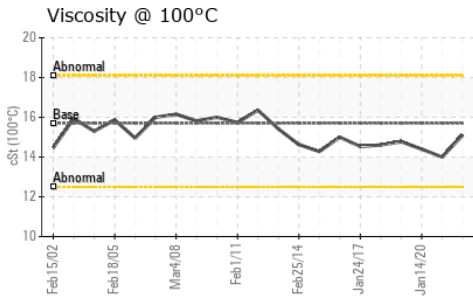
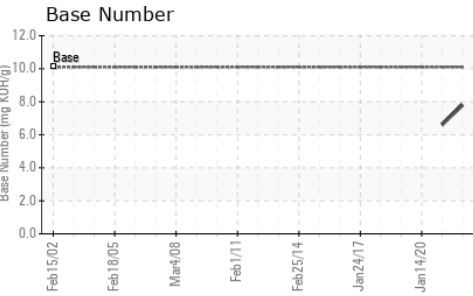
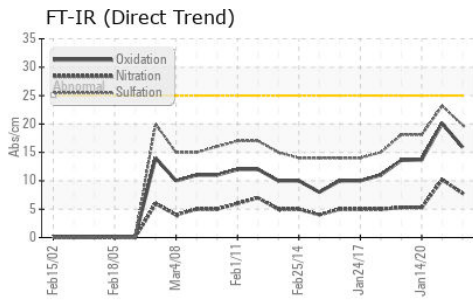
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	14	19	8
Potassium	ppm	ASTM D5185m	>20	3	<1	3
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.8	10.2	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	23.2	18.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		2	2	3
Boron	ppm	ASTM D5185m	316	100	94	9
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	1.2	71	65	58
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	24	339	384	879
Calcium	ppm	ASTM D5185m	2292	2089	2034	1035
Phosphorus	ppm	ASTM D5185m	1064	1215	1145	950
Zinc	ppm	ASTM D5185m	1160	1292	1280	1084
Sulfur	ppm	ASTM D5185m	4996	3948	3431	3559
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	20.1	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.8	6.6	---
Visc @ 100°C	cSt	ASTM D445	15.7	15.1	14.0	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887915
Lab Number : 06146921
Unique Number : 10976999
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

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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