

OIL ANALYSIS REPORT

SAMPLE INFORMATION

Base Number (BN) mg KOH/g ASTM D2896



GENERAC WESTLAND OTN - 3003650119

Component

Diesel Engine

NAPA Motor Oil 15W40 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

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.

-		
Feb2022	Feb2023	Feb2024

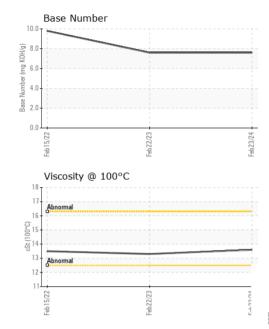
SAMI LE IM OTTO	IATION	method	IIIIII/Dase	Current	HISTOLAL	HISTOLYZ
Sample Number		Client Info		WC0894384	WC0771499	WC0637065
Sample Date		Client Info		23 Feb 2024	22 Feb 2023	15 Feb 2022
Machine Age	hrs	Client Info		223	195	172
Oil Age	hrs	Client Info		21	16	20
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	1	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2	3	6
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	3	7	9
Tin	ppm	ASTM D5185m	>15	0	<1	1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		66	326	289
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		64	96	78
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		52	354	425
Calcium	ppm	ASTM D5185m		2124	1698	1557
Phosphorus	ppm	ASTM D5185m		998	941	864
Zinc	ppm	ASTM D5185m		1131	1148	950
Sulfur	ppm	ASTM D5185m		3763	3608	2502
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	5	6
Sodium	ppm	ASTM D5185m		2	2	2
Potassium	ppm	ASTM D5185m	>20	2	4	6
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.9	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	11.4	6.2
Sulfation	Abs/.1mm	*ASTM D7024	>30	17.1	26.7	22.5
FLUID DEGRADA		method	limit/base		history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9	20.4	18.0
Paga Number (DNI)	ma 1/01 1/a	ACTIVE DOOOG		76	7 C	() ()

7.6

9.8



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		13.6	13.3	13.5
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe			100	Severe		
U + Q			80	1		
0 - Abnormal			60 E 40	Abnormal		
0+			40	-	:	
0			20			
-	2/23			5/25	1/23	
Feb 15/22	Feb22/23		Feb23/24	Feb15/22	Feb22/23	
Aluminum (ppm)				Chromium (p	pm)	
Severe			50	Severe		
				J		
0 - Abnormal			§ 30 20	Abnormal		
0			10			
0						
Feb15/22	-eb22/23		Feb23/24	-eb15/22	-eb22/23	
윤	균		品	윤	Feb	
Copper (ppm)			80	Silicon (ppm)		
Abnormal			********	Severe		
0+7			60	1		
0 +			E 40	+1		
0			20	Abnormal		
22	23-		24	22 +	- 523	





Laboratory Sample No.

Lab Number : 06101315 Unique Number : 10899545

cSt (100°C)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0894384

Test Package: MOB 1 (Additional Tests: TBN)

Viscosity @ 100°C

Received : 27 Feb 2024 **Tested** : 28 Feb 2024 Diagnosed

: 28 Feb 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Base Number

10.0 (mg KOH/g)

Base Number 0.0

> 4541 PRESLYN DR RALEIGH, NC US 27616 Contact: BRANDON RICE

> **NATIONAL POWER CORP**

brandon.rice@natpow.com T:

* - 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)