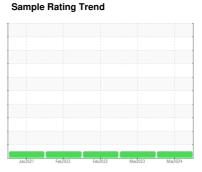


OIL ANALYSIS REPORT

Area [13440] **RED VENTURES/RV4-5 UNIT A**

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)





Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

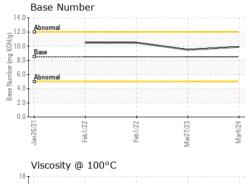
Fluid Condition

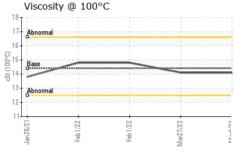
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Jan 2021	Feb2022	Feb 2022 Mar 2023	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0884255	WC0770439	WC0616173
Sample Date		Client Info		04 Mar 2024	27 Mar 2023	01 Feb 2022
Machine Age	hrs	Client Info		95	94	90
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	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	<1	1	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	<1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	0	1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Antimony	ppm	ASTM D5185m				<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	13	110	102
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	52	2	3
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	898	621	693
Calcium	ppm	ASTM D5185m	3000	1039	1212	1297
Phosphorus	ppm	ASTM D5185m	1150	986	949	940
Zinc	ppm	ASTM D5185m	1350	1186	1090	1069
Sulfur	ppm	ASTM D5185m	4250	3504	3792	3011
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Sodium	ppm	ASTM D5185m	>158	<1	0	2
Potassium	ppm	ASTM D5185m	>20	0	4	3
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	4.7	5.8	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	18.5	20.4
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	11.6	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.9	9.5	10.5



OIL ANALYSIS REPORT





VISUAL		method				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 PROPERTIES		method	limit/base	current	history1	history2

١	/isc @ 100°C	cSt	ASTM D445	14.4	14.1	14.1	14.8	
	GRAPHS							
250 · 200 · 150 · 100 · 50 · 0	Iron (ppm) Severe				Lead (ppm))		
	Jan 26,21 -	Feb 1/22 -	Mar27/23 -	Mar4/24	Jan26/21	Feb 1/22 -	Mar27/23 -	Mar4/24
50· 40· 20·	Aluminum (ppm)	<u></u>	Wa	W	Chromium 50 40 Severe Abnormal		Wa	W
400 · 300 · E 200 ·	Copper (ppm)	Feb1/22 -	Mai27/23-	Mar4/24	Silicon (ppr		Mar27/23	Mar4/24
100	Viscosity @ 100°C	Feb1/22	Mar27/23	Mar4/24	20 Live State Numb		Mar27/23	Mar4/24
18- (10- (10- (10- 10- 10-	Abnormal Abnormal L2/9 2 In 17/9 2	Feb1/22 +	Mar27/23 +	Mar4/24	Base Number (mg KOH/g) Do 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Mar27/23	Mar4/24





Laboratory Sample No.

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

Unique Number : 10939707

: WC0884255 Lab Number : 06125556

Received **Tested** Test Package: MOB 1 (Additional Tests: TBN)

Diagnosed

: 21 Mar 2024 : 22 Mar 2024

: 22 Mar 2024 - Wes Davis

RALEIGH, NC US 27616 Contact: BRANDON RICE brandon.rice@natpow.com

NATIONAL POWER CORP

4541 PRESLYN DR

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)

F: (919)790-9714

Contact/Location: BRANDON RICE - NATRAL

T: