

OIL ANALYSIS REPORT

Area [134443] **RED VENTURES/RV4-ACD4 UNIT B**

Diesel Engine

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

Sample Rating Trend



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

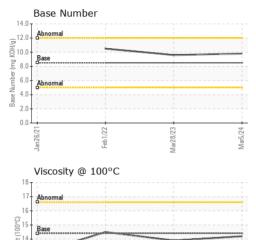
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Jan202	1 Feb2022	Mar2023 N	1ar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0884256	WC0770430	WC0616172
Sample Date		Client Info		05 Mar 2024	28 Mar 2023	01 Feb 2022
Machine Age	hrs	Client Info		90	89	84
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	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	2
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	12	109	101
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	896	612	695
Calcium	ppm	ASTM D5185m	3000	1020	1193	1281
Phosphorus	ppm	ASTM D5185m	1150	1007	940	925
Zinc	ppm	ASTM D5185m	1350	1173	1073	1064
Sulfur	ppm	ASTM D5185m	4250	3508	3681	3009
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	3	4
Sodium	ppm	ASTM D5185m	>158	<1	0	3
Potassium	ppm	ASTM D5185m	>20	0	4	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	4.7	5.9	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	18.5	20.5
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	11.6	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.8	9.6	10.5



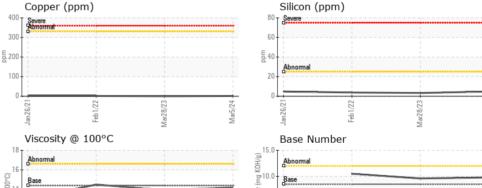
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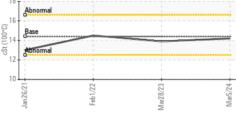
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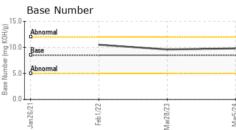


VISUAL		method				history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
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	
FILLID DEODEDTIFO							
FLUID PROPERT	IES	method	limit/base	current	history1	history2	

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	FLUID PROPEF	RTIES	method	limit/base	current	history
	Visc @ 100°C	cSt	ASTM D445	14.4	14.2	13.9
	GRAPHS					
	Iron (ppm)	Lead (ppm)				
	Severe			100	Savara	
-	50				1	
E 1	00 Abnormal			E 40	Abnormal	
	50			20	1	
	727				12/2	
	Jan 26/21		Mar28/23	Mar5/24	Jan 26/2	Feb1/22
	Aluminum (ppm)		Chromium (ppm)			
	50 40 Severe			50	Severe]
	20			20		
mdd	20 Abnormal			E 20	Abnormal	
	10-			10	-	
	I i				1 -	











Laboratory Sample No. Unique Number : 10939708

: WC0884256 Lab Number : 06125557

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

Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 21 Mar 2024 : 22 Mar 2024

: 22 Mar 2024 - Wes Davis

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

NATIONAL POWER CORP

4541 PRESLYN DR

RALEIGH, NC

F: (919)790-9714

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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