

## **OIL ANALYSIS REPORT**

Sample Rating Trend

### NORMAL

Machine Id

# **IROCK RVS-20 ARTESIA CRU**

**Diesel Engine** Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

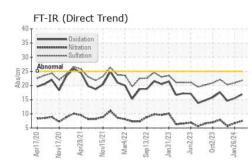
#### Fluid Condition

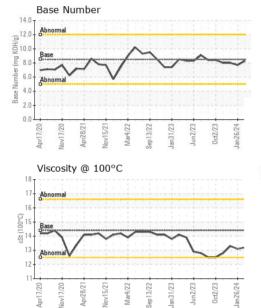
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

RUSHER						
		v/2020 Nov2020	Apr2021 Nov2021 Mar202	2 Sep2022 Jan2023 Jun2023 Oct2	000000 023 Jan2024	
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0013573	KL0013285	KL0013250
Sample Date		Client Info		09 Apr 2024	26 Jan 2024	27 Dec 2023
Machine Age	hrs	Client Info		0	0	45272
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION		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	10	3	4
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
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	250	438	397	403
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	88	85	88
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	434	415	449
Calcium	ppm	ASTM D5185m	3000	1328	1231	1385
Phosphorus	ppm	ASTM D5185m	1150	965	950	1033
Zinc	ppm	ASTM D5185m	1350	1124	1102	1242
Sulfur	ppm	ASTM D5185m	4250	3756	3096	3638
CONTAMINANTS		method	limit/base	current	history1	history2
	ppm	ASTM D5185m		6	4	4
Sodium	ppm	ASTM D5185m		2	<1	3
Potassium	ppm	ASTM D5185m	>20	2	0	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.5	6.7	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	20.9	20.3
FLUID DEGRADAT	ΓΙΟΝ	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	15.5	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.3	7.7	8.0



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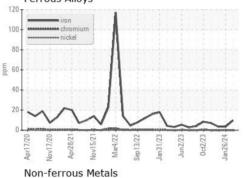
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.1	13.3
CDADUS						

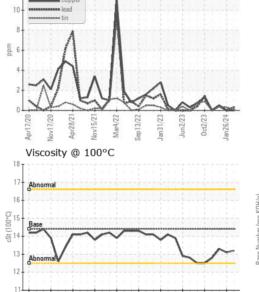
Ferrous Alloys

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Apr17/20

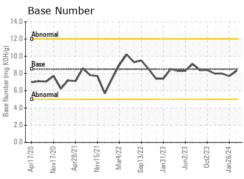
Nov17/20 nr28/21 Jov15/21 **Mar4/22** Sep 13/22 an31/23





0ct2/23

an26/24



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **RAMIREZ & SONS** Sample No. : KL0013573 Received : 10 Apr 2024 3404 N ENTERPRISE DR Lab Number : 06145192 Tested : 11 Apr 2024 HOBBS, NM Unique Number : 10970000 Diagnosed : 11 Apr 2024 - Wes Davis US 88240 Test Package : FLEET Contact: Rick Davidson Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rickdavidson.rsi@gmail.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: RAMHOB [WUSCAR] 06145192 (Generated: 04/11/2024 17:55:53) Rev: 1

Submitted By: Mike Richardson Page 2 of 2