

OIL ANALYSIS REPORT

Sample Rating Trend



Ram Blue - Ali (S/N 1C6SRFHM0PN505470)

Diesel Engine

Fluid DIESEL ENGINE OIL SAE 5W40 (8 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Wear

Metal levels are typical for a components first oil change.

Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HPL0004972		
Sample Date		Client Info		12 May 2024		
Machine Age	mls	Client Info		4000		
Oil Age	mls	Client Info		4000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	٨	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	86		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	13		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	37		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	63		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	3		
Manganese	ppm	ASTM D5185m		6		
Magnesium	ppm	ASTM D5185m	450	37		
Calcium	ppm	ASTM D5185m	3000	2409		
Phosphorus	ppm	ASTM D5185m	1150	881		
Zinc	ppm	ASTM D5185m	1350	983		
Sulfur	ppm	ASTM D5185m	4250	2381		
CONTAMINANTS		method				history2
Ciliana						
Shicon	ppm	ASTM D5185m	>25	38		
Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>25 >44	38 3		
Sodium Potassium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >44 >20	38 3 28		
Sodium Potassium INFRA-RED	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >44 >20 limit/base	38 3 28 current	 history1	 history2
Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	>25 >44 >20 limit/base >3	38 3 28 current 0.2	 history1 	 history2
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	>25 >44 >20 limit/base >3 >20	38 3 28 current 0.2 8.3	 history1 	 history2
Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7615	>25 >44 >20 limit/base >3 >20 >30	38 3 28 current 0.2 8.3 14.7	 history1 	 history2
Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >44 >20 limit/base >3 >20 >30 limit/base	38 3 28 <u>current</u> 0.2 8.3 14.7 <u>current</u>	 history1 history1	 history2 history2
Solicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm % Abs/cm Abs/.1mm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415	>25 >44 >20 limit/base >3 >20 >30 limit/base >25	38 3 28 current 0.2 8.3 14.7 current 11.3	 history1 history1 	 history2 history2



35

30

25

Abs/cm

10

14.0

0.212.0 0.0 KOH/g) 0.8 Base Number (mg KOH/g) 0.9 CON KOH/g)

2.0

0.0

18

16 cSt (100°C)

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