

OIL ANALYSIS REPORT

[PMOAS2873368] 6JA00526

Component

Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

Sample Rating Trend



Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

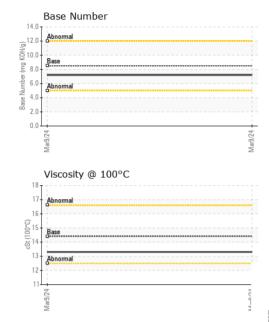
Fluid Condition

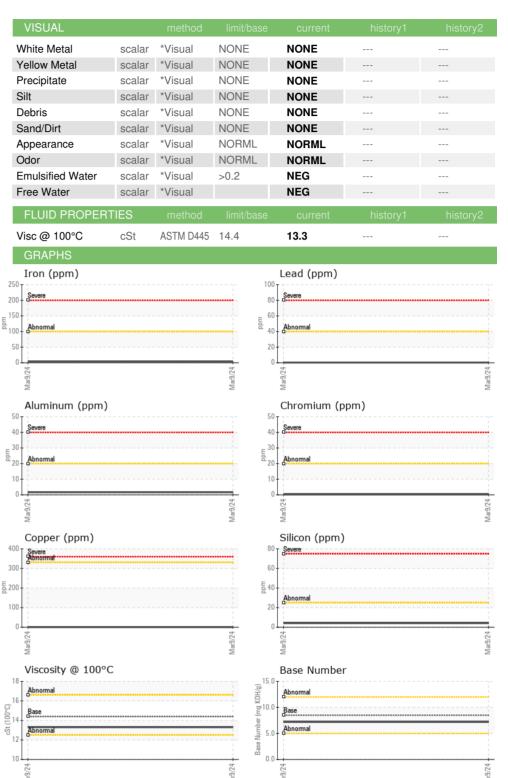
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date Client Info 09 Mar 2024 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info Changed Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 Water WC Method >0.2 NEG					Mar2024		
Sample Date Client Info 09 Mar 2024	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0	Sample Number		Client Info		DC0035011		
Oil Age hrs Client Info Changed	Sample Date		Client Info		09 Mar 2024		
Contamed Client Info Changed Changed Contamination Contamination	Machine Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Oil Changed		Client Info		Changed		
Fuel WC Method S5 <1.0	Sample Status				NORMAL		
Water WC Method >0.2 NEG Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 3 Chromium ppm ASTM D5185m >20 <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 3	Water		WC Method	>0.2	NEG		
Iron	Glycol		WC Method		NEG		
Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	3		
Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >20 2 Aluminum ppm ASTM D5185m >20 2 Lead ppm ASTM D5185m >40 <1	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>4	<1		
Aluminum ppm ASTM D5185m >20 2 Lead ppm ASTM D5185m >40 <1	Titanium	ppm	ASTM D5185m		<1		
Lead	Silver	ppm	ASTM D5185m	>3	0		
Copper ppm ASTM D5185m >3330 <1 Tin ppm ASTM D5185m >15 <1	Aluminum	ppm	ASTM D5185m	>20	2		
Tin	Lead	ppm	ASTM D5185m	>40	<1		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 4 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 3 Manganese ppm ASTM D5185m 100 3 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Zinc ppm ASTM D5185m 1150 915 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>330</td> <th><1</th> <td></td> <td></td>	Copper	ppm	ASTM D5185m	>330	<1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 4 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 3 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 25 4 CONTAMINANTS method limit/base current history1 history2 Sod	Tin	ppm	ASTM D5185m	>15	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 3 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 100 3 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base curr	Boron	ppm	ASTM D5185m	250	4		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1		ppm	ASTM D5185m	10	0		
Magnesium ppm ASTM D5185m 450 42 Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1	Molybdenum	ppm	ASTM D5185m	100	3		
Calcium ppm ASTM D5185m 3000 2398 Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 1150 915 Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844 >3 0 Nitration Abs/:mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/:nm *ASTM D7414 <t< td=""><td>3</td><td>ppm</td><td></td><td>450</td><th>42</th><td></td><td></td></t<>	3	ppm		450	42		
Zinc ppm ASTM D5185m 1350 1107 Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0 Nitration Abs/.mm *ASTM D7624 >20 6.5 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9		ppm	ASTM D5185m	3000	2398		
Sulfur ppm ASTM D5185m 4250 4225 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9	•	ppm					
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1		ppm		1350	1107		
Silicon ppm ASTM D5185m >25 4 Sodium ppm ASTM D5185m >216 <1 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9	Sulfur	ppm	ASTM D5185m	4250	4225		
Sodium ppm ASTM D5185m >216 <1	CONTAMINANTS	3	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9							
INFRA-RED		ppm	ASTM D5185m	>216			
Soot % % *ASTM D7844 >3 0 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9	Potassium	ppm	ASTM D5185m	>20	2		
Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 15.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.9	Soot %	%		>3	0		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm 'ASTM D7414 >25 9.9		Abs/cm		>20			
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	15.9		
	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 8.5 7.2	Oxidation	Abs/.1mm	*ASTM D7414	>25	9.9		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.2		



OIL ANALYSIS REPORT









Certificate L2367

Laboratory Sample No.

Lab Number : 06122181 **Unique Number** : 10936332

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0035011

Received **Tested** Diagnosed

Test Package : MOB 1 (Additional Tests: TBN)

: 19 Mar 2024 : 20 Mar 2024

: 20 Mar 2024 - Wes Davis

KELLY GENERATOR & EQUIPMENT INC 1955 DALE LN OWINGS, MD

US 20736 Contact: LESLIE SNURR

To discuss this sample report, contact Customer Service at 1-800-237-1369. LSNURR@KGE.COM * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (410)257-5225 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (410)257-5227