

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

G1

Component

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

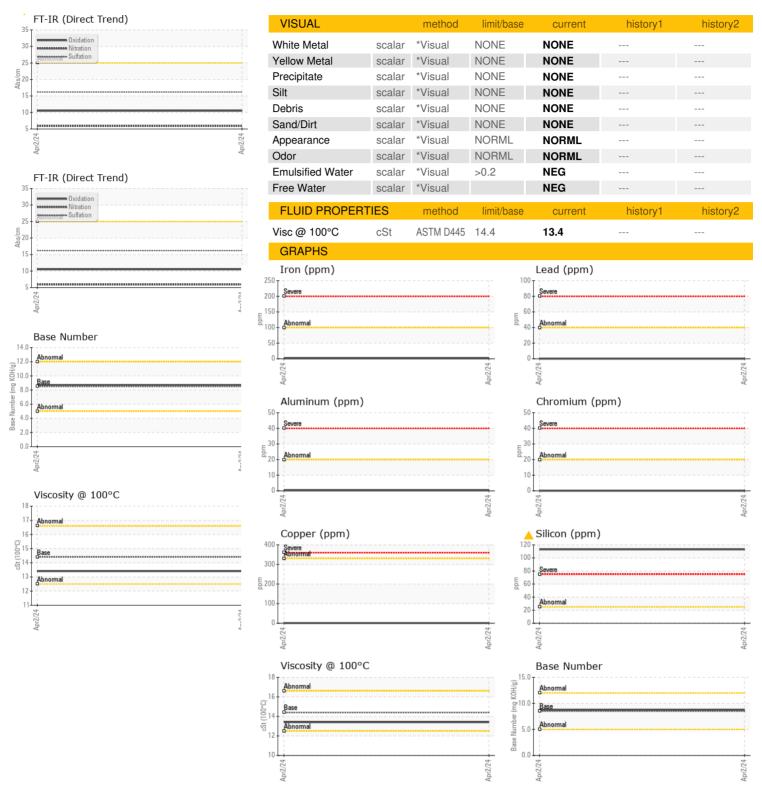
Fluid Condition

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

Fuel					Apr/024		
Sample Number Client Info RW0005560					7,000		
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Client Info	Sample Number		Client Info		RW0005560		
Machine Age hrs Client Info 46 Oil Age hrs Client Info N/A Oil Changed Client Info N/A Sample Status BABNORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0							
Oil Age hrs Client Info 46 Oil Changed Client Info N/A Sample Status BABORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 Water WC Method >5 <1.0 Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 <1 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 Wickel ppm ASTM D5185m >20 <1 Silver ppm ASTM D5185m >20 <1		hrs			-		
Colient Info							
ABNORMAL					-		
Fuel	Sample Status				ABNORMAL		
Water Glycol WC Method WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 <1	CONTAMINATION	V	method	limit/base	current	history1	history2
Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 <1 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >20 <1 Lead ppm ASTM D5185m >20 <1 Lead ppm ASTM D5185m >33.0 <1 Copper ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2	Fuel		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 <1	Water		WC Method	>0.2	NEG		
Description Description	Glycol		WC Method		NEG		
Chromium ppm ASTM D5185m >20 0	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >20 0	iron	mag	ASTM D5185m	>100	c1		
Nickel	-						
STIM D5185m STIM D5185m					-		
Silver					_		
Aluminum ppm ASTM D5185m >20 <1				>3			
Lead							
Copper							
Tin ppm ASTM D5185m >15 0							
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 26 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 14 Manganese ppm ASTM D5185m 100 14 Magnesium ppm ASTM D5185m 450 234 Calcium ppm ASTM D5185m 450 234 Phosphorus ppm ASTM D5185m 100 957 Zinc ppm ASTM D5185m 1350 1041 Sulfur ppm ASTM D5185m >25 113	• •						
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 26 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 14 Manganese ppm ASTM D5185m 450 234 Magnesium ppm ASTM D5185m 3000 2058 Calcium ppm ASTM D5185m 3000 2058 Phosphorus ppm ASTM D5185m 150 957 Zinc ppm ASTM D5185m 4250 3889 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25	Vanadium		ASTM D5185m		0		
Boron ppm ASTM D5185m 250 26 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 100 14 Manganese ppm ASTM D5185m 450 234 Magnesium ppm ASTM D5185m 3000 2058 Phosphorus ppm ASTM D5185m 1150 957 Sulfur ppm ASTM D5185m 1350 1041 Sulfur ppm ASTM D5185m 4250 3889 Sulfur ppm ASTM D5185m 25	Cadmium		ASTM D5185m		0		
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Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 450 234 Calcium ppm ASTM D5185m 3000 2058 Phosphorus ppm ASTM D5185m 1150 957 Zinc ppm ASTM D5185m 1350 1041 Sulfur ppm ASTM D5185m 4250 3889 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 ▲ 113 Sodium ppm ASTM D5185m >158 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 <td>Molybdenum</td> <td></td> <td></td> <td>100</td> <th>14</th> <td></td> <td></td>	Molybdenum			100	14		
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Zinc ppm ASTM D5185m 1350 1041 Sulfur ppm ASTM D5185m 4250 3889 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 113 Sodium ppm ASTM D5185m >158 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *A	Calcium		ASTM D5185m	3000	2058		
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Silicon ppm ASTM D5185m >25 ▲ 113 Sodium ppm ASTM D5185m >158 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Sulfur	ppm	ASTM D5185m	4250	3889		
Sodium ppm ASTM D5185m >158 2 Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Silicon	ppm	ASTM D5185m	>25	<u> </u>		
Potassium ppm ASTM D5185m >20 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Sodium	ppm	ASTM D5185m	>158	2		
Soot % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Potassium		ASTM D5185m	>20	0		
Nitration Abs/cm *ASTM D7624 >20 5.9 Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Soot %	%	*ASTM D7844	>3	0.1		
Sulfation Abs/.1mm *ASTM D7415 >30 16.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 10.5	Nitration	Abs/cm	*ASTM D7624	>20	5.9		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30			
	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.71		



OIL ANALYSIS REPORT





Certificate 12367

Laboratory Sample No. Lab Number : 06141539

: RW0005560 Unique Number: 10966347 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 08 Apr 2024

Tested : 09 Apr 2024 Diagnosed : 10 Apr 2024 - Sean Felton

CITY OF SAGINAW - WATER TREATMENT DIVISION

522 EZRA RUST DR SAGINAW, MI US 48601

Contact: Service Manager

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)

Report Id: CITSAGMI [WUSCAR] 06141539 (Generated: 04/10/2024 14:23:32) Rev: 2

Contact/Location: Service Manager - CITSAGMI

T:

F: