

PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

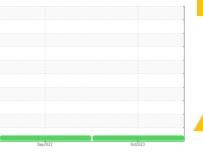


FORD W5G -550 CHASSI FBK6202 (S/N 1FD0W5GT2KEC15019)

Component

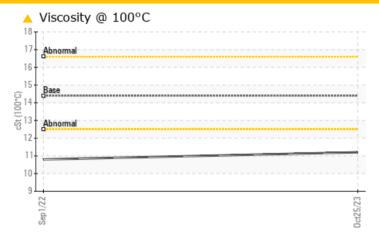
Diesel Engine

DIESEL ENGINE OIL SAE 5W40 (--- QTS)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS Sample Status ATTENTION ATTENTION -- Visc @ 100°C cSt ASTM D445 14.4 ▲ 11.2 ▲ 10.8 --

Customer Id: AR1050BRI
Sample No.: AR10006447
Lab Number: 06007484
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS								
Action	Status	Date	Done By	Description				
Change Fluid			?	Oil and filter change at the time of sampling has been noted.				
Change Filter			?	Oil and filter change at the time of sampling has been noted.				

HISTORICAL DIAGNOSIS

01 Sep 2022 Diag: Jonathan Hester

VISCOSITY



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.





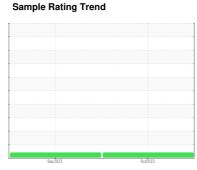
OIL ANALYSIS REPORT

Area **2H28**

FORD W5G -550 CHASSI FBK6202 (S/N 1FD0W5GT2KEC15019)

Diesel Engine

DIESEL ENGINE OIL SAE 5W40 (--- QTS)





DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

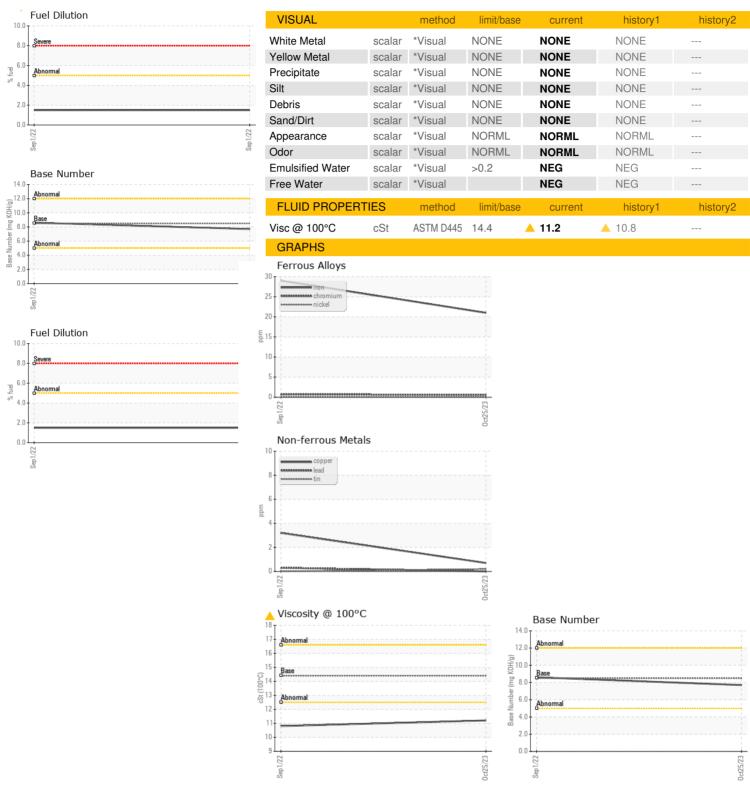
Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION method limit/base current history1 history2				Sep2022	0ct2023		
Sample Date Client Info 25 Oct 2023 01 Sep 2022 Machine Age mls Client Info 140100 108505 Oil Age mls Client Info 32000 0 Oil Changed Client Info Changed ATTENTION Contamination Med ATTENTION ATTENTION CONTAMINATION method limit/base current history1 history2 Iron ppm ASTM 05185m >100 21 29 Nicel ppm ASTM 05185m >20 <1 <1 Nikel ppm ASTM 05185m >2 0 0 Aluminum ppm ASTM 05185m >2 0 0 Aluminum ppm ASTM 05185m >2 0 0 Aluminum ppm ASTM 05185m >3 4 Lead ppm AST	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 140100 108505	Sample Number		Client Info		ARI0006447	ARI0006408	
Oil Age	Sample Date		Client Info		25 Oct 2023	01 Sep 2022	
Client Info Changed Changed	Machine Age	mls	Client Info		140100	108505	
CONTAMINATION	Oil Age	mls	Client Info		32000	0	
CONTAMINATION	Oil Changed		Client Info		Changed	Changed	
WEAR METALS	Sample Status				ATTENTION	ATTENTION	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >100 21 29 Chromium ppm ASTM D5185m >20 -1 -1 Nickel ppm ASTM D5185m >2 0 0 Titanium ppm ASTM D5185m >2 0 0 Silver ppm ASTM D5185m >2 0 0 Aluminum ppm ASTM D5185m >2 0 0 Lead ppm ASTM D5185m >40 0 -1 Copper ppm ASTM D5185m >40 0 -1 Vanadium ppm ASTM D5185m >330 <1 3 Tin ppm ASTM D5185m >15 <1 0 Vanadium ppm ASTM D5185m >50 18	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron	Glycol		WC Method		NEG	NEG	
Chromium ppm ASTM D5185m >20 <1 <1 Nickel ppm ASTM D5185m >2 0 0 Titanium ppm ASTM D5185m >2 0 0 Silver ppm ASTM D5185m >2 0 0 Aluminum ppm ASTM D5185m >2 3 4 Lead ppm ASTM D5185m >40 0 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>100	21	29	
Titanium	Chromium	ppm	ASTM D5185m	>20	<1	<1	
Stiver	Nickel	ppm	ASTM D5185m	>2	0	0	
Aluminum ppm ASTM D5185m >25 3 4 Lead ppm ASTM D5185m >40 0 <1	Titanium	ppm	ASTM D5185m	>2	<1	<1	
Lead	Silver	ppm	ASTM D5185m	>2	0	0	
Copper ppm ASTM D5185m >330 <1 3 Tin ppm ASTM D5185m >15 <1	Aluminum	ppm	ASTM D5185m	>25	3	4	
Tin	Lead	ppm		>40			
Vanadium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 18 10 Barium ppm ASTM D5185m 10 4 6 Molybdenum ppm ASTM D5185m 100 41 61 Manganese ppm ASTM D5185m 100 41 61 Magnesium ppm ASTM D5185m 100 41 61 Magnesium ppm ASTM D5185m 450 895 820 Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base curren	• •	ppm	ASTM D5185m	>330	<1		
Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 18 10 Barium ppm ASTM D5185m 10 4 6 Molybdenum ppm ASTM D5185m 100 41 61 Manganese ppm ASTM D5185m 100 41 -1 Magnesium ppm ASTM D5185m 450 895 820 Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current		ppm		>15			
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Boron	Cadmium	ppm	ASTM D5185m		0		
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Molybdenum ppm ASTM D5185m 100 41 61 Manganese ppm ASTM D5185m < 1 <1 Magnesium ppm ASTM D5185m 450 895 820 Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >20 1 2 Fuel % ASTM D5185m >20 1 2 INFRA-RED method limit/base	Boron	ppm	ASTM D5185m	250	18	10	
Manganese ppm ASTM D5185m <1 <1 Magnesium ppm ASTM D5185m 450 895 820 Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >26 8 9 Potassium ppm ASTM D5185m >20 1 2 Fuel % ASTM D5185m >20 1 2 Fuel % ASTM D5185m >3 0.5		ppm	ASTM D5185m	10	4		
Magnesium ppm ASTM D5185m 450 895 820 Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1		ppm		100			
Calcium ppm ASTM D5185m 3000 1213 1221 Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >20 1 2 Potassium ppm ASTM D5185m >20 1 2 Fuel % ASTM D3524 >5 <1.0	•	ppm					
Phosphorus ppm ASTM D5185m 1150 1088 1014 Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1							
Zinc ppm ASTM D5185m 1350 1306 1212 Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1 0 Potassium ppm ASTM D5185m >20 1 2 Fuel % ASTM D3524 >5 <1.0 1.5 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414					_		
Sulfur ppm ASTM D5185m 4250 3331 3535 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1							
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1	_						
Silicon ppm ASTM D5185m >25 8 9 Sodium ppm ASTM D5185m >44 <1 0 Potassium ppm ASTM D5185m >20 1 2 Fuel % ASTM D3524 >5 <1.0 1.5 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3					3331	3535	
Sodium ppm ASTM D5185m >44 <1	CONTAMINANTS		method	limit/base	current		history2
Potassium ppm ASTM D5185m >20 1 2 Fuel % ASTM D3524 >5 <1.0 1.5 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3		ppm		>25	8	9	
Fuel % ASTM D3524 >5 <1.0 1.5 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3		ppm		>44	<1		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3							
Soot % % *ASTM D7844 >3 0.5 0.6 Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3	Fuel	%	AS1M D3524	>5	<1.0		
Nitration Abs/cm *ASTM D7624 >20 10.6 11.4 Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.0 22.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3	Soot %	%	*ASTM D7844	>3	0.5	0.6	
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3	Nitration	Abs/cm	*ASTM D7624	>20	10.6	11.4	
Oxidation Abs/.1mm *ASTM D7414 >25 17.6 20.3	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	22.6	
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 8.5 7.7 8.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	20.3	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.7	8.6	



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ARI0006447 : 06007484

: 10741246 **Unique Number**

Diagnosed Diagnostician : Don Baldridge **Test Package**: CONST (Additional Tests: FuelDilution, TBN)

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received

: 14 Nov 2023

: 16 Nov 2023

* - 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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