

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# FORD F-250 2000 FORD F-250

Diesel Engine

#### SCHAEFFER #9000 SUPREME 9000 SAE 5W40 (--- QTS)

#### DIAGNOSIS

#### Recommendation

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

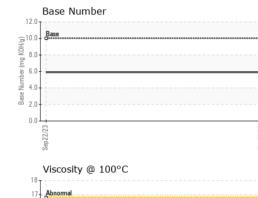
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		JR0131682		
Sample Date		Client Info		22 Sep 2023		
Machine Age	mls	Client Info		369600		
Oil Age	mls	Client Info		8000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	10		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>2	0		
Silver	ppm	ASTM D5185m	>2 >25	0		
Aluminum	ppm	ASTM D5185m ASTM D5185m	>25 >40	2		
Lead	ppm	ASTM D5185m	>40 >330	2		
Copper Tin	ppm			2 <1		
Vanadium	ppm	ASTM D5185m ASTM D5185m	>15	< 1		
Cadmium	ppm	ASTM D5185m		0		
	ppm			0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	limit/base	current 69	history1	history2
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	69 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88		
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118 1293	   	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118	   	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118 1293	    	    
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		69 0 88 <1 20 2450 1118 1293 6085		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118 1293 6085 current	     history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base	69 0 88 <1 20 2450 1118 1293 6085 current 5	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >25	69 0 88 <1 20 2450 1118 1293 6085 current 5 5 5 1	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	69 0 88 <1 20 2450 1118 1293 6085 current 5 5 5 1	     history1  	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	69 0 88 <1 20 2450 1118 1293 6085 <b>current</b> 5 5 1 1 <b>current</b>	     history1   history1	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	69 0 88 <1 20 2450 1118 1293 6085 <b>current</b> 5 5 1 1 <b>current</b> 0.1	     history1   history1  history1	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	69 0 88 <1 20 2450 1118 1293 6085 <i>current</i> 5 5 5 1 <i>current</i> 0.1 9.0	     history1  history1  history1	      history2   history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >25 >20 limit/base >3 >20 >30 >30	69 0 88 <1 20 2450 1118 1293 6085 <i>current</i> 5 5 5 1 <i>current</i> 0.1 9.0 17.1 <i>current</i>	      history1  history1  history1	      history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	Imit/base >25 >20 Imit/base >3 >20 >30	69 0 88 <1 20 2450 1118 1293 6085 <b>current</b> 5 5 1 1 <b>current</b> 0.1 9.0 17.1	      history1  history1  history1	     history2  history2  history2  history2



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## **OIL ANALYSIS REPORT**



	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
2/23	Appearance	scalar	*Visual	NORML	NORML		
Sep22/23	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
)°C	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT		method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445		12.6		
	GRAPHS						
	Ferrous Alloys						
	Non-ferrous Metals						
	Viscosity @ 100°C			12.0	Base Number		
	17- Abnormal			10.0	Base		
	16						
i co	Base			9.8 Q			
	14			-0.8 KOH(0) -0.9 e Mmper (mg KOH(0) -0.9 e Mmper (mg KOH(0)			
,	13			4.0-			
	12 - Abnormal			2.0-			
	11			0.0			
	2/23			5/23	2/23		2/23 -
	Sep 22/23			Sep 22/23	Sep 22/23		Sep22/23
To discuss this sample report, c * - Denotes test methods that ar	: 05961141 I : 10662354 I : CONST ( Additional contact Customer Servi re outside of the ISO 1	Received Diagnose Diagnost Tests: TI ce at 1-8 7025 sco	l : 26 \$ ed : 27 \$ ician : Dor BN ) 00-237-1369 pe of accred	Sep 2023 Sep 2023 n Baldridge 9. litation.		4668 SENECA LEV Contact: Se	VISBURG, WV US 24901 ervice Manager T:
Statements of conformity to speci	fications are based on th	ne simple	acceptance c	decision rule (J	CGM 106:2012	)	F:

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Contact/Location: Service Manager - JAMLEW