

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id **211011** 

Component **Diesel Engine** 

## **MOTORCRAFT SUPER PREMIUM SAE 10W**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Diesel 10w30 )

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

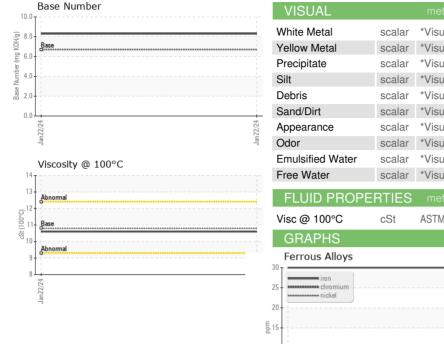
### **Fluid Condition**

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

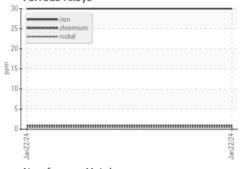
SAMPLE INFORMATION   method   limit/base   current   history2   history2   sample Number   Client Info   22 Jan 2024         Machine Age   mls   Client Info   31437							
Client Info   Client Info   Cample   Date   Client Info   Changed   Client Info   Clie	30 (3 GAL)				Jan 2024		
Cample Date   Client Info   22 Jan 2024       Machine Age   mis   Client Info   31437	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age   mls	Sample Number		Client Info		GFL0095365		
Dit Changed	Sample Date		Client Info		22 Jan 2024		
Client Info   Changed   Client Info   NORMAL   CONTAMINATION   Method   Imit/base   current   history1   history2   Contamination   Contamin	Machine Age	mls	Client Info		31437		
CONTAMINATION   method   minit/base   current   history1   history2   water   WC Method   >5   <1.0         water   WC Method   >0.2   NEG           water   WC Method   NEG       water   WEAR METALS   method   minit/base   current   history1   history2   water   w	Dil Age	mls	Client Info		3707		
CONTAMINATION	Oil Changed		Client Info		Changed		
Victor   V	Sample Status				NORMAL		
Water         WC Method         >0.2         NEG             Glycol         WC Method         Imitibase         current         history1         history2           WEAR METALS         method         limit/base         current         history1         history2           ron         ppm         ASTM D5185m         >20         <1             Chromium         ppm         ASTM D5185m         >20         <1             Filtanium         ppm         ASTM D5185m         >2         <1             Silver         ppm         ASTM D5185m         >2         <1             Silver         ppm         ASTM D5185m         >2         <1             Silver         ppm         ASTM D5185m         >40         0             Januarium         ppm         ASTM D5185m         >40         0             Januarium         ppm         ASTM D5185m         >15         <1             Januarium         ppm         ASTM D5185m         0	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	uel		WC Method	>5	<1.0		
WEAR METALS         method         limit/base         current         history1         history2           ron         ppm         ASTM D5185m         >100         30	Vater		WC Method	>0.2	NEG		
Concord	Glycol		WC Method		NEG		
ASTM D5185m   >20	WEAR METAL	.S	method	limit/base	current	history1	history2
Astanton	on	ppm	ASTM D5185m	>100	30		
Silver   ppm   ASTM D5185m   >2   <1	Chromium	ppm	ASTM D5185m	>20	<1		
Silver	Nickel	ppm	ASTM D5185m	>2	<1		
Ast   Ast	Titanium	ppm	ASTM D5185m	>2	<1		
December   December	Silver	ppm	ASTM D5185m	>2	<1		
April	Aluminum	ppm	ASTM D5185m	>25	4		
Acade   Acad	_ead	ppm	ASTM D5185m	>40	0		
Acade   Acad	Copper	ppm	ASTM D5185m	>330	<1		
Anadium			ASTM D5185m	>15	<1		
ADDITIVES	/anadium		ASTM D5185m		<1		
Soron   ppm   ASTM D5185m   74	Cadmium		ASTM D5185m		0		
Description	ADDITIVES		method	limit/base	current	history1	history2
Sarium	Boron	ppm	ASTM D5185m		74		
Molybdenum         ppm         ASTM D5185m         1             Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         709             Calcium         ppm         ASTM D5185m         1182             Phosphorus         ppm         ASTM D5185m         1013             Zinc         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         25         7             Godium         ppm         ASTM D5185m         1             Potassium         ppm         ASTM D5185m         20         2             Potassium         ppm         ASTM D5185m         20         2             Potassium         ppm         ASTM D5185m         1             Bootium         ppm         ASTM D5185	Barium		ASTM D5185m		0		
Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         709             Calcium         ppm         ASTM D5185m         1182             Phosphorus         ppm         ASTM D5185m         1013             Zinc         ppm         ASTM D5185m         1166             Sulfur         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7             Goldium         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         2             Soot % <td>Molybdenum</td> <td></td> <td>ASTM D5185m</td> <td></td> <td>1</td> <td></td> <td></td>	Molybdenum		ASTM D5185m		1		
Magnesium         ppm         ASTM D5185m         709             Calcium         ppm         ASTM D5185m         1182             Phosphorus         ppm         ASTM D5185m         1013             Zinc         ppm         ASTM D5185m         1166             Sulfur         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7             Potassium         ppm         ASTM D5185m         1             Potassium         ppm         ASTM D5185m         >20         2             Soot % <td>-</td> <td></td> <td>ASTM D5185m</td> <td></td> <td>&lt;1</td> <td></td> <td></td>	-		ASTM D5185m		<1		
Calcium         ppm         ASTM D5185m         1182             Phosphorus         ppm         ASTM D5185m         1013             Zinc         ppm         ASTM D5185m         1166             Sulfur         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7             Potassium         ppm         ASTM D5185m         1             Potassium         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.8	•		ASTM D5185m		709		
Phosphorus         ppm         ASTM D5185m         1013             Zinc         ppm         ASTM D5185m         1166             Sulfur         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7             Sodium         ppm         ASTM D5185m         1              Potassium         ppm         ASTM D5185m         >20         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Sulfation         Abs/.1mm         *ASTM D7624         >20         7.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         12.2         -	-						
Tinc   ppm   ASTM D5185m   1166							
Sulfur         ppm         ASTM D5185m         3485             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         7             Sodium         ppm         ASTM D5185m         1             Potassium         ppm         ASTM D5185m         >20         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Solfation         Abs/.1mm         *ASTM D7624         >20         7.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         12.2							
Solicon   ppm   ASTM D5185m   >25   7							
Sodium   ppm   ASTM D5185m   1           Potassium   ppm   ASTM D5185m   >20   2         INFRA-RED   method   limit/base   current   history1   history2     Soot %   *ASTM D7844   >3   0.3         Nitration   Abs/cm   *ASTM D7624   >20   7.8         Sulfation   Abs/.1mm   *ASTM D7415   >30   18.8         FLUID DEGRADATION   method   limit/base   current   history1   history2     Dxidation   Abs/.1mm   *ASTM D7414   >25   12.2	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Sodium	Silicon	ppm	ASTM D5185m	>25	7		
Potassium         ppm         ASTM D5185m         >20         2             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Nitration         Abs/cm         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Dxidation         Abs/.1mm         *ASTM D7414         >25         12.2					1		
Goot %         %         *ASTM D7844         >3         0.3             Nitration         Abs/cm         *ASTM D7624         >20         7.8             Gulfation         Abs/.1mm         *ASTM D7415         >30         18.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         12.2				>20			
Nitration         Abs/cm         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         18.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         12.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         18.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Dxidation         Abs/.1mm         *ASTM D7414         >25         12.2	Soot %	%	*ASTM D7844	>3	0.3		
Sulfation         Abs/.1mm         *ASTM D7415         >30         18.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Dxidation         Abs/.1mm         *ASTM D7414         >25         12.2	Nitration	Abs/cm	*ASTM D7624	>20	7.8		
<b>Dxidation</b> Abs/.1mm *ASTM D7414 >25 <b>12.2</b>							
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2		
	Base Number (BN)	mg KOH/g			8.3		

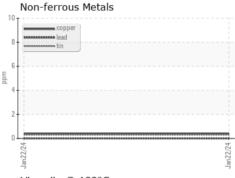


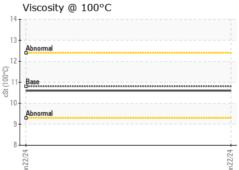
# **OIL ANALYSIS REPORT**

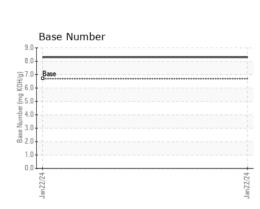


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.8	10.6		











Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10850315 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0095365 : 06073638

Recieved Diagnosed

: 30 Jan 2024 : 31 Jan 2024 Diagnostician : Don Baldridge GFL Environmental - 930 - Mosinee HC

1372 State Highway 34 MOSINEE, WI US 54455 Contact: Kirk Koss

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)

T: (715)571-2784

F: