

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id FORD EXC Component Diesel Engine Fluid MOBIL FULL SYNT (--- GAL)

DIAGNOSIS

A 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

Light fuel dilution occurring.

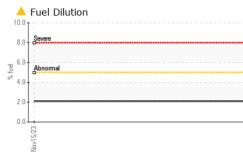
Fluid Condition

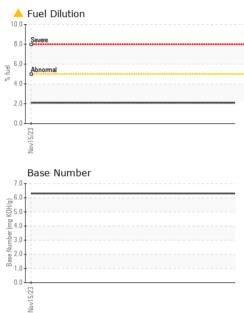
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0009234		
Sample Date		Client Info		15 Nov 2023		
Machine Age	mls	Client Info		114000		
Oil Age	mls	Client Info		5000		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	63		
Chromium	ppm	ASTM D5185m	>20	4		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	4		
Lead	ppm	ASTM D5185m	>40	4		
Copper	ppm	ASTM D5185m	>330	4		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		96		
Barium	ppm	ASTM D5185m		3		
Molybdenum	ppm	ASTM D5185m		36		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		760		
Calcium	ppm	ASTM D5185m		1046		
Phosphorus	ppm	ASTM D5185m		903		
Zinc	ppm	ASTM D5185m		1045		
Sulfur	ppm	ASTM D5185m		3217		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	12		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	2		
Fuel	%	ASTM D3524	>5	<mark>/</mark> 2.1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	8.8		
Sulfation	Abs/.1mm	*ASTM D7415	>30	34.0		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.0		
Base Number (BN)	mg KOH/g	ASTM D2896		6.3		



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	SUAL		method	limit/ba	se	current	history1	history2
	te Metal	scalar	*Visual	NONE		NONE		
Yello	ow Metal	scalar	*Visual	NONE		NONE		
Prec	cipitate	scalar	*Visual	NONE		NONE		
Silt		scalar	*Visual	NONE		NONE		
Deb		scalar	*Visual	NONE		NONE		
	d/Dirt	scalar	*Visual	NONE		NONE		
5	earance	scalar	*Visual	NORML		NORML		
000		scalar	*Visual	NORML		NORML		
	ulsified Water	scalar	*Visual	>0.2		NEG		
Free	e Water	scalar	*Visual			NEG		
FL	UID PROPE	RTIES	method	limit/ba	se	current	history1	history2
Visc	:@100°C	cSt	ASTM D445		4	11.9		
GI	RAPHS							
250 T	on (ppm)				100 T	Lead (ppm)		
200 - Sev	vere				80-	Severe		
					60			
150 - Abr	normal				E 40	Abnormal		
50 -					20-			
0					0			
Nov15/23				Nov15/23		Nov15/23		
				Nov				
Alu	uminum (ppm)				50 .	Chromium (pp	m)	
40 - Sev	vere				40	Severe		
						T		
20 - Abr	normal				ط ³⁰	Abnormal		
10					10			
o					0			
Nov15/23				Nov15/23		Nov15/23		
—				Nov		_		
400-	opper (ppm)				80 .	Silicon (ppm)		
Abi	vere nomnal							
300					60-			
틆 200 -					튭 40 -	Abnormal		
100					20-	Abnormal		
0					0			
Nov15/23				Nov15/23		Nov15/23		
				Nov				
▲ Vis	scosity @ 100°C				8.0 T	Base Number		
Abr	normal				(B/HO			
(5-00) 14 (5-00) 14 (5-00) 14					0.9 0.9 000 0.9 000 0.9 000 0.0 0.0 0.			
0014-	nomal				1a 4.0			
12	normal				III 2.0			
10					ee 0.0			
Nov15/23				Nov15/23		Nav15/23		
Nov				Nov		Nov		
Sample No. : PCA Lab Number : 060	28487	01 Madis Recieved Diagnose Diagnost	d :07 ed :15	ry, NC 27 Dec 2023 Dec 2023 athan Hes			1750 MANH	A.V. IN IATTAN ROA JOLIET, US 238

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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