

Coolant Analysis Report

North America: +1-877-971-7799



		A 000	nt Inforn	antion						00015	on ont!			port s	everity ba	sed on	comments.		C	mala I	orms+	ion.			
Λ	ount Number		Component Information Component ID: 1FTNW21F33EA23489 EC										Sample Information Tracking Number: 20050K46057												
	ount Number:			•					2348	9 EC		_													
Co	mpany Name:	Secondary ID: 2003 F250 FRONT											Lab Number: I-146243												
		Component Type: COOLANT - CONVENTIONAL EG											Lab Location: Indianapolis												
_		Manufacturer: FORD Model: F250											Data	a Analy		26 5 1	2020								
F	hone Number	:						اممد				MOTIV	/E	Ç.,c	tom					impled:					
							Capac		ication	1.	AUTU	IVIOTIV	E	эуз	tem		Received: 06-Mar-2020								
							capac										Resolved: 06-Mar-2020 Completed: 11-Mar-2020								
									Mi	scella	neous	Inform	natio	n					duct In						
									1411	Jeene	incous	11110111	iatio				Produc	ct Manuf					ted		
																	Troduc	ot ivialiai				-		nuasta	
		C	. £1 la :	- 41-1			Product Name: Information Requestions and install new recommended coolant; Copper is at a SEVERE level, copper can attack the														•				
CC																									
other metals in the cooling system; Copper sources may be corrosion or erosion of the radiator (tubes, top tank, side-plates), heat exchanger, oil coole air cooler, thermostat, and/or residual from a previous issue. The nitrite level is low which may be due to precipitation from over treatment with inhibitions.																_									
leak, over extending service, or mixing coolant formulations. The pH level is moderately low and below specifications. This may indicate inadequate buffer																									
air leak, combustion gas leak, localized overheating, mixing coolant formulations, or over extending coolant use. Aluminum corrosion is at a MODERAT																									
Aluminum sources may be corrosion or erosion of the radiator, heat exchanger, oil cooler, charge air cooler, thermostat, and/or residual from a process of the radiator.															revious	issue.									
		Please	provide	missing (COOLANT	MANU	FACTUR	ER an	d PRO	DUCT	NAMI	E; Resa	mple	in 6	0 days;										
																		Contaminants Carrier S							
		Comple Information							Corrosion Metals (ppm)										Corro	cian Inh	ihitoro	(nnm)			
		Sample Information								Corrosio			s (hh	''' <i>)</i>			(pp		COITO	orrosion Inhibitor		(ppiii)	(ppii	n/10) 	
	ō	9 9		Coolant Time	me	a	70	e.										E		tes	;	Molybdenum			
#	əldı	DateReceived		Coola Time	UnitTime	ang	SCA Added	ang										iesi		pha		den		Ę	
ple	San		Sece	j	n n	CoolantChange	ŠΑ	FilterChange		nin				<u>_</u>		_		Magnesium		Phosphates		Ιλρ		ıssiı	
Sample#	DateSampled		atel					Filte		Aluminum	er					iun	E.	2	5	on P	_	Σ	Ш	Potassium	
		Δ		mi	mi mi		gal		Iron	5 `	Copper	Lead	Tin	Silver	Zinc	Titanium	Calcium		Silicon		Boron		Sodium		
1	26-Feb-2020	06-Mar			203330	Unk	0	Unk	4	10	23	0	0	0	0		6	4	9	46	816	6	397	120	
											Visua	l Testir	ng												
															Λ	/lagne	tic	Non-Magnetic							
‡	Foan	n		Cold			0	il		Fuel					Pr	ecipit			Precipi	ecipitation			Odor		
1	None	None Clear Dark Yellow					None None Non								None	e None				None					
										В	asic Te	sting													
		Antifreeze									7	otal						Specific					Carboxylic		
					Per	cent					На	rdness			Nitrit	:e	Condu	ıctance					Acid		
#	Freeze Point	: (°F)	Boil Po	int (°F)	(%)	pl	H Wat	ers (pl	H)	(ı	opm)			(ppm	1)		(μS)		CA Num	ber		(Pass / Fail)		
1	-56	-56 228 58				7.3 29 <5 - Strip										3870		0	.0						
							Additional Testing																		
												100	۵												
	pa																								
#	ds ds																								
Sample#	Total Dissolved Solids																								
San	ppm																								
1	2050																								

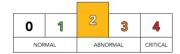
Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.

Historical Comments



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Overall report severity based on comments.

Account Information											Com	ponent I				Sample Information									
Account Number:										Com	ponent	ID: 1FTN	W21F3	3EA23	489 TF		Tracking Number: 20050J46054								
Company Name:											•	003 F250				Lab Number: I-143186									
												JTO/POW	/ERSHI	FT TRA	NSMIS	SION	Lab Location: Indianapolis								
Address: Phone Number:										anutac	cturer: F					Data Analyst: SAT									
'	none N	umbe	er:							٠ا:	Model: cation:	AUTOI				Sampled: 26-Feb-2020									
									Capa	ump		Received: <mark>06-Mar-2020</mark> Completed: _{09-Mar-} 2020													
									Cupt		Completed: 09-Mar-2020														
Filter Information												Product Information													
	Filt	er Typ	e: Infor	mation	Reques	ted											Product Manufacturer: Information Requested								
	Mic	cron F	Rating: 0																Р	roduc	ct Name	: Inform	ation Re	quested	
																Viscosity Grade: Information Requested									
C	omment	:S	00							ate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conc															
										clude contamination, incorrectly identified viscosity grade, or adding a different viscosity grade to the c													•		
Acid Number is SLIGHTLY HIGH, which m provide missing lubricant information. M												•										•			
			1.		-				iaiiuiaci	urer, _l	product	marrie, ai	iu visco	osity gi	auc ai	i to pro	perry ev	aiuate	iubii	icant pro	pper ties	. LODINIC	AIV I		
	TIME was not provided for this sample. Contaminant Metals																								
	Wear Metals (ppm)											(ppm)		Multi-Source			Metals	letals (ppm)		Addit		itive Metals (ppn)	
															٦		υ			ج			ST		
		٦		٦				_		۽			٦		Molybdenum	≥	Manganese			Magnesium			Phosphorus		
Sample#		Chromium		Aluminum				Cadmium		Vanadium			Potassium		ybdy	Antimony	ang			agn(osp		
am		hro	_	lum	er			adr		ana	ے	٤	ota	L L L	Mol	htii	Š	٤	_	Ž	Ę	Ε	Р		
S	Iron	٥	Nickel	◀	Copper	Lead	۱ <u>۱</u>	1	Silver	>	Silicon	Sodium	<u> </u>	Titanium				Lithium	Boron		Calcium	Barium		Zinc	
1	29	0	1	6	23	3	2	C		0		<u>ب</u>	0	0	0	0	0	0	<u>m</u>	0		0	194	15	
				Sample	Inforn	nation	<u> </u>						Cont	amina	nts					F	Fluid Properties				
					I														1						
	7	5		ъ	me	LubeTime UnitTime		ge	, p	ge	_	Fuel Dilution						Viscosity	.0 Visgosity		Acid Number	BaseNo. D4739	Oxidation	ıtior	
#	y du	DateSampled		DateReceived			Jit I	han	Lube Added	han		rue Diil		_		Š	ָּטָ	ایج	<u> </u>	Acid	Acic Nur	ase 1473	kida	Nitration	
Sample#	Sar						5	LubeChange	7 4	FilterChange				Soot		**************************************	۵ د	>	9 >	100	·	ш Ц	ô	_	
Sar	Date	Š		atel				3		世											mg	mg		abs/0.1	
				Δ	mi	ı	ni		gal		9/	6 Vol		% Vol		% \	/ol	cSt	c:	St I	KOH/g	KOH/g	abs/cm	mm	
1	26-Feb-2	.020	06-Ma	r-2020	0	203	330	Unk	0	Unk						<.1 -	FTIR		5.	.3	0.84		19	4	
Particle Count (particles									/mL)		•						Additional Testing								
#a	ISO Cod	e																							
Sample#	Based On > 4 > 6 > 10 > 14 >				> 21	1 > 38 >		> 70	> 100		est														
Sa	4/6/1	4	μm	μm	μm	ŀ	ım	μm	μr	n	μm	μm	Me	thod	-										
11 1																									

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Overall report severity based on comments.

Account Information											Com	ponent li			po. c se v	Sample Information										
Acc	count Nu	ımbe	er:							Comp		ID: 1FTN			489 E)	Tracking Number: 20050J46055									
Co	ompany	Nam	e:						Se	condary	ID: F2	50 2003	FRONT				Lab Number: I-143168									
			C	ontact:				(Compo	nent Ty	pe: DIE	SEL ENG	INE			Lab Location: Indianapolis										
		Addr	ess:						Ma	nufactu	ırer: F0	ORD				Data Analyst: RMF										
F	Phone N	umb	er:							N	۱odel:	F250				Sampled: 26-Feb-2020										
										Applicat	tion:	E S	ump	Received: <mark>06-Mar-2020</mark>												
									Capacity:										Completed: 09-Mar-2020							
			Filte	r Inform	ation						Misce	llaneous	Inform	ation		Product Information										
			ype: Ir	nformati	on Re	queste	d M	icron									Produ	ct Man	ufactur	er: SHI	ELL					
	Rating:	0																	duct Na							
			le:							1.6						Viscosity Grade: SAE 15W40										
Co	omment	:S							nediate need for maintenance action. Continue to observe the																	
									on what should be present for the identified lubricant. This ment lubricant or formulation may have been in use prior to a re										• • •					•		
				km) and					intiublicant or formulation may have been in use prior to a re										ecent change. Continue to use naturor 3,000 fillies							
			-	•					Contaminant Metals																	
				Wear	Metals	(ppm))					(ppm)		Multi-Sourc			Metals (ppm)			Additive Metals (ppn			n)			
															ے		υ U			۶			S			
		ے		_				_		_			_		Molybdenum	>	Manganese			Magnesium			Phosphorus			
#əle		niur		inur				l in		diur			siur		/pqe	non	ange			agne			ldsc			
Sample#		Chromium		Aluminum	-			Cadmium		Vanadium	_	ε	Potassium	E	Moly	Antimony	ž	٤		Š	Ε	ڃ	Ph			
Š	Iron	ט	Nickel	A	Copper	Lead	_		Silver	>	Silicon	Sodium	Ā	Fitanium	_	◀		Lithium	Boron		Calcium	Barium		Zinc		
1	25	1	_	2	Ŭ 1	_ Le	o Tin	0	o Si	0	S.)S 4	6	i <u> </u>	14	0	0	0	ച്ച് 138	192	ئ 2123	0 <u>B</u>	1075	i⊽ 1245		
-	23				Inform									caminants					130			perties	_	1243		
			<u> </u>	Jumpic	1	lation	I	1					Conta	iiiiiiai	11.5				<u> </u>	1	1	perties	1			
	7				ā		<u>و</u>	a)		a)		uo.						<u>:</u>	Ė		ber	o _	uo	ion		
	beld	<u>.</u>		ved	LubeTime	į	Unitlime	LubeChange	Lube Added	angı	٩	Dilution				,	_	Viscosity	.0 Visæsity	1	Acia Number	BaseNo. D4739	Oxidation	Nitration		
ple#	Sam			ecei	npe		- -	S S	Lu	Ş	ш	. Ш		Soot		+	water Visc		40 Vis		∢ Z	Ba D4	ÖXİ	Ë		
Sample#	DateSampled			DateReceived	-			Ϋ́		FilterChange				So			>			Ì,	mg	mg		abs/0.1		
0,		1		Da	mai .	_			aal		0/	Val		0414			/al			кс	OH/g	KOH/g	aha/am	mm		
1	26-Feb-2	mi mi 5-Feb-2020 06-Mar-2020 4230 203330 Unk				Unk	gal 0	Unk		% Vol - Estimate		% Vol <.1		% \ <.1 -	FTIR	cSt	13.			6.93	abs/cm 13	7				
	Particle Count (particles															Additional Testing										
	Farticle Count (particles												T						uuitioii	ai iest	"'B					
	ادل رحم																									
ple#	ISO Code Based 0		> 4	> 6	> 10		14	> 21	> 20	, ,	70	> 100	Te	st												
Sample#	4/6/14		ν4 μm	μm	μm		ım	μm				2100 μm	Metl													
1	- //	// µm µm µm µm µ				P****	μι μι			L																

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