

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: ONLINE-7145-0000 Company Name: ██████████ Contact: ██████████ Address: ██████████ Phone Number: ██████████		Component ID: 2021 RANGER E Secondary ID: ██████████ Component Type: GASOLINE DIRECT INJECTION ENG. Manufacturer: FORD Model: RANGER Application: UNKNOWN Sump Capacity: ██████████		Tracking Number: ██████████ Lab Number: ██████████ Lab Location: Indianapolis Data Analyst: JPH Sampled: 04-May-2024 Received: 10-May-2024 Completed: 14-May-2024	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: Information Requested Micron Rating: 0				Product Manufacturer: MOTORCRAFT Product Name: PREMIUM SYNTHETIC BLEND Viscosity Grade: SAE 5W30	
Comments		<p>Check for source of FUEL LEAK. Fuel is at a SEVERE LEVEL. Fuel dilution may be caused by component faults related to injectors, ignition/timing, or excessive blow-by. Additional causes include heavy throttle application, engine lugging, frequent short trips and excessive idling. LUBRICANT and FILTER CHANGE is suggested if not done at sampling time. FUEL DILUTION has caused viscosity to decrease slightly below grade; FUEL DILUTION reduces the viscosity of the lubricant which decreases FILM STRENGTH and LUBRICITY and may lead to increased wear. MINOR POTASSIUM could be a coolant indicator; Coolant leaks at this level will most likely not be detectable through normal diagnostics; Suggest MONITORING COOLANT LEVEL closely between samples; Flagged additive levels are different than what should be present for the identified lubricant. This may have been topped off with a different lubricant, the fluid may be misidentified, or a different lubricant or formulation may have been in use prior to a recent change. Resample at half interval. Sample information has been added or tests have been rerun or additional testing was added and the report has been regenerated.</p>			

Sample #	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)					Additive Metals (ppm)					
	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
1	4	0	0	8	1	0	1	0	0	0	10	3	24	0	74	2	1	0	112	547	958	12	760	792

Sample #	Sample Information							Contaminants			Fluid Properties					
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base No. D4739	Oxidation	Nitration
			mi	mi		gal		%	%	%	cSt	cSt	mg KOH / g	mg KOH / g	abs / cm	abs / 0.1mm
1	04-May-2024	10-May-2024	2317	25396	No	0	No	>5 - GC	<.1	<.1 - FTIR		7.8				

Sample #	Particle Count (particles/mL)									Additional Testing	
	ISO Code	> 4	> 6	> 10	> 14	> 21	> 38	> 70	> 100	Test Method	
	Based On 4/6/14	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL		
1	/ /										

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