



Sample does not meet ASTM specifications for fuel type designated.

Account Information	Component Information	Sample Information
Account Number: CUMDBU-0425-0004 Company Name: CUMMINS SALES & SERVICE Contact: MIKE MCKEOWN/JOE WICKERHAM Address: 5221 HWY 763 COLUMBIA, MO US Phone Number: 573-449-3711	Component ID: 35134237 COMP PORT DF Secondary ID: ENGINE Fuel Type: #2 DIESEL FUEL LOW SULFUR Manufacturer: Model: Application: MARINE Tank Capacity:	Tracking Number: 20209Y68433 Lab Number: I-563561 Lab Location: Indianapolis Data Analyst: RMF Sampled: 06-Oct-2020 Received: 08-Oct-2020 Completed: 13-Oct-2020
Filter Information	Miscellaneous Information	
Filter Change: No Filter Type: Information Requested Micron Rating: 9		
Comments	Particle count results exceed acceptable limits. Increased injector and fuel pump WEAR may result. PARTICLE COUNT RESULTS suggest the use of PORTABLE FILTRATION to improve SYSTEM CLEANLINESS; and/or; FILTER CHANGE suggested if not done at sampling time (as applicable).	

Test Results									
Test Method	Test Name	Result	Min	Max	Elemental Analysis mod. ASTM D5185	Result	Min	Max	
ASTM D7220	Sulfur (ppm)				Iron (ppm)	1			
ASTM D2709	Water and Sediment (%)				Chromium (ppm)	0			
mod. ASTM D6304	Water by Karl Fischer (%)				Nickel (ppm)	0			
mod. ASTM D6304	Water by Karl Fischer (ppm)	65		500	Aluminum (ppm)	1			
Manufacturer	Aerobic Bacteria (Counts)				Copper (ppm)	0			
Manufacturer	Bacteria (Counts)	0			Lead (ppm)	1			
Manufacturer	Fungi (Counts)	Negative			Tin (ppm)	0			
Manufacturer	Mold (Counts)	0			Cadmium (ppm)	0			
mod. ASTM D6468	Thermal Stability (%)				Silver (ppm)	0			
mod. ASTM D445	Viscosity 40°C (cSt)				Vanadium (ppm)	0			
mod. ASTM D445	Viscosity 100 °C (cSt)				Silicon (ppm)	0			
mod. ASTM D664	Acid Number (mg KOH/g)				Sodium (ppm)	0			
ASTM D7689	Cloud Point (°C)				Potassium (ppm)	1			
ASTM D7346	Pour Point (°C)				Titanium (ppm)	0			
ASTM D6371	Cold Filter Plug Point (°C)				Molybdenum (ppm)	0			
ASTM D3828	Closed Cup Flash Point (°C)				Antimony (ppm)	1			
ASTM D7345	Distillation Initial Boiling Point (°C)				Manganese (ppm)	0			
"Predicted D86"	Distillation 10% Recovered (°C)				Lithium (ppm)	0			
ASTM D7345	Distillation 50% Recovered (°C)				Boron (ppm)	11			
"Predicted D86"	Distillation 90% Recovered (°C)				Magnesium (ppm)	0			
ASTM D7345	Distillation Final Boiling Point (°C)				Calcium (ppm)	1			
"Predicted D86"					Barium (ppm)	0			
ASTM D976	Cetane Index				Phosphorus (ppm)	0			
ASTM D7777	API Gravity				Zinc (ppm)	0			
ASTM D7777	Density (g/mL)								
Internal Method	Specific Gravity				Particle Count (particles/mL) ISO 4406 & mod. ISO 11500	Result	Min	Max	
ASTM D4868	BTU Per Gallon (BTU/gal)				ISO Cleanliness Code	24 / 23 / 19	/ /	18 / 16 / 13	
ASTM D4868	BTU Per Pound (BTU/lb)				> 4µm	114909		2500	
ASTM D6079	Lubricity (µm)				> 6µm	47894		640	
ASTM D130	Copper Corrosion				> 10µm	11970			
ASTM D482	Ash Content (mass %)				> 14µm	4270		80	
ASTM D189	Carbon Residue (%)				> 21µm	1063			
ASTM D7371	% Biodiesel - FAME (%)				> 38µm	72			
					> 70µm	2			
					> 100µm	0			

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.