Aviation Investigation Final Report

Location:	St Jacob, Illinois	**Accident Number:**	CEN15LA177
Date & Time:	March 7, 2015, 15:00 Local	**Registration:**	N87EV
Aircraft:	Ercoupe 415 C	**Aircraft Damage:**	Substantial
Defining Event:	Fuel contamination	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Ferry		

Analysis

The pilot reported that he was flying the accident airplane under a ferry permit to the destination airport. However, due to unsafe runway conditions at the destination, he chose to land at an alternate airport nearby. Upon arrival at the alternate airport, the pilot executed an aborted landing. He applied engine power and climbed the airplane to about 150 to 200 ft and then the engine lost power without any warning. During the forced landing, the airplane sustained substantial wing and firewall damage. During a postaccident engine run using the header tank fuel from the accident flight, the engine started, ran roughly, and would not accelerate smoothly. The header tank was drained, and fresh aviation fuel was added to the tank; the engine then ran smoothly and accelerated normally. The engine likely lost power due to contaminated fuel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The loss of engine power during the go-around due to fuel contamination.

Findings

Aircraft	Fuel - Fluid condition

Factual Information

History of Flight

Approach-VFR go-around	Fuel contamination (Defining event)
Emergency descent	Off-field or emergency landing
Emergency descent	Collision with terr/obj (non-CFIT)

On March 7, 2015, about 1500 central daylight time, an Ercoupe 415-C airplane, N87EV, impacted terrain during a forced landing following a loss of engine power during a go-around near the St Louis Metro-East Airport/Shafer Field (3K6), St Jacob, Illinois. The private pilot was uninjured. The airplane sustained substantial firewall and wing damage. The airplane was registered to an individual and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a ferry flight. Day visual flight rules conditions prevailed for the flight, which did not operate on a flight plan. The flight originated from the A Paul Vance Fredericktown Regional Airport (H88), near Fredericktown, Missouri, about 1400.

The pilot stated in his accident report that he was flying the accident airplane under a ferry permit from H88 to Sackman Field Airport (H49), near Columbia, Illinois. However, due to unsafe runway conditions at H49, 3K6 was chosen as an alternate airport. Upon arrival at 3K6, the pilot executed an aborted landing. He applied engine power and climbed about 150-200 feet. The engine lost power without any "coughing" or warning.

At 1358, the recorded weather at the Scott Air Force Base/MidAmerica Airport, near Belleville, Illinois, was: Wind 230 degrees at 2 knots; visibility 10 statute miles; sky condition clear; temperature 18 degrees C; dew point 1 degree C; altimeter 30.13 inches of mercury.

A Federal Aviation Administration inspector examined the accident airplane. He observed that the fuel exiting from the header fuel tank was not aviation gasoline. The inspector observed the accident airplane during a subsequent engine run. The engine started, ran rough, and it would not accelerate smoothly when it was fed fuel from the header tank containing fuel from the accident flight. The header tank was drained and fresh aviation gasoline was added to the tank. The engine ran smoothly and accelerated normally.

Pilot Information

Certificate:	Private	**Age:**	48
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	April 28, 2014
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 1, 2014
Flight Time:	456 hours (Total, all aircraft), 6 hours (Total, this make and model), 9.3 hours (Last 90 days, all aircraft), 4.8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe	**Registration:**	N87EV
Model/Series:	415 C C	**Aircraft Category:**	Airplane
Year of Manufacture:	1946	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	958
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	March 25, 2015 Annual	**Certified Max Gross Wt.:**	1260 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2411 Hrs as of last inspection	**Engine Manufacturer:**	CONT MOTOR
ELT:	C91 installed, not activated	**Engine Model/Series:**	A&C75 SERIES
Registered Owner:	On file	**Rated Power:**	75 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KBLV,459 ft msl	**Distance from Accident Site:**	11 Nautical Miles
Observation Time:	13:58 Local	**Direction from Accident Site:**	191°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	2 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	230°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.12 inches Hg	**Temperature/Dew Point:**	18°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FREDERICKTOWN, MO (H88)	**Type of Flight Plan Filed:**	None
Destination:	St Jacob, IL (3K6)	**Type of Clearance:**	None
Departure Time:	14:00 Local	**Type of Airspace:**	

Airport Information

Airport:	ST LOUIS METRO-EAST 3K6	**Runway Surface Type:**	Asphalt
Airport Elevation:	477 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	13	**IFR Approach:**	None
Runway Length/Width:	2662 ft / 50 ft	**VFR Approach/Landing:**	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	38.732776,-89.806663(est)

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Kyle D Kraus; Federal Aviation Administration; St Ann, MO
Original Publish Date:	August 25, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=90906