

June 15, 2015

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046

Subject: Oil Sensor Internal Photos

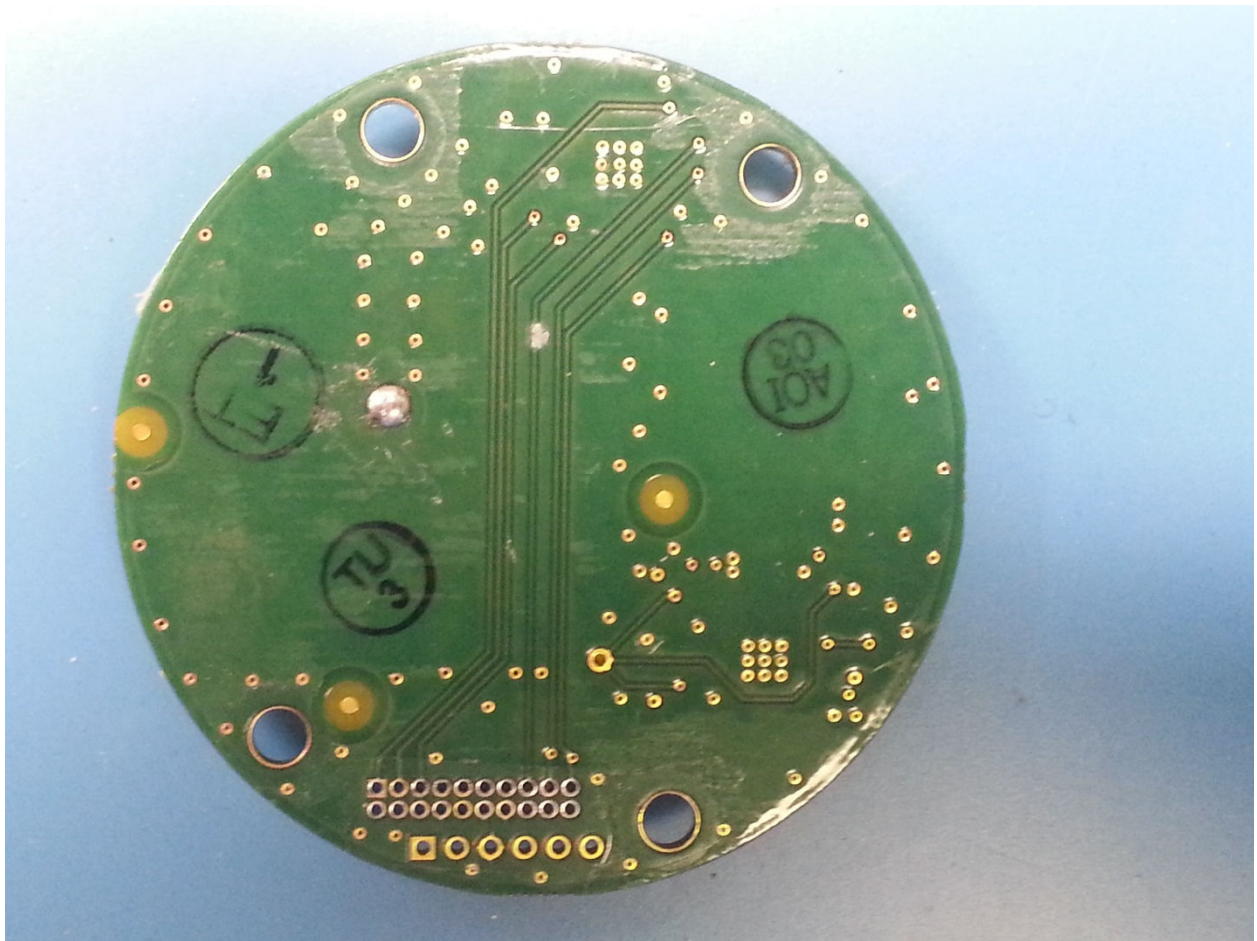


Image 1: Antenna Board Assembly, Solder Side

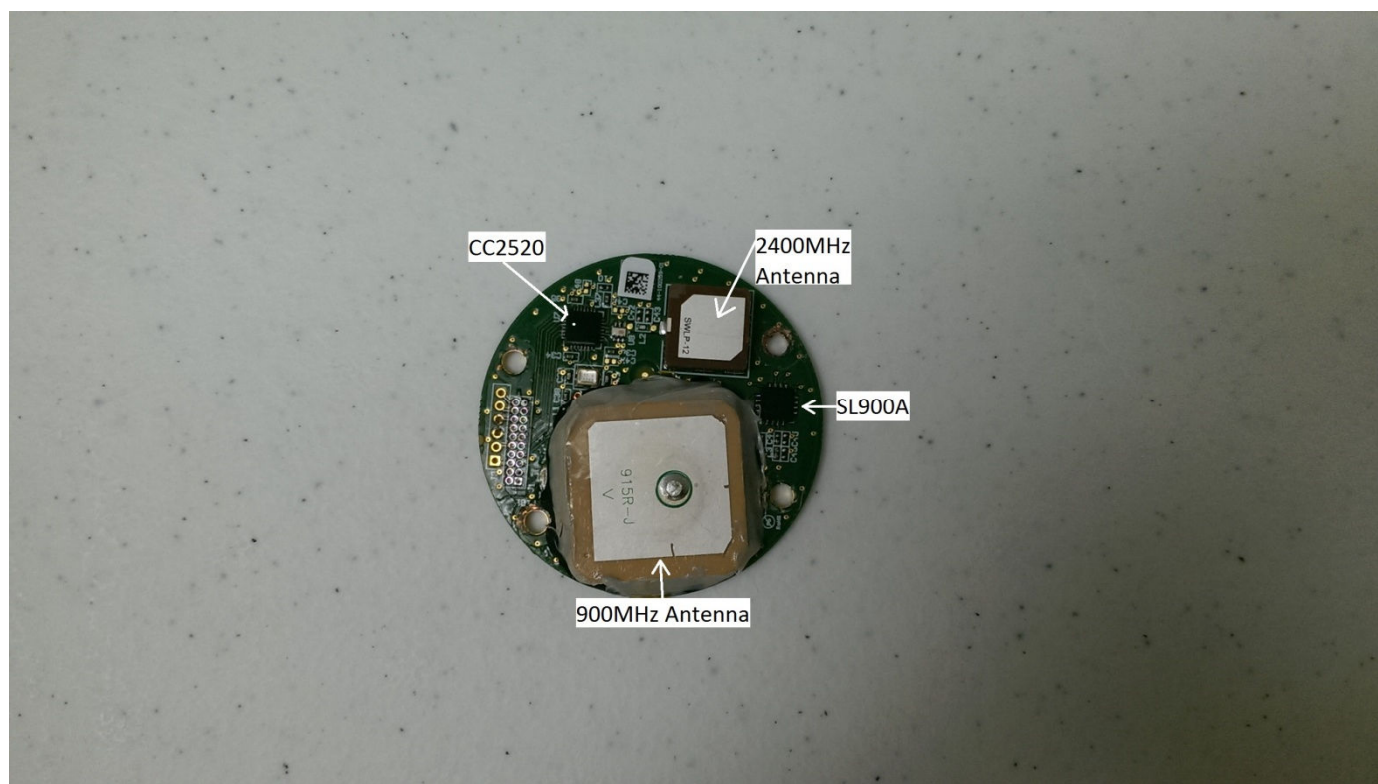


Image 2: Antenna Board Assembly, Component Side

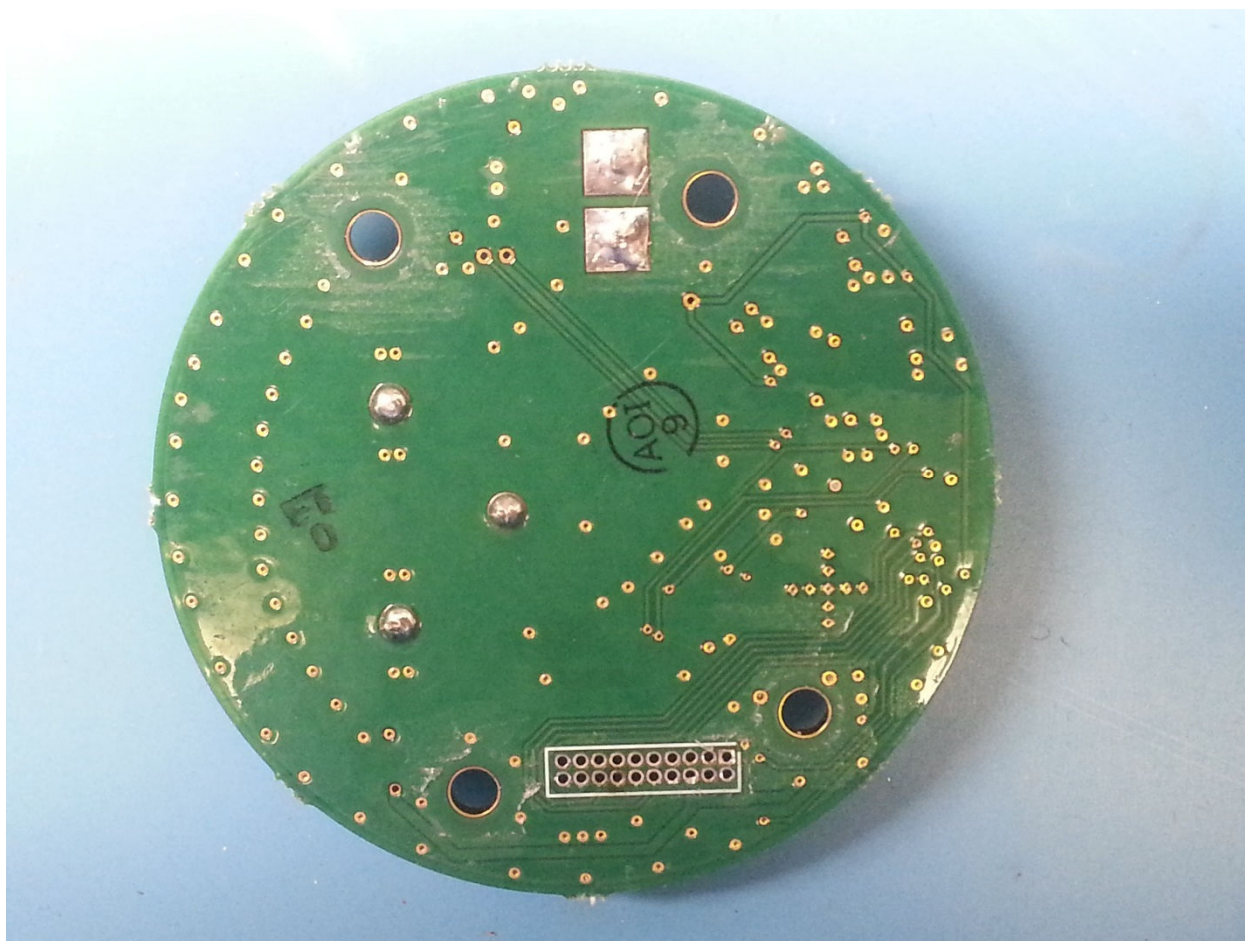


Image 3: Battery Board Assembly, Solder Side

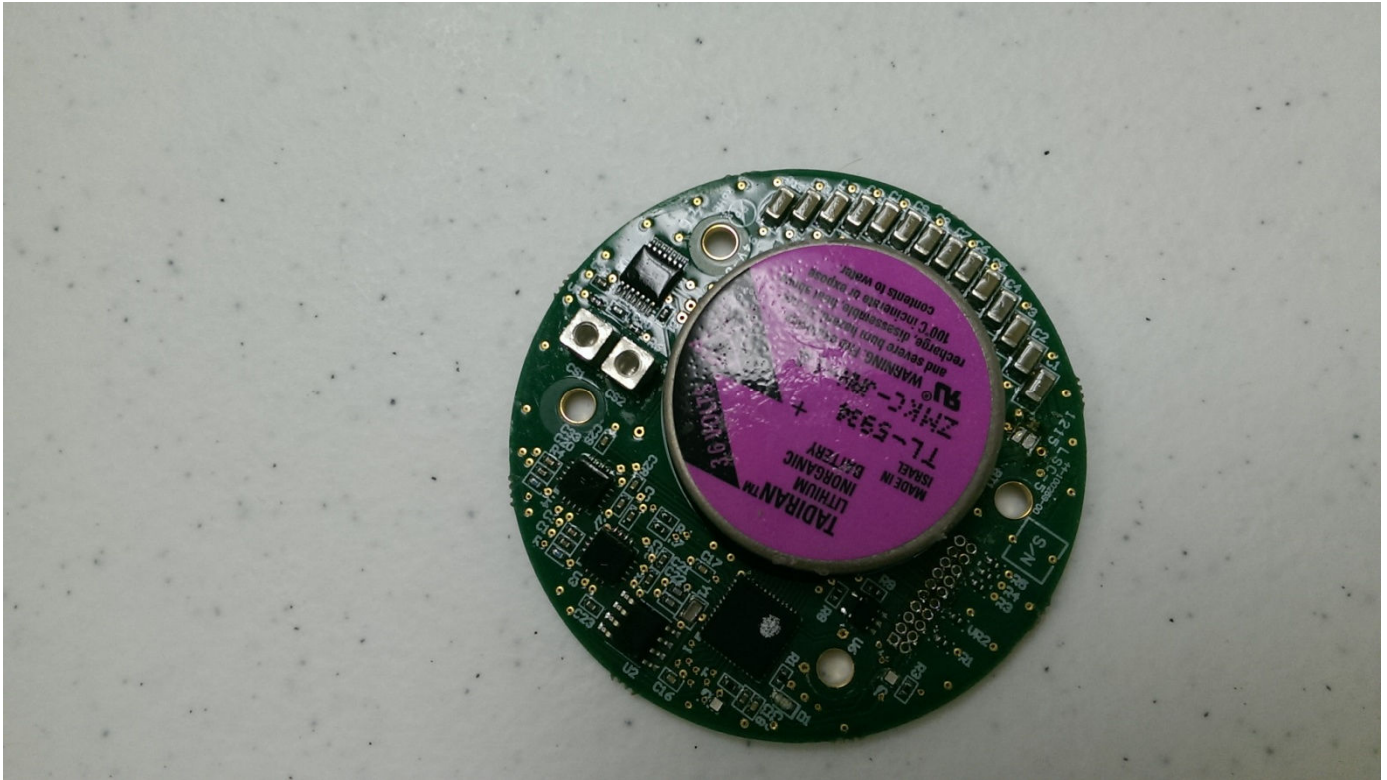


Image 4: Battery Board Assembly, Component Side

Part Number: 84A234628G1

Functional Description: The sensor takes capacitance, temperature, accelerometer, etc. data readings periodically and communicates them to the gateway if it is in range. An operator can also get in close proximity to the sensor and trigger readings from it with a handheld RFID unit. The units are designed to go on locomotives. RFID in the sensor is passive.

Sincerely,



Brian T. Hemmelman
Principal Engineer, DarCEO Inc.